



DIVISION OF
CORPORATION FINANCE

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

August 6, 2010

Thomas M. Ray, President
CoreSite Realty Corporation
1050 17th Street
Suite 800
Denver, CO 80265

**Re: CoreSite Realty Corporation
Amendment No. 2 to Registration Statement on
Form S-11
Filed July 28, 2010
File No. 333-166810**

Dear Mr. Ray:

We have reviewed Amendment No.2 to your registration statement 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 by amending your registration statement and providing the requested information. 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 registration statement and the information you provide in response to these comments, we may have additional comments.

Cover Page

1. We note that Citi, BofA Merrill Lynch, and RBC Capital Markets are acting as joint book running managers and representatives of the underwriters. We note that you have identified two additional underwriters in this amendment. Please ensure that only the lead or managing underwriter(s) are identified on the prospectus cover page. See Item 501(b)(8) of Regulation S-K. We note that KeyBanc Capital Markets and Credit Suisse are not identified as lead managers in your disclosure regarding the underwriters. If these two entities will serve as lead managers, please clarify and explain their role on page 176

Prospectus Summary, page 1

Our Company, page 1

2. We note your response to comment 1 of our letter dated July 22, 2010. We reissue our comment in part. Please revise your disclosure to define the term “high-quality” data center. Please clarify how each of your data centers qualifies as a “high-quality” data center.

Our Structure, page 9

3. In the footnotes to the diagram, please identify the “certain members” of your management that will receive shares and operating partnership units.

Balanced Sheet Positioned to Fund Continued Growth, page 4

4. We note your response to comment 2 of our letter. In response to our comment, you revised your disclosure to state that you may incur additional indebtedness “in amounts limited only by the restrictive covenants under your revolving credit facility.” We note, in your articles of incorporation, there is no specified limit on the amount of leverage you may incur. Please clearly state that, aside from restrictions that may be imposed in the future by agreements, there are no limits on the amount of leverage you may use and make similar revisions to the risk factor on page 26 and your disclosure on page 74.

Summary Risk Factors, page 6

5. Please add a summary risk factor to disclose that you may pay distributions from offering proceeds, borrowings, or the sale of assets to the extent distributions exceed earnings or cash flows from operations.

The Restructuring Transactions, page 7

6. We note your response to comment 4 of our letter. Please expand your disclosure in this section to include the information contained in your response.

Restrictions on Transfer, page 11

7. We note your response to comment 6 of our letter. Please revise your disclosure in this section to clarify that certain operating partnership units are not subject to the restrictions discussed in this section because they will be sold to you in connection with the restructuring transaction.

Dividend Policy, page 39

8. We have read and considered your response to comment 9 and we do not find your argument persuasive. Unless you have entered into a renewal lease by June 30, 2010, it does not appear that you have a reasonable basis to assume the continuation of month-to-month leases for a full year. Please revise your distribution table to reflect the decreases due to lease expirations for month-to-month leases.
9. As previously requested in comment 10, please revise your disclosure in footnote (7) to explain how management expects investors to use information related to the average tenant improvement costs and leasing commissions and how such information will enhance the investor's understanding of your calculation of cash available for distribution.
10. Also, expand your disclosure in footnote (9) to identify the property that the scheduled amortization payment of mortgage loan principal represents.

Capitalization, page 43

11. We have read and considered your response to comment 15. Consistent with the representations included in your supplemental response to us, please disclose your intentions to enter into a binding agreement or obtain a firm commitment prior to seeking effectiveness as well as the fact that these financing transactions are a pre-condition to the closing of the initial public offering. Similar disclosure should also be made on pages 63 and F-13 in the sections where you discuss the proposed financing transactions.
12. We note that the mortgage payment pro forma as adjusted balance of \$124,919 differs from the mortgage payment balance of \$122,919 that is reflected in your pro forma financial statements on page F-8. Please explain the discrepancy or revise accordingly. In addition on page 4, and throughout your filing, you indicate you have a combined indebtedness, on a pro forma basis, of \$124.9M . Please also explain why this amount differs from the amount reported within your pro forma financial statements.

Dilution, page 44

13. In footnote 2, please identify the "certain members" of your management that will receive restricted shares.

Results of Operations, page 56

14. We note your response to comment 18 of our letter. In response to our comment, you state that management services will be eliminated upon completion of this offering and consummation of the Restructuring Transactions. Please add this disclosure and clarify that you will not receive management fees after the consummation of the Restructuring Transactions.

Our Portfolio, page 78

15. We note your response to comment 21 of our letter and the additional footnote disclosure about reimbursements. We also note that over 45% of your leased area and 30% of your rents are on a modified gross or net basis. As such, please revise to disclose the rental figures in the table for such leases without the gross up. You may include the gross up amounts in the footnotes.

Legal Proceedings, page 102

16. We note your response to comment 22 and the revised disclosure of your belief. It appears that any action that is the basis for Mr. Brumer's allegations would have taken place prior to your formation. As such, please revise to clarify how responsibility would be attributable to you if a suit were initiated.

Executive Officer Compensation, page 108

17. We note your response to comment 24 of our letter. Please note that disclosure regarding the long-term incentive units should be presented in conjunction with your discussion of compensation. Please revise your disclosure accordingly. Additionally, please expand your disclosure to discuss whether the incentive units could achieve full parity immediately. Further, please describe the circumstances under which the long-term incentive units will not achieve full parity with the common units.

2009 Equity Compensation, page 111

18. We note your disclosure that Ms. Beckman, Mr. Rockwood, and Mr. Dunn will receive operating partnership units in exchange for the PIP awards and that the vesting of a percentage of these units will be accelerated. Please disclose when the remaining unvested units will vest.

Certain Relationships and Related Party Transactions, page 124

19. Please revise to identify the parties that will receive OP units and cash as part of the restructuring transactions. Please refer to Item 404(a) of Regulation S-K.

Description of Securities, page 143

Underwriting, page 176

20. Please disclose whether the shares that are part of the directed share program will be subject to the lock-up agreement.

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Pro forma Condensed Consolidated Financial Statements, page F-6

21. We have read and considered your response to comment 28. Please provide your basis for presenting consolidated financial statements for periods in which the other entities were not under control of CRP Fund V Holdco.
22. Confirm to us whether CRP Fund V Holdings, LLC owns or consist of any other entities besides those entities listed on page F-22.

Legality Opinion

23. Please have counsel revise to clarify if the fifth assumption made on page 2 applies to future periods or is as of the date of the opinion. If the assumption is as of the date of the opinion, it is not clear why such information is not ascertainable by counsel. Please advise.

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 the information the Securities Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness

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as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Yolanda Crittendon at (202) 551-3472 or Cicely LaMothe, Accounting Branch Chief, at (202) 551-3413 if you have questions regarding comments on the financial statements and related matters. Please contact Stacie Gorman, Attorney – Advisor, at (202) 551-5858 or me at (202) 551-3386 with any other questions.

Sincerely,

Duc Dang
Attorney – Advisor

Cc: Patrick H. Shannon, Esq.
via facsimile (202) 637-2201