



City of Rancho Palos Verdes

# 2013 Infrastructure Report Card

## Evaluation of Landslide Infrastructure



## Evaluation Strategy

Grading Shall be the Opinion of the Consultant Based on the Following Approach:

- Meet with City Staff (Kickoff Meeting)
- Gather Required Information (i.e. Data, Reports, etc)
- Visit Various Facility Sites
- Review Provided Information
- Evaluate Current Infrastructure Condition and Determine "Draft" Grade
- Discuss Analysis of Data and Obtain Written and Verbal Elaborations on Current Infrastructure Conditions from City Staff  
(that Amend or Expand Written Report Data)
- Re-Evaluate Current Infrastructure Conditions and Draft Grade  
(Based on Increased Understanding of Infrastructure Conditions from City Staff)
- Prepare Draft Report Summarizing the Infrastructure Conditions and Provide a Revised Grade (if Different from "Draft" Grade Above)
- Meet with City to Review Draft Report & Obtain Comments from City Staff
- Finalize Report Based on Comments from City and Provide Final Grade

## **Kickoff Meeting with City Staff**

- June 12, 2013
  
- Attendees:
  - Siamak Motahari
  - Bindu Vaish
  - Nicole Jules
  - Ron Dragoo
  - Andy Winje
  - Nadia Carasco
  
- Ron Dragoo Provided Information on The Landslide Mitigation Infrastructure Following the Kickoff Meeting.

## **Data/Information Evaluated**

- 2012 Landslide Mitigation Workshop Presentation
- 2007 GIS Landslide Inventory Maps

## **Site Visits**

- June 19th
- June 20th

Visited the Abalone Cove are of the overall Palos Verdes Drive South Landslide area. Inspected surface drainage systems, dewatering and monitoring wells, and surface conditions.

## Photos from Site Visits (June 19, 2013 Site Visit:)

### Abalone Cove Area:



## Review of Provided Data/Reports

- 2012 Landslide Mitigation Workshop Presentation  
Determined: Types of landslide mitigation infrastructure present in City, ground/surface conditions and the effects of rainfall, number of dewatering and monitoring wells and the production amounts of dewatering wells, significant landslides in recent years (Paseo Del Mar) and planned/recommended improvements to landslide mitigation infrastructure.

## Preliminary Evaluation

### Evaluation Criteria:

- Capacity of Infrastructure  
As it relates to landslide prevention
- Structural Condition of Infrastructure  
As it relates to operation and maintenance
- Environmental Sustainability of Infrastructure  
As it relates to preserving the natural landscape and wildlife when operating, maintaining, and improving landslide mitigation infrastructure

## **Preliminary Evaluation (cont.)**

"Draft" Grades

Capacity of Infrastructure: **D (60%)**

Structural Condition of Infrastructure: **D (64%)**

Environmental Sustainability of Infrastructure: **C (74%)**

**Overall Grade: D (66%)**

## **Progress Meeting**

July 30, 2013 and August 8, 2013

Progress Meeting were held on above dates.

Data Evaluation and "Draft" Grades were discussed with City staff. Current condition of landslide mitigation system was discussed. Data presented in 2012 presentation was the most recent data the City had. Although some minor aspects of the landslide mitigation system may have changed slightly, the overall system were still lacking and CIP projects have not yet been implemented, due to the recent nature of the presentation. Funding concerns were also discussed, along with working together with other agencies.

## **Re-Evaluation of Landslide Mitigation Infrastructure, Report Preparation, and Final Grade Determination**

Final Grade of Landslide Mitigation System, based on review of existing data, site visits, and discussions with City staff, is shown on spreadsheet breakdown on the following page:

## Evaluation of Landslide Mitigation Infrastructure

### Criteria 1: The capacity of infrastructure as it relates to landslide prevention

<u>No.</u>	<u>Subcriteria</u>	<u>Score</u>	<u>Comments</u>
1	Overall Coverage of Facilities	5	Insufficient coverage throughout City
2	Size/sufficiency of surface drainage lines	5	Only a small % require capacity upgrades
3	Redundancy of system	6	Multiple medium drains versus fewer large ones
4	Grading improvements	8	Recent grading improvements made
5	Cost of current or pending capacity improvements	6	Many improvements (new facilities) needed
<b>Average Score</b>		<b>6</b>	<b>"D" Grade</b>

### Criteria 2: The structural condition of infrastructure as it relates to operation & maintenance

<u>No.</u>	<u>Subcriteria</u>	<u>Score</u>	<u>Comments</u>
1	Overall structural condition of facilities	6	Overall poor condition of facilities
2	Quantity of maintenance/structural problems	5	Facilities need continuous maintenance/adjustment
3	Severity of maintenance/structural problems	5	Piping discontinuous, wells in need of replacement, etc.
4	Safety concerns of structural/maintenance problems	5	Some torn/cut CMP along walking paths
5	Cost of structural/maintenance problems	5	Many repairs (to exist. facilities) needed
<b>Average Score</b>		<b>5.2</b>	<b>"F" Grade</b>

### Criteria 3: The environmental sustainability of infrastructure as it relates to preserving the natural landscape and wildlife when operating, maintaining, and improving landslide mitigation infrastructure.

<u>No.</u>	<u>Subcriteria</u>	<u>Score</u>	<u>Comments</u>
1	Overall environmental utilization/optimization	6	Overall fair utilization/optimization
2	Location of facilities in relation to landscapes and aesthetic/visual qualities	7	Facilities not a significant eyesore
3	Use of natural features to extent practical	5	Natural Features (ground) are not feasible for use
4	Landslide facilities protect existing landscape improvements (man-made)	8	Facilities mostly located away from man-made landscape improvements
5	Cost of landscape improvements (man-made) due to faulty facilities	8	Facilities mostly located away from man-made landscape improvements
<b>Average Score</b>		<b>6.8</b>	<b>"D" Grade</b>

<b>Total Average Score</b>	<b>6.0</b>	<b>"D" Grade</b>
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**Final Grade: "D"**