

Mail Stop 4561

April 7, 2009

VIA USMAIL and FAX (415) 738 - 6501

Mr. A. William Stein, Chief Financial Officer
Digital Realty Trust, Inc.
560 Mission Street, Suite 2900
San Francisco, CA 94105

RE: Digital Realty Trust, Inc.
File No. 001-32336
Form 10-K for the year ended December 31, 2008

Dear Mr. Stein:

We have reviewed your filing and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments. Please be as detailed as necessary in your explanation.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the year ended December 31, 2008

Note 10. Incentive Plan, page 98

1. Please refer also to note 2(m). We noted that you use the Black-Scholes option-pricing model for your stock option grants. Please explain to us, and disclose in futures filings, the method used to measure the fair value of the share-based compensation awards with performance conditions under your Class C Unit awards, including a description of the significant assumptions used to measure the fair value of these awards.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Jorge L. Bonilla at (202) 551-3414 or me at (202) 551-3413 if you have questions regarding comments on the financial statements and related matters. Please contact Stacie Gorman at (202) 551-3585 with any other questions.

Sincerely,

Cicely LaMothe
Branch Chief