



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

June 16, 2014

Via E-mail

Mr. Jeff Finnin
Chief Financial Officer
CoreSite Realty Corporation
1001 17th Street, Suite 500
Denver, CO 80202

Re: CoreSite Realty Corporation
Form 10-K for the fiscal year ended December 31, 2013
Filed February 14, 2014
File No. 1-34877

Dear Mr. Finnin:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the fiscal year ended December 31, 2013

General

1. In your future Exchange Act filings, please ensure that you comply with plain English requirements and limit the use of industry jargon. If you elect to use an industry-specific term, please define it the first time it is used. By way of example only, we note your references on page 5 to "data center solutions with six 9s of uptime (99.9999%)," and "non-modified SSAE16 SOCI Type 2 reports."

Item 1. Business, page 4

2013 and Recent Developments, page 4

2. We note that the interest rate on your \$100 million senior unsecured term loan is determined by your Operating Partnership's leverage ratio. Please disclose the leverage ratio required and the current interest rate.

Our Portfolio, page 10

3. We note your disclosure of operating statistics for your same store property portfolio on page 11. In future Exchange Act periodic reports, please expand your analysis in the MD&A section to address any material period to period changes in same-store performance, including the relative impact of occupancy and rental rate changes, or advise.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 45

4. We note your disclosure on page 47 discussing your leasing activity for new and expansion leases, in net rentable square feet. In future Exchange Act periodic reports, please expand your disclosure to include the number of leases represented by this data. Further, in future Exchange Act periodic reports, please include disclosure of your leasing activity for renewed leases during the relevant periods.

Conditions in Significant Markets, page 48

5. We note your risk factor disclosure on page 19 that a significant percentage of your customer leases expire every year, and that a decrease in rental rates could have a material adverse effect on your business. In future Exchange Act periodic reports, please expand this disclosure to discuss any trends regarding the relationship of market rents to your expiring rents. We note, by way of example, Mr. Ray's statement regarding rental rate trends in the earnings call on February 13, 2014.

Financial Statements

Consolidated Statements of Cash Flows, page 65

6. We note your response to comment 3 in your letter to the Staff dated December 14, 2012 in which you indicated that you would improve transparency by separately disclosing acquisitions, tenant improvements and construction in progress within the investing section of your consolidated statements of cash flows. Please tell us and disclose in future filings the portion of real estate improvements that relates to development and re-development activities versus those that relate to building and building improvements.

Deferred Costs, page 68

7. We note your disclosure regarding deferred leasing costs on page 68. In future Exchange Act periodic reports, please revise your disclosure regarding your leasing activity to include a breakdown of your leasing costs, including any commissions and concessions, for new and renewed leases.

We urge all who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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.

You may contact Howard Efron, Staff Accountant, at (202) 551-3439 or me at (202) 551-3629 if you have questions regarding comments on the financial statements and related matters. Please contact Charles Garrison, Staff Attorney, at (202) 551-3466 or Kristina Aberg, Staff Accountant, at (202) 551-3404 with regard to legal comments.

Sincerely,

/s/ Robert F. Telewicz Jr.

for

Kevin Woody
Branch Chief