MEMORANDUM

TO: HONORABLE MAYOR AND COUNCILMEMBERS
FROM: DIRECTOR OF PLANNING, BUILDING & CODE ENFORCEMENT
DATE: MARCH 21, 2006
SUBJECT: REPORT ON LAND MOVEMENT WITHIN THE LANDSLIDE MORATORIUM AREA OUTLINED IN BLUE (A PORTION OF THE SEAVIEW TRACT)

RECOMMENDATION

1) Review the City Geologist's report on recent movement in the Klondfike Canyon landslide area. 2) Consider whether to adopt an Urgency Ordinance on April 4, 2006 that would repeal Municipal Code section 15.20.040.K, thereby removing the more lenient development restrictions afforded to the area outlined in blue, making the area subject to the more stringent development restrictions contained in Municipal Code section 15.20.040.H, which apply to the entire moratorium area outlined in red; and 3) Adopt Urgency Ordinance No. _____, thereby extending the temporary moratorium that was originally established by the City Council on November 15, 2005 an additional thirty (30) days to April 20, 2006.

BACKGROUND

In September 1978, the City Council adopted Urgency Ordinance No. 108U, which established the Landslide Moratorium Area in and around the Portuguese Bend landslide (described as the area outlined in red in the ordinance). In February 1981, the City Council adopted Ordinance No. 139U, which added the area known as Klondfike Canyon to the Landslide Moratorium Area (described as the area outlined in blue in the current ordinance). The Blue Area is located on the eastern end of the moratorium area encompassing 36 residential lots in the Seaview tract and a portion of 2 Yacht Harbor Drive (see attached maps).

In September 1989, the City Council adopted a more flexible treatment of development proposals in the Blue Area. This action was based on the fact that this area had been subdivided previously and was almost completely developed (only one or two lots were not developed at the time) and included a sewer system, along with a lack of indicators of recent movement in the Blue Area. These factors distinguished this Area from other portions of the Landslide Moratorium Area.
Memorandum: Report on Land Movement in Area Outlined in Blue
March 21, 2006

As a result of these actions, the City's current Landslide Moratorium Ordinance (see attached Municipal Code chapter 15.20) recognizes two separate areas within the overall landslide moratorium area that are subject to differing development criteria. Unlike properties located in the Red Area, owners of properties in the Blue Area are entitled, subject to certain conditions, to seek approval of a landslide moratorium exception permit for "[t]he construction of residential buildings, accessory structures, pools/spas, and grading..." (Municipal Code Section 15.20.040 K). The code also requires applicants to submit geological studies reasonably required to demonstrate to the satisfaction of the city geotechnical staff that the proposed project would not aggravate the existing situation. (Id.)

In May 2005, following the heavy rains during the winter of 2004-2005, City Staff first witnessed indications that the Blue Area may be experiencing new landslide movement. The movement was brought to the attention of the City's geologist, who documented the movement and recommended that the City continue to monitor the area. In October 2005, Staff received a report from the City Geologist in response to a geology report prepared by an applicant seeking to build additions to an existing residence at 4380 Dauntless in the Blue Area. The City geologist alerted Staff that observed cracks in the area are indicative of land movement and that Staff should be aware of this before issuing the development permits to the applicant.

Based on this alert from the City geologist, Staff placed an item on the City Council's November 15, 2005 agenda to consider whether the more lenient development standards that have been allowed in the Blue Area since 1989 should be repealed so that the Blue Area will be subject to the same development restrictions as the remainder of the Landslide Moratorium Area, as was the case from February 1981 through September 1989. Based on public testimony, the City Council adopted Urgency Ordinance No. 427U establishing a temporary 60-day moratorium on the processing and issuance of building, grading or other permits, in the Blue Area, unless otherwise exempted from the moratorium. The 60-day moratorium was to allow the City's Geologist time to acquire additional land movement data, analyze the data and report his findings to the City Council. On December 20, 2005, the City Council adopted Urgency Ordinance No. 432U, extending the temporary moratorium an additional sixty-six days to March 21, 2006 to allow more time for the City geologist to prepare his report to the City Council.

The City geologist submitted his report to the City on March 14, 2006. The report is now being submitted to the City Council for review and discussion.

DISCUSSION

As discussed in the City geologist's report dated March 14, 2006 (attached), the City geologist evaluated the recent movement of the Klondike Canyon landslide by reviewing past documents, photo documentation, and survey documentation. As a result of this evaluation, the City geologist has concluded that the Klondike Canyon landslide
Memorandum: Report on Land Movement in Area Outlined in Blue
March 21, 2006

experienced accelerated movement in 2005 due to an increase in the local groundwater within and below the slide mass as a result of last winter's heavy rains and due to an increased drag from the accelerated movement of the adjacent Portuguese Bend landslide. However, the accelerated movement of the Klondike Canyon Landslide has declined back to a slow creep, as has been the case since the late 1980's.

Based on these recent events and past observations and monitoring, the City geologist notes that "the Klondike Canyon landslide should be considered an active landslide with the potential for continued slow movement and occasional increased acceleration." He also notes that although it doesn't appear that the slide is capable of catastrophic failure at this time, continued movement of the Portuguese Bend landslide could cause episodic acceleration in the creep rate of the Klondike Canyon slide. He goes on to conclude that "the continued slow movement of the landslide will result in distress and damage to structures and improvements that straddle or are adjacent the landslide boundaries."

Given this conclusion, Staff is recommending that the City Council consider whether to adopt an Urgency Ordinance at its next meeting (April 4, 2006) that would repeal Municipal Code section 15.20.040.K, thereby removing the more lenient development restrictions afforded to the area outlined in blue, making the area subject to the more stringent development restrictions contained in Municipal Code section 15.20.040.H, which apply to the entire moratorium area outlined in red. In order to allow for the adoption of said urgency ordinance at its April 4th meeting, or perhaps even the subsequent April 18th meeting, Staff is also recommending that the City Council adopt the attached Urgency Ordinance to extend the temporary moratorium on the acceptance of applications and the issuance of permits for the Blue Area an additional 28 days to April 18, 2006.

CONCLUSION

Pursuant to City Council direction given on November 15, 2005, the City geologist has evaluated the recent movement related to the Klondike Canyon Landslide and is now reporting his findings to the City Council. Staff is recommending that the City Council review the City geologist's report and provide direction to Staff on whether to amend the development restrictions that currently apply to the Blue Area covered by the City's current Landslide Moratorium Ordinance.

ADDITIONAL INFORMATION

As a reminder, there are no more developable vacant lots in the Blue Area and so the temporary moratorium on the processing of applications in the Blue Area that is currently in effect only affects applications for additions to existing residences or tear down/rebuild projects. There are three property owners with submitted project applications that are affected by the temporary moratorium. Two were in the planning review process and one was in the Building and Safety plan check review process when the City Council
Memorandum: Report on Land Movement in Area Outlined in Blue
March 21, 2006

established the temporary moratorium on November 15, 2005. The property owner at
4394 Dauntless Drive (Matura) was seeking approval of a second story addition by the
Planning Commission and the property owner at 4380 Dauntless Drive (Arrepose) was
seeking a Landslide Moratorium Exception Permit for first and second story additions.
Both of these applications were denied without prejudice after the temporary moratorium
was enacted since the moratorium did not stop the clock on the State’s Permit Streamlining
Act processing deadlines. The property owner at 4342 Admirable Drive (Mirich) has
received planning approval but has not yet been issued a building permit for the demolition
of the existing house and the construction of a new 5,000+ sq. ft. residence since his plans
are still in the plan check process. When the temporary moratorium was enacted, the plan
check process was frozen on this project.

FISCAL IMPACT

There is no fiscal impact to the City as a result of Staff’s recommendation.

Respectfully submitted:

Joel Rojas, AICP
Director of Planning, Building
and Code Enforcement

Reviewed by:

Les Evans
City Manager

Attachments

Report from City geologist dated March 14, 2006
Urgency Ordinance No. ___ (extension of temporary moratorium)
Landslide Moratorium Ordinance (Chapter 15.20)
Landslide Moratorium Area maps
Geology Report re: 4380 Dauntless dated October 25, 2005
Photos of land movement
Mr. Joel Rojas  
City of Rancho Palos Verdes  
30940 Hawthorne Blvd  
Rancho Palos Verdes, CA 90275-5391

Subject: Evaluation of Recent Movement related to the Klondike Canyon Landslide, Rancho Palos Verdes, California.

Dear Mr. Rojas,

At the request of the City of Rancho Palos Verdes our firm has evaluated the recent movement associated with the Klondike Canyon landslide. As part of our evaluation we reviewed past documents relating to the landslide, photo documented the area of movement and reviewed survey documentation of the movement. Recent movement of the landslide has manifested as the cracking of pavements, curb and gutter and sidewalks in the area of Dauntless and Exultant Drives.

Background

From a review of published documents, the Klondike Canyon landslide was recognized to be active in around 1980. The landslide is estimated to occupy about 50 acres immediately east of the Portuguese Bend landslide. The landslide is generally considered to be the eastward extension of the ancient Portuguese Bend landslide with movement being initiated as part of the movement of the Portuguese Bend landslide approximately 37,000 years ago. It has been estimated that the total horizontal displacement since the initiation of landslide movement is on the order of less than 50 feet. The toe of the landslide is thought to be about 100 feet below the ground surface at the coastline and about 50 feet below the ground surface near the head of the landslide. The Klondike Canyon landslide is thought to be a block glide landslide that has generally moved as an intact block.

Historical overall movement from 1956 to 1981 has been estimated at about 2.5 feet, with most of the movement estimated to have occurred between 1977 and 1981. In 1981, an excavation for an inclinometer near the toe of the landslide produced artesian water conditions from the landslide. The subsequently installed dewatering well has been credited with slowing the movement of the landslide.

In a March 1987 memo, Perry Ehlig indicated that the horizontal movement of the Klondike Canyon landslide from 1980 to 1987 ranged from 3.5 to 8.6 inches with rates ranging from 0.5 to 2.3 inches per year. He also observed accelerated creep of the landslide during 1986. He attributed increased groundwater and frictional drag from the
accelerated movement on the adjacent Portuguese Bend landslide as the cause of the accelerated creep. Remedial grading in 1987 removed the portion of the Portuguese Bend landslide that was overriding the lower portion of the Klondike Canyon landslide that was suspected of increasing frictional drag on the Klondike Canyon landslide. It is our understanding that grading of this nature had previously been performed at least one other time in the past.

It was Mr. Ehlig's opinion that although the movement of the Klondike Canyon landslide was of concern, he determined that "such movement could continue almost indefinitely without causing much damage." This was due in part to the unbroken nature of the main landslide body.

Recent Observations and Monitoring

It is our understanding that the recent distress within the Dauntless Drive area was observed in May of 2005. Our first observation of the distress was on June 1, 2005. Specifically, distress was manifested in the form of en echelon cracking and displacements in street pavement, driveways, curbs and gutter and sidewalks. Two lines of discontinuous cracking extended from north of the southeast corner property line at the intersection of Dauntless and Exultant Drive (4342 Dauntless Drive) to the southwest corner of the house at 4361 Dauntless Drive. Generally the cracks were on the order of 1/8 inch to 1 inch wide. A distinct down dropped zone is visible between the two sets of cracks. It should be noted that previous authors (Ehlig, Ehlert and Davis) recognized the same crack pattern and down dropped subsidence zone in the 1980s and early 1990s. It is our understanding that the distressed area has been repaired a number of times between observations. A review of photographs taken over time and observations by the authors indicates that the observed cracks and distress have changed very little in the 9 months since our initial observation; although minor new cracks have appeared and minor enlargements of existing cracks have been observed. In addition, other cracks and offsets in pavements and distress to improvements and structures have also occurred on Palos Verdes Drive South and within the lower portion of the landslide along Yacht Harbor Drive.

A set of monitoring points for the Klondike Canyon Landslide were established in late 1994 and early 1995 and have been monitored using global position satellites (GPS) since installation. The monitoring data was provided by Charles Abbott and Associates at the direction of the City of Palos Verdes Public Works Department. A review of the monitoring points indicates that the readings show abundant scatter, and appear to be within a range of potential survey error (due to thermal expansion, traffic disturbance, etc.). In order to more accurately evaluate the movement of the landslide, we have evaluated the distance between the individual monitoring points. Point KC07 is northeast of the recognized landslide headscarp and is therefore considered to be out of the zone subject to movement. Using KC07 as a base point, we have compared the distance over time between KC07 and other monitoring points. In order to further reduce the error form one reading to another, we have evaluated the cumulative change in distance between points over time (see Figures 1 through 4). The distance between points has
increased over time for all the points evaluated which indicates continued movement of the landslide. In addition, the graph of distance versus time over the past 11 years plots generally as a straight line indicating relatively continuous movement throughout the monitoring period. Vertical differences were not observed in the data beyond the precision of the survey.

A comparison of monitoring points within the main landslide mass indicates that the distance between points has not increased. This suggests that the main landslide mass is moving in a relatively undisturbed intact block.

The last monitoring period prior to the movement in May 2005 was February 2005. Readings have been made of various monitoring points following the May movement. A comparison of the February readings to the readings following the May movement would suggest that the landslide experienced an accelerated movement. Based on the visual observations it appears that most of the movement recorded occurred in a relatively short period of time prior to June 2005.

In October it was reported by the Portuguese Bend Club and the Klondike Canyon Geologic Hazard Abatement District that the eastern portion of the Portuguese Bend landslide in the area of 131 Yacht Harbor Drive had again overridden the lower portion of the Klondike Canyon landslide in a manner very similar to that which occurred in 1987 (AMEC, 2005). Remedial grading similar to the remedial grading in 1987 was completed in late 2005. It should be recognized that this area of the Portuguese Bend landslide had the largest horizontal movements in the landslide during the period of January to October 2005 including 9.6 feet at FB46, 8 feet at PB11, 5.4 feet at PB12 and 3.2 feet at PB13. Comparing these readings to past readings, horizontal movements are on the order of 12 to 29 percent above the average yearly movement recorded for these points.

Conclusions

Based on the foregoing discussion, it is concluded that the Klondike Canyon landslide experienced accelerated movement in the period just prior to June of 2005. However, we also conclude that the accelerated movement has again declined to a slow background creep as has been the case since the 1980's. Based on recent events and past observations and monitoring, the Klondike Canyon landslide should be considered an active landslide with the potential for continued slow movement and occasional increased acceleration. It does not appear to be capable of catastrophic failure at this time, although over the long term, continued movement of the Portuguese Bend Landslide could cause episodic acceleration in the creep rate of the Klondike Canyon Landslide.

It is further concluded that the accelerated movement in May of 2005 was precipitated by two major causes: an increase in the local groundwater within and below the slide mass due to the record rainfall received during the winter of 2004-2005 and increased drag from the accelerated movement of the Portuguese Bend landslide.
Rancho Palos Verdes

March 14, 2006

The Klondike Canyon landslide is estimated to have moved less than 50 feet since the estimated initiation of movement about 37,000 years ago. This is only a fraction of the total movements recognized in the other active landslides in the area. The overall limited movement of the Klondike Canyon landslide has also contributed to the relatively stable nature of the main block of the landslide. However, it should be noted that the continued slow movement of the landslide will result in distress and damage to structures and improvements that straddle or are adjacent to the landslide boundaries. Structures and improvements within the main landslide block away from landslide boundaries should be generally immune from distress unless a major increase in movement occurs.

Recommendation

The following recommendations should be considered for continued evaluation of the Klondike Canyon landslide.

Monitoring

The current survey monitoring utilizing GPS generally has only limited application for precise survey monitoring for slow moving landslides with limited displacements. Since GPS is dependent on the number of satellites available at any given time and a direct line of site to the satellites, there are limitations to the precision of the data. It is therefore recommended that the landslide monitoring currently being implemented be evaluated from a precision standpoint and be modified as necessary to obtain more precise data. This would include establishment of more robust monitoring points and monuments, and implementing either a traditional closed loop, or a survey net type of monitoring system.

Remedial Grading

It is recommended that grading in the area of the Portuguese Bend Club as was accomplished recently and in 1987 be completed any time the Portuguese Bend landslide overrides the lower portion of the Klondike Canyon landslide.

Groundwater

Groundwater has been one of the primary factors controlling the movement of the Rancho Palos Verdes landslides. Numerous steps have been taken in the past to reduce the amount of water in the subsurface of the landslide areas. These include directing surface water away from areas of potential infiltration, installation of dewatering wells, limiting irrigation, modifying irrigation practices, installation of sewer and storm drain facilities and limiting development including limiting the installation of pools. Where possible, these steps should be continued or implemented throughout the landslide areas of Rancho Palos Verdes including the Klondike Canyon landslide.
Investigation

Further investigation of the Klondike Canyon landslide should be considered. Investigative work should focus on improved monitoring, monitoring schedules, observation and mapping of landslide features and distress within Klondike Canyon and the adjoining development, the relationship of water infiltration within Klondike Canyon to landslide stability and the relationship of movement of the Portuguese Bend landslide to the measured creep rate of the Klondike Canyon landslide.

Repair of Improvements

Currently, damaged and cracked pavements and concrete drainage features in the area of Dauntless Drive allow water to enter the subsurface. It is recommended that these damaged or distressed improvements be repaired to limit infiltration of surface water into the subsurface.

CLOSURE

Zeiser Kling Consultants, Inc. appreciates this opportunity to be of continued services to the City of Rancho Palos Verdes. If you should have any questions regarding the information or recommendations contained in this letter, please contact our office.

Sincerely,

ZEISER KLING CONSULTANTS, INC.

[Signatures]

Matthew G. Rogers
Principal Geotechnical Engineer
GE 2495
Expires 12/31/07

JML: MGR: HF: mg
Distribution: (3) Addressee

Enclosures: Sheet F
Figures 1 through 4
CAA GPS Observations of Land Movement Areas
Cumulative Change in Distance Graphs
Klondike Canyon Landslide Area
Cumulative Change in Distance
KC6 vs. KC7

Change in distance between points (inches)

Date
Jan-94  Jan-95  Jan-96  Jan-97  Jan-98  Jan-99  Jan-00  Jan-01  Jan-02  Jan-03  Jan-04  Jan-05  Jan-06  Jan-07

Figure 1
Figure 3

Klondike Canyon Landslide Area
Cumulative Change in Distance
KC4 vs. KC7

Change in Distance Between Points (inches)

Date

Jan-94 Jan-95 Jan-96 Jan-97 Jan-98 Jan-99 Jan-00 Jan-01 Jan-02 Jan-03 Jan-04 Jan-05 Jan-06 Jan-07
ORDINANCE NO. ___ U

AN ORDINANCE OF THE CITY OF RANCHO PALOS VERDES EXTENDING URGENCY ORDINANCE NO. 472U ESTABLISHING A MORATORIUM ON THE ISSUANCE OF CERTAIN PERMITS AND THE PROCESSING OF PLANNING APPROVALS AND SUSPENDING CERTAIN PREVIOUSLY ISSUED BUILDING PERMITS AND APPROVALS, IN THE PORTION OF THE LANDSLIDE MORATORIUM AREA OUTLINED IN BLUE ON THE LANDSLIDE MORATORIUM MAP ON FILE IN THE CITY’S PLANNING, BUILDING AND CODE ENFORCEMENT DEPARTMENT, WHICH INCLUDES PORTIONS OF DAUNTLESS DRIVE, EXULTANT DRIVE, ADMIRABLE DRIVE AND PALOS VERDES DRIVE SOUTH, AND DECLARING THE URGENCY THEREOF

WHEREAS, in September 1978, the City Council adopted Urgency Ordinance No. 108U, which established the Landslide Moratorium Area in a portion of the City, as depicted on a map that is on file in the City’s Department of Planning, Building and Code Enforcement; and

WHEREAS, in February 1981, the City Council adopted Ordinance No. 139U, which added the area known as Klondike Canyon to the Landslide Moratorium Area, which is described as the area outlined in red on the map that is on file in the City’s Department of Planning, Building and Code Enforcement; and

WHEREAS, in September 1989, the City Council adopted Ordinance No. 247, which added a new provision to the Landslide Moratorium Ordinance that provided the possibility for more intense development than previously was permitted in the Klondike Canyon Area, as outlined in blue on the map that is on file in the City’s Department of Planning, Building and Code Enforcement (“Blue Area”); and

WHEREAS, in May 2005, following the unusual winter rains during the winter of 2004-2005, the first indications that the Blue Area may be experiencing landslide movement appeared; and

WHEREAS, in October 2005, the City received a report from the City Geologist, who was reviewing a proposed development in the Blue Area, that discussed the issue of landslide movement in the Blue Area; and

WHEREAS, based on the new evidence of landslide movement in the Blue Area, the City Council has asked the City Geologist to determine whether the more flexible development standards that had been allowed in the Blue Area since 1989 should be repealed so that the Blue Area will be subject to the same
development criteria that are applicable to the other areas that are subject to the Landslide Moratorium Ordinance, as was the case from February 1981 through September 1989; and,

WHEREAS, on November 15, 2005, the City Council adopted Urgency Ordinance No. 472U, which established a 60-day moratorium on the processing and issuance of building, grading or other permits, and landslide moratorium exception permits and the processing or approval of Environmental Assessments, Environmental Impact Reports, Conditional Use Permits, height variation applications, tentative maps or parcel maps in the Blue Area and temporarily suspended Section 15.20.040 K of the Rancho Palos Verdes Municipal Code pending the completion of new geological data to determine whether construction in the Blue Area is safe in light of the newly observed instability or if the proposed development could adversely impact the stability of said Area; and,

WHEREAS, because the Global Positioning System ("GPS") data still was being collected, and the City Geologist still was in the process of completing the review of that data to assess the potential impacts of construction in the Blue Area upon the overall stability of said Area and upon the public health, safety and welfare and, accordingly, needed additional time to complete that review before determining if the moratorium imposed by Ordinance 472 U should be lifted, the moratorium was extended by the City Council to March 21, 2006; and

WHEREAS, because the City Geologist's report has been completed and presented to the City Council, but the City Council and the public need additional time to review the report before determining whether to amend the Chapter 15.20 of the Rancho Palos Verdes Municipal Code;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF RANCHO PALOS VERDES DOES ORDAIN AS FOLLOWS:

SECTION 1. The City Council of the City of Rancho Palos Verdes hereby extends Urgency Ordinance 472U for an additional thirty days, until April 20, 2006. Except as otherwise modified by this Ordinance, all provisions of Urgency Ordinance No. 472U shall remain in full force and effect through and including April 21, 2006.

SECTION 2. It has recently come to the attention of the City Council that the land identified in the Blue Area, which was previously thought to be stable, may in fact be experiencing current landslide movement. In order to protect the public health, safety and welfare, the City Geologist was to review recently collected GPS Data to determine the stability of the land in question and to whether development of new structures on undeveloped lots or parcels, substantial additions to existing homes, or the construction of certain accessory
structures on properties in the Blue Area should be allowed. The City Geologist’s report has been completed and has been submitted to the City Council. However, additional time is needed for the City Council and the public to review the City Geologist’s report before determining whether Chapter 15.20 of the Municipal Code should be amended to remove the more deferential development standards that were imposed on the area that is subject to the Klondike Canyon Landslides. Thus, the City Council needs additional time to review the report and determine whether additional controls on development are necessary to protect the public health, safety, and general welfare from the harmful effects associated with slope failure. The City Council finds that continued development in the Blue Area during this additional time could expose residents to undue health hazards and safety risks and pose a current and immediate threat to the public health, safety, or general welfare and approval of additional entitlements for development inconsistent with the provisions of Urgency Ordinance No. 472U would frustrate the City’s ability to protect the public health, safety and welfare by minimizing the adverse effects of slope failure. This ordinance is therefore necessary for the immediate preservation of the public peace, health, safety and welfare and shall take effect immediately upon adoption as an urgency ordinance. This ordinance is effective until 11:59 p.m. on April 20, 2006, unless further extended by the City Council.

PASSED, APPROVED AND ADOPTED this 21st day of March 2006, by the following vote:

AYES:

NOES:

ABSENT

______________________________
MAYOR

ATTEST:

CAROLYNN A. PETRU, CITY CLERK

Oed.032006 temp morning copy 2
3
I HEREBY CERTIFY that the foregoing is true and correct copy of Ordinance No. _____ approved and adopted by the City Council of the City of Rancho Palos Verdes at a meeting thereof held on the 21st day of March, 2006.

CAROLYNN A. PETRU, CITY CLERK
Chapter 15.20  
MORATORIUM ON LAND USE PERMITS*  

Sections:  
15.20.010 Definitions.  
15.20.020 New construction permits not issued.  
15.20.030 Revocation of unused permits.  
15.20.040 Exceptions.  
15.20.050 Landside mitigation measures required.  
15.20.060 Application.  
15.20.070 Appeals.  
15.20.080 Expiration.  
15.20.090 Municipal code and environmental regulations.  
15.20.100 Exclusions.  
15.20.110 Required connection to operational sanitary sewer system.  

* Prior ordinance history: Ordinances 14801, 11881, 12082, 12382, 12882, 13882, 13982, 14082, 14182, 14282, 14382, 2082, 223, 247, 29457 and 276.  

15.20.010 Definitions.  
The following definitions shall apply to this chapter:  
"Alter" means to change in some, but not all, aspects where necessary to continue the use of, and where repair, replacement and rectification are not possible.  
"Director" means the director of planning, building and code enforcement.  
"Geologic investigation permit" means a permit issued by the city to allow field research for the preparation of geologic, geotechnical or soils reports. Field research shall include investigative trenching, boring or grading which is performed mechanically or by hand. Such trenching, boring or grading shall pertain only to the accumulation of necessary data.  
"Maintenance" means to keep in a particular safe condition.  
"Repair" means to bring back to a safe condition after partial decay or destruction.  
"Replacement" means to exchange a damaged portion for a new equivalent portion without changing form or function. For a dwelling unit it means to construct a new portion of a dwelling to substitute for that existing prior to damage.  
"Restoration" means to bring back to the original condition.  
"Permanent detached accessory structure" means a structure that is constructed on a permanent foundation, separate from and appurtenant to a main dwelling unit, which meets the minimum Uniform Building Code standard for human habitation, does not include any kitchen facilities and is not used as a separate dwelling unit. Acceptable structures shall include guest rooms, workshops or similar structures.  
"Plumbing fixture" means a plumbing fixture as defined by the Uniform Plumbing Code, unless expressly defined otherwise in this chapter.  
"Served by a sanitary sewer system" means that an operational sanitary sewer system is located within the boundaries of the subject lot or parcel or is located within a thoroughfare or right-of-way that is immediately adjacent to the lot or parcel and is no more than two hundred feet from the boundary of the lot or parcel. (Ord. 337 § 5 (part), 2000; Ord 309 § 4 (part), 1995)  

15.20.020 New construction permits not issued.  
Notwithstanding any other ordinance or code of the city, the city declares a moratorium on the filing, processing, approval or issuance of building, grading or other permits, environmental assessments, environmental impact reports, conditional use permits, tentative maps or parcel maps in the area of the city identified as the "landside moratorium area" as outlined in red on the landslide moratorium map on file in the office of the director, unless expressly allowed by Section 15.20.040 of this chapter. However, the filling and preparation of environmental assessments, initial studies, negative declarations or environmental impact reports for the exclusive purpose of determining whether a parcel of land may be excluded from the moratorium pursuant to Section 15.20.100 of this chapter are not precluded by this section. (Ord. 309 § 4 (part), 1995)  

15.20.030 Revocation of unused permits.  
Any building, grading permit or other permit for new construction in the landslide moratorium area which has been previously granted by the city but which has not been acted upon in substantial reliance by the holder thereof is revoked. (Ord. 309 § 4 (part), 1995)  

15.20.040 Exclusions.  
The moratorium shall not be applicable to any of the following:  
A. Maintenance of existing structures or facilities which do not increase the land coverage of these facilities or add to the water usage of those facilities:  
B. Replacement, repair or restoration of a residential building or structure which has been damaged or destroyed due to one of the following hazards, provided that a land-
slide moratorium exception permit is approved by the director, and provided that the project complies with the criteria set forth in Section 15.20.050 of this chapter:

1. A Geologic Hazard. Such structure may be replaced, repaired or restored to original condition; provided, that such construction shall be limited to the same square footage and in the same general location on the property and such construction will not aggravate any hazardous geologic condition, if a hazardous geologic condition remains. Prior to the approval of a landslide moratorium exception permit, the applicant shall submit to the director any geological or geotechnical studies reasonably required by the city to demonstrate the satisfaction of the city geotechnical staff that the proposed project will not aggravate the existing situation. The applicant shall comply with any requirements imposed by the city's geotechnical staff and shall substantially repair the geologic condition to the satisfaction of the city geotechnical staff prior to the issuance of a final building permit. Upon application to the director, setbacks may conform to the setbacks listed below:

<table>
<thead>
<tr>
<th>Minimum Setback Standards</th>
<th>Front</th>
<th>Interior side</th>
<th>Street side</th>
<th>Rear</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>

2. A Hazarded Other Than a Geologic Hazard. Such structure may be replaced, repaired or restored to original condition; provided, that such construction shall be limited to the same square footage and in the same general location on the property and such construction will not aggravate any hazardous condition, if a hazardous condition remains. Prior to the approval of a landslide moratorium exception permit, the applicant shall submit to the director any geological or geotechnical studies reasonably required by the city to demonstrate the satisfaction of the city geotechnical staff that the proposed project will not aggravate the existing situation. Upon application to the director, setbacks may conform to the setbacks listed in subsection (E)(3) of this section:

D. Building permits for existing structures which were constructed prior to October 5, 1978, for which permits were not previously granted, in order to legalize such structures. Such permits may only be granted if the structure is brought into substantial compliance with the Uniform Building Code.

E. Projects that are to be performed or constructed by the city or by the Ranchos Pales Verde redevelopment agency to mitigate the potential for landslide or to otherwise enhance public safety;

F. Remedial grading to correct problems caused by landslides or to otherwise enhance public safety, performed pursuant to a permit issued pursuant to Section 17.76.04(B)(3) of this Code;

G. Geologic Investigation Permits. Prior to the approval of such a permit, the applicant shall submit to the director any geological or geotechnical studies reasonably required by the city to demonstrate the satisfaction of the city geotechnical staff that the proposed investigation will not aggravate the existing situation;

H. Minor projects on a lot that currently is developed with a residential structure or other lawfully existing nonresidential structure and involves an addition to an existing structure, enclosed patio, conversion of an existing garage to habitable space or construction of a permanent attached or detached accessory structure and do not exceed a cumulative project(s) total of six hundred square feet per parcel; provided that a landslide moratorium exception permit is approved by the director and provided that the project complies with the criteria set forth in Section 15.20.050 and does not include any additional plumbing fixtures, unless the lot is served by a sanitary sewer system. The six hundred square foot limitation on cumulative projects that can be approved on a lot pursuant to this subsection does not include the construction of a new garage, which can be approved pursuant to subsection I. of this section. Minor projects involving the construction of an enclosed permanent detached accessory structure shall include a requirement that a use restriction covenant, in a form acceptable to the city, that prevails the enclosed permanent detached accessory structure for being used as a separate dwelling unit is recorded with the Los Angeles County register-recorder. Such covenant shall be submitted to the director prior to the issuance of a building permit. Prior to approval of a landslide moratorium exception permit for such minor projects, the applicant shall submit to the director any geological or geotechnical studies reasonably required by the city to demonstrate the satisfaction of the city geotechnical staff that the proposed project will not aggravate the existing situation.

I. Construction of temporary minor nonresidential structures which are less than one hundred twenty square feet in size, with no plumbing fixtures and which do not increase water use, may be approved by the director. If the lot is served by a sanitary sewer system, the permit may allow the installation of plumbing fixtures. All permits shall include a requirement that a use restriction covenant,
in a form acceptable to the city which prevents the structure from being used for any purpose other than as a non-inhabitable use, as recorded with the Los Angeles County register-encoder. A minor nonresidential structure is defined as temporary if the building code does not require it to be erected upon or attached to a fixed, permanent foundation and if, in fact, it will not be erected upon or attached to such a foundation. Prior to approval of the application, the applicant shall submit to the director any geological or geotechnical studies reasonably required by the city to demonstrate to the satisfaction of the city geotechnical staff that the proposed project will not aggravate the existing situation.

J. Submittal of a lot-line adjustment application;
K. The construction of residential buildings, accessory structures, pools/spas and grading in the "landslide moratorium area" as outlined in blue on the landslide moratorium map on file in the director’s office; provided, that a landslide moratorium exception permit is approved by the director, and provided that the project complies with the criteria set forth in Section 15.20.050 of this chapter. Such projects shall qualify for a landslide moratorium exception permit only if all applicable requirements of this code are satisfied, and the parcel is served by a sanitary sewer system. Prior to the issuance of a landslide moratorium exception permit, the applicant shall submit to the director any geological or geotechnical studies reasonably required by the city to demonstrate to the satisfaction of the city geotechnical staff that the proposed project will not aggravate the existing situation;
L. Construction of one attached or detached garage per parcel that does not exceed an area of six hundred square feet, without windows or any plumbing fixtures, on a lot that currently is developed with a residential structure or other lawfully existing nonresidential structure; provided that a landslide moratorium exception permit is approved by the director, and provided that the project complies with the criteria set forth in Section 15.20.050. If the lot is served by a sanitary sewer system, the permit may allow the installation of windows and plumbing fixtures in the garage. The approval of a landslide moratorium exception permit for such a project shall be conditioned to require that the use be restricted covenanted, in a form acceptable to the city, that prevents the garage from being used for any purpose other than parking of vehicles and storage of personal property as recorded with the Los Angeles County register-encoder. Such covenant shall be submitted to the director prior to the issuance of a building permit. Prior to the approval of a landslide moratorium exception permit for such garage, the applicant shall submit to the director any geological or geotechnical studies reasonably required by the city to demonstrate to the satisfaction of the city’s geotechnical staff that the proposed project will not aggravate the existing situation.

M. Submittal of applications for discretionary planning permits for structures or uses which are ancillary to the primary use of the lot or parcel, where there is no possibility of any adverse impact upon soil stability. Examples of these types of applications include special use permits for minor, temporary uses and events; fence, wall and hedge permits that do not involve grading or the construction of retaining walls; permits for the keeping of large domestic animals and exotic animals; conditional use permits for the establishment of a use or activity at or on an existing structure where no site-specific modifications are required; and such other uses, activities and structures that the city geotechnical staff determine to have no potential for adverse impacts on landslide conditions;
N. Minor projects on lots which are currently developed with a residential structure, which do not involve new habitable space, which cannot be used as a gathering space and viewing area, and which do not constitute lot coverage;
O. Permits issued pursuant to Section 15.20.110 of this chapter to connect existing structures with functional plumbing fixtures to an operational sewer system. (Ord. 407 § 6, 2004; Ord. 383 § 5, 2002; Ord. 382U § 5, 2002; Ord. 357 § 5 (part), 2000; Ord. 309 § 4 (part), 1995)

15.20.050. Landslide mitigation measures required. Within the landslide moratorium area as identified in Section 15.20.020 of this chapter, the city shall require that appropriate landslide abatement measures be implemented as conditions of issuance of any permit issued pursuant to this chapter. With respect to proposed projects and uses requiring a landslide moratorium exception permit pursuant to subsections B, H, J, and L of Section 15.20.040, which must satisfy all of the criteria set forth in this section, the conditions imposed by the city shall include, but be not limited to, the following:
A. If lot drainage deficiencies are identified by the director of public works, all such deficiencies shall be corrected by the applicant.
B. If the project involves additional plumbing fixtures, or additions of habitable space which exceed two hundred square feet, or could be used as a new bedroom, bathroom, laundry room or kitchen, and if the lot or parcel is not served by a sanitary sewer system, septic systems shall be replaced with approved holding tank systems in which to dispose of on-site waste water. The capacity of the required holding tank system shall be subject to the review and approval of the city’s building official. For the pur-
II. The applicant shall submit for recording a covenant agreeing to construct the project strictly in accordance with the approved plans; and agreeing to prohibit further projects on the subject site without first filing an application with the director pursuant to the terms of this chapter. Such covenant shall be submitted to the director for recording prior to the issuance of a building permit.

I. All landscaping irrigation systems shall be part of the water management system approved by the director of public works. Irrigation for landscaping shall be permitted only as necessary to maintain the yard and garden.

j. If the project involves pools and/or spas, a leak detection system approved by the city building official shall be installed.

K. All other necessary permits and approvals required pursuant to this code or any other applicable statute, law or ordinance shall be obtained. (Ord. 337 § 5 (part), 2000; Ord. 309 § 3 (part), 1995)

15.20.060 Application.

A. Applicants for an exception to this chapter under Section 15.20.040(B), (E), (m) and (l), shall file an application for a landslide moratorium exception permit with the director. The application shall be signed by the property owner, and shall include the following:

1. A letter, signed by the property owner, setting forth the reason for request, as well as a full description of the project;

2. Copies of a site plan, showing accurate lot dimensions; the location, dimensions, and heights of all existing and proposed structures; the location of the existing and proposed septic systems and/or holding tank systems; and the location of the existing and/or proposed sanitary sewer system, if the site is or will be served by a sanitary sewer system. The number of copies required shall be determined by the director;

3. Information satisfactory to the city’s geotechnical staff (including but not limited to geotechnical, geological and soils reports) reasonably required by the city to demonstrate that the proposed project will not aggravate the existing situation;

4. A fee as established by resolution of the city council;

5. If grading is proposed, a grading plan showing the topography of the lot and all areas of project cut and fill, including a breakdown of the earthwork quantities.

A landslide moratorium exception permit application shall become null and void if, after submitting the required application to the director, the application is ad-

---

(Repealed Version 5.44)
ministratively withdrawn by the director because the application is allowed to remain incomplete by the applicant for a period which exceeds one hundred eighty days, or if the application is withdrawn by the applicant. (Ord. 357 § 3 (part), 2000; Ord. 309 § 4 (part), 1995)

15.20.070 Appearals. Any interested person may appeal any decision or any condition imposed by the director to the city council by filing a written request, together with an appeal fee as established by resolution of the city council, within fifteen days after the decision is made. (Ord. 309 § 4 (part), 1995)

15.20.080 Expiration. A moratorium exception permit shall become null and void after one hundred eighty days from the date of issuance unless the planning applications necessary for the proposed project have been submitted to the director. The director may grant extensions beyond these periods for good cause. (Ord. 309 § 4 (part), 1995)

15.18.090 Municipal code and environmental regulations. The building code, as amended, and existing plan checking procedures are adequate and appropriate to allow and regulate maintenance, repair, restoration, replacement and alteration as defined in this chapter. The Administrative Code, including Sections 309 through 379 as added by Section 15.18.110, applies and permits are required. Nothing contained in this chapter shall except the proposed construction or use from any requirement or regulation of the building code, zoning ordinance or other ordinance of this Code or the California Environmental Quality Act. (Ord. 349 § 4 (part), 1995)

15.20.100 Exclusions. For a parcel of land to be excluded from the landslide moratorium area, a landowner, or his designated agent, may apply for such exclusion to the city council.

A. Application: To obtain an exclusion from this chapter, an applicant shall file an application for exclusion with the director and signed by the property owner. An application shall not be deemed complete until all required geologic studies have been completed and review has been completed by the city geotechnical staff. An application shall include the following:
1. The reason for the request;
2. A legal description of the property and a map of the property;
3. All anticipated development applications;
4. Any existing geological or geotechnical reports or necessary geology studies as determined by the city geotechnical staff;
5. A fee as established by the city council;
6. Any additional information as determined by the director or the city geotechnical staff;
7. A completed environmental assessment.

B. Public Hearing. Notices shall be published in a newspaper of general circulation in the community not less than fifteen days before the date set for the city council hearing. The notice shall contain all data pertinent to the hearing. Written notice shall also be mailed not less than fifteen days before the date set for the city council hearing to the owners of property shown on the last equalized assessment roll as owning real property within five hundred feet of the boundaries of the subject property.

C. Findings. Upon approval of a landslide moratorium exclusion, the city council shall find as follows:
1. The exclusion is consistent with the general plan and any applicable specific plan of the city, including but not limited to, the coastal specific plan of the city;
2. The exclusion promotes the health, safety and welfare of the community;
3. The exclusion shall not aggravate any existing geologic conditions in the area;
4. Conditions Upon Issuance of Approval. In granting any exclusion under this chapter, the city council may impose such conditions as it deems reasonably necessary to preserve the intent of the goals and policies of the general plan. (Ord. 309 § 4 (part), 1995)

15.20.110 Required connection to operational sanitary sewer system. Any owner of a lot or parcel within the "landslide moratorium area," as outlined in red on the landslide moratorium map on file in the director's office, which is developed with a residential structure or any other structure that contains one or more operational plumbing fixtures and is served by a sanitary sewer system, as defined in this chapter, shall connect such structure(s) to the sanitary sewer system within six months after the commencement of operation of the sanitary sewer system. Either the director or the director of public works shall determine whether a lot or parcel is served by a sanitary sewer system, whether a structure contains one or more operational plumbing fixtures, or whether the connection to the sewer system is performed properly, including, without limitation, removal, or the discontinuation of the use of, any existing septic system. (Ord. 377 § 5 (part), 2000)
<table>
<thead>
<tr>
<th>Category 3</th>
<th>FY OF RANCHO PALOS VERDES</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOTECHNICAL REPORT RESPONSE CHECKLIST</td>
<td></td>
</tr>
</tbody>
</table>

| Date Received: | October 19, 2005 |
| Date of Report: | October 17, 2005 |
| Previous Report: | July 31, 2005 |
| Consultant: | Hamilton & Associates |
| Applicant Name: | Mr. & Mrs. Arreguines |
| Site Address: | 4380 Damascus Drive |
| Lot/Tract No.: | Rancho Palos Verdes, CA |
| LEGEND: | N = No |
| NA = Not Applicable |
| Legend: | Y = Yes |

**Proposed Project:** One and Two Story Additions and Subterranean Garage

**Geotechnical Response**

- [ ] Responsive to Checklist Comments
- [ ] Grading/Foundation Plans Changed as a Result of Response

**Planning Department:**

- [X] In Concept Approval for Planning Purposes

**Building and Safety:**

- [ ] Report Approved
- [X] Conditional Approval (See Below)
- [ ] Additional Input Required

**The site is located within the Blue Area of the Landslide Mitigation Zone as defined in Chapter 15.20.040.F of the City of Rancho Palos Verdes Building Code. The applicant shall abide by the provisions of Section 15.20.050 of the City of Rancho Palos Verdes Building Code.**

**It should be noted that our firm and the consultants of record have observed a large zone of distress in the street directly adjacent to the subject property. Please see Item 2, below.**

**Items requiring response/further evaluation:**

None

**Additional Comments/Conditions of Approval (as response required):**

1. Note to City Staff: Staff should confirm that the Consultants (C.E.G. and R.E.G.) have signed the final dated grading/foundation plans, thereby verifying the plans’ geotechnical conformance with the Consultant’s original report and associated addenda.

2. Note to City Staff: The site is within the limits of the Clouds Canyon Landslide. Staff should be aware that the consultant observed “two distinct patterns of cracking near the intersection of Damascus Drive and Eastland Drive: Tension cracks are up to 0.25 to 1.25 inches wide, with vertical separations in some areas of concrete paving up to 1.25 inches. Cracks like these are indicative of landslide movement...” City staff should be aware of this in deciding whether or not to issue a permit (Blue Area of the Landslide Mitigation Zone).

3. An as graded geotechnical report should be prepared by the project geotechnical consultant following grading of the subject site. The report should include the results of all field density testing, depth of reprocessing and recompaction, as well as a map depicting the limits of grading, locations of all density testing, and geologic conditions exposed during grading. The report should include conclusions and recommendations regarding applicable setbacks, foundation recommendations, erosion control and any other relevant geotechnical aspects of the subject site. An updated risk assessment statement should be provided to address landslide concerns.

---

© Project 1997-172(1317)79 Review 10-05.doc
Limitations:

Our review is intended to determine if the submitted report(s) comply with City of Rancho Palos Verdes Codes and generally accepted geotechnical practices within the local area. The scope of our services for this third party review has been limited to a brief site visit and a review of the above referenced report and associated documents, as supplied by the City of Rancho Palos Verdes. Re-analysis of reported data and/or calculations and preparation of amended construction or design recommendations are specifically not included within our scope of services. Our review should not be considered as a certification, approval or acceptance of the consultant’s work, nor is it meant to an acceptance of liability for final design or construction recommendations made by the geotechnical consultant of record or the project designers or engineers.

BY: Gal T. Coulibsk, C.E.G., 1674
ZEISER KLEING CONSULTANTS, INC.

BY: Chris A. Spitzer, R.P.E. 100881
ZEISER KLEING CONSULTANTS, INC.