
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 20549

Form 11-K

ANNUAL REPORT PURSUANT TO SECTION 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2010

or

TRANSITION REPORT PURSUANT TO SECTION 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number 001-16441

CROWN CASTLE INTERNATIONAL CORP. 401(K) PLAN

(Full title of the Plan and address of the Plan,
if different from that of the issuer named below)

CROWN CASTLE INTERNATIONAL CORP.

1220 Augusta Drive, Suite 500

Houston, Texas 77057-2261

(Name of issuer of the securities held pursuant to the
plan and the address of principal executive office)

[Table of Contents](#)

**CROWN CASTLE INTERNATIONAL CORP.
401(k) Plan**

Table of Contents

	Page
Report of Independent Registered Public Accounting Firm	1
Statements of Net Assets Available for Benefits as of December 31, 2010 and 2009	2
Statements of Changes in Net Assets Available for Benefits for the Years Ended December 31, 2010 and 2009	3
Notes to Financial Statements	4
Supplemental Schedule:	
Schedule H, Line 4i – Schedule of Assets (Held at End of Year)	11
Note: All other schedules required by the Department of Labor’s Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because there is no information to report.	
Signature	12
EXHIBIT	
23.1 Consent of Independent Registered Public Accounting Firm	

Report of Independent Registered Public Accounting Firm

The Crown Castle International Corp. 401(k) Plan Participants and Administrator:

We have audited the accompanying statements of net assets available for benefits of the Crown Castle International Corp. 401(k) Plan (the Plan) as of December 31, 2010 and 2009, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2010 and 2009, and the changes in net assets available for benefits for the years then ended in conformity with U.S. generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of Schedule H, Line 4i – Schedule of Assets (Held at End of Year) as of December 31, 2010 is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ KPMG LLP
Pittsburgh, Pennsylvania
June 27, 2011

CROWN CASTLE INTERNATIONAL CORP. 401(k) PLAN

Statements of Net Assets Available for Benefits

December 31, 2010 and 2009

	<u>2010</u>	<u>2009</u>
Assets		
Investments, at fair value (notes 3 and 4)	\$82,037,457	\$64,101,198
Receivables:		
Employer contributions	2,013,015	1,858,612
Participant contributions	—	168,976
Notes receivable from participants	1,658,378	1,169,524
Other receivables	3,505	5,547
Total receivables	<u>3,674,898</u>	<u>3,202,659</u>
Net assets available for benefits	<u>\$85,712,355</u>	<u>\$67,303,857</u>

See accompanying notes to financial statements.

CROWN CASTLE INTERNATIONAL CORP. 401(k) PLAN**Statements of Changes in Net Assets Available for Benefits****For the Years Ended December 31, 2010 and 2009**

	<u>2010</u>	<u>2009</u>
Additions (deductions) to net assets attributed to:		
Investment income (loss):		
Net appreciation (depreciation) in fair value of investments (note 3)	\$ 8,448,015	\$15,066,107
Dividends and interest	998,814	1,149,798
Total investment income (loss)	<u>9,446,829</u>	<u>16,215,905</u>
Contributions:		
Employer	4,166,112	3,897,914
Participants	6,123,628	5,650,099
Rollovers	588,518	33,506
Total contributions	<u>10,878,258</u>	<u>9,581,519</u>
Total additions (deductions)	20,325,087	25,797,424
Deductions from net assets attributed to:		
Benefits paid to participants	2,325,279	2,207,709
Administrative expenses	17,240	15,750
Total deductions	<u>2,342,519</u>	<u>2,223,459</u>
Transfers from Merged Plan (note 7)	425,930	—
Net increase (decrease)	18,408,498	23,573,965
Net assets available for benefits:		
Beginning of year	67,303,857	43,729,892
End of year	<u>\$85,712,355</u>	<u>\$67,303,857</u>

See accompanying notes to financial statements.

**CROWN CASTLE INTERNATIONAL CORP. 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS
December 31, 2010 and 2009**

(1) Plan Description

The following description of the Crown Castle International Corp. 401(k) Plan (the "Plan") provides only general information. Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

(a) General

The Plan is a defined contribution plan available to eligible employees of Crown Castle International Corp. (the "Company"). The Charles Schwab Trust Company is the trustee of the Plan. Schwab Retirement Plan Services, Inc. is recordkeeper, and both Schwab Retirement Plan Services, Inc. and State Street Bank and Trust Company serve as custodians. The Company is the plan administrator for the Plan. The Plan was established on May 1, 1999. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974.

(b) Contributions

Employees are eligible for participation in the Plan once they are twenty-one years of age and have completed three months of service with the Company. Employees can participate in the Plan on the first day of the month coinciding with or following three months of service. At the discretion of the plan sponsor, the service requirement can be waived. Participants may contribute any percentage that allows the participant to reach the section 401(k) pre-tax contribution limit of \$16,500 in both 2010 and 2009 for participants under age 50. Participants who are age 50 and older can contribute an additional \$5,500 in both 2010 and 2009 for a total of \$22,000. These employee contributions are made through salary reductions and are fully vested at all times. Participants may also contribute amounts representing distributions from other qualified plans. Participants direct the investment of their contributions into various investment options offered by the Plan. As of December 31, 2010, the Plan offered 11 mutual funds, seven common collective funds, a participant directed brokerage account and the Crown Castle International Corp. Common Stock Unitized Trust Fund. The Company matches and contributes 100% of the first 3% of compensation that a participant contributes to the Plan. In addition, discretionary amounts may be contributed at the option of the Company's board of directors. The discretionary contributions for 2010 and 2009 were 100% of the second 3% of compensation that participants contributed to the Plan. Contributions are subject to certain limitations. The Company's discretionary contributions were \$1,912,127 (net of \$22,370 of forfeitures) and \$1,707,993 (net of \$54,304 of forfeitures) for the years ended December 31, 2010 and 2009, respectively.

(c) Participant Accounts

Participant accounts are maintained at fair market value. Each participant's account is credited with the participant's contribution and allocations of (a) the Company's matching and discretionary contributions and (b) Plan earnings and losses. The participant is entitled to the benefit that can be provided from the participant's vested account.

**CROWN CASTLE INTERNATIONAL CORP. 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS
December 31, 2010 and 2009**

(d) Vesting

Participants are vested immediately in their contributions plus actual earnings (losses) thereon. Vesting in the Company's contribution portion of their accounts is generally based on years of service. A participant is 33% vested after one year of credited service, 67% vested after two years of credited service, and 100% vested after three years of credited service. A participant automatically vests in any non-vested accounts upon attainment of age 65, upon retirement due to disability, upon death and upon termination of the Plan.

(e) Notes Receivable From Participants

Participants are permitted to borrow from their account a minimum of \$1,000 up to a maximum of 50% of the vested balance or \$50,000, whichever is less. The notes are secured by the balance in the participant's account and bear interest at a fixed rate of prime plus 1%. As of December 31, 2010, interest rates on the notes receivable from participants ranged from 4.25% to 9.25%. All notes are subject to specific repayment terms and must be repaid within a five-year period. Each participant is permitted one note at a time. No allowance for credit losses has been recorded as of December 31, 2010 and 2009.

In the event of default, as described by the Plan, participants are considered to have received a distribution and are subject to income taxes on the distributed amount. Also, participants may be subject to an additional 10% tax on their taxable withdrawal if it occurs prior to age 59 1/2.

(f) Payment of Benefits

Participants are permitted to withdraw any portion of their vested account balance due to death, permanent disability, retirement, attainment of age 59 1/2, in the event of financial hardship or termination of service. The participant may elect to receive a lump-sum payment, subject to federal income tax withholdings, or rollover the vested account balance to another qualified plan. These withdrawals, prior to retirement, may result in certain suspensions of future participation in the Plan.

(g) Forfeitures

Company contributions and earnings (losses) thereon that have not become vested, and have been forfeited by participants in accordance with the applicable provisions of the Plan, are applied against the Company's contributions to the Plan and may be applied to reduce the administrative expenses of the Plan. During the years ended December 31, 2010 and 2009, the Plan has and anticipates continuing to predominately utilize participant forfeitures to reduce any annual discretionary contribution. Amounts forfeited were \$24,517 and \$50,311 during the years ended December 31, 2010 and 2009, respectively. Forfeited amounts of \$1,950 and \$4,550 were applied against administrative expenses for the years ended December 31, 2010 and 2009, respectively. The forfeited amounts that were unallocated to participants totaled \$294 and \$0 as of December 31, 2010 and 2009, respectively. See note 1(b).

(h) Administration Expenses

Plan administrative expenses, to the extent not paid by the Company, are charged to and paid from the Plan's assets as incurred. The Plan permits the application of forfeited assets to pay administrative expenses.

**CROWN CASTLE INTERNATIONAL CORP. 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS
December 31, 2010 and 2009**

(i) Termination of Plan

In the event of termination of the Plan, the plan administrator will continue to function during such period as is necessary to make remaining normal distributions and to administer and distribute the residual interests of the participants. Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, participants become 100% vested in their accounts. Any unallocated assets of the Plan shall be allocated to participant accounts and distributed in such a manner as the Company may determine.

(j) Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statement of net assets available for benefits. For example, as of December 31, 2010 approximately 10% of the Plan's net assets are invested in the Crown Castle International Corp. Unitized Trust Fund that predominately consists of the Company's common stock. See also note 3.

(2) Summary of Significant Accounting Policies

(a) Basis of Financial Statements

The accompanying financial statements have been prepared on the accrual basis. Amounts payable to participants terminating participation in the Plan are included as a component of net assets available for benefits. The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires the plan administrator to make estimates and assumptions that affect the amounts reported in the financial statements and notes thereto. Actual results could differ from those estimates.

(b) New Accounting Pronouncements

In January 2010, the Financial Accounting Standards Board ("FASB") issued an Accounting Standards Codification Update ("ASU") to improve disclosures about fair value measurements. The Plan adopted this ASU for the year ended December 31, 2010. The adoption of this ASU did not have a material impact on the Plan's fair value measurement disclosures.

In September 2010, the FASB issued an ASU which provides guidance on how loans to participants should be classified and measured by defined contribution plans. This ASU requires that participant loans be classified as notes receivable from participants, which are segregated from plan investments and measured at their principal balance plus any accrued but unpaid interest. This ASU was adopted for the year ended December 31, 2010 and retrospectively applied to December 31, 2009 by reclassifying "notes receivable from participants" to within "receivables" on the statement of net assets available for benefits. There was no impact to the Plan's net assets as of December 31, 2010 or 2009 as a result of the adoption of this ASU.

(c) Investment Income

Interest income from investments is recorded as earned on an accrual basis. Dividend income is recorded on the ex-dividend date.

**CROWN CASTLE INTERNATIONAL CORP. 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS
December 31, 2010 and 2009**

(d) Investments and Fair Value Measurements

The Company's assets and liabilities recorded at fair value are categorized based upon a fair value hierarchy that ranks the quality and reliability of the information used to determine fair value, in accordance with applicable accounting guidance (see note 4).

The following is a description of the levels of the fair value hierarchy:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include quoted prices for similar assets or liabilities in active markets, as well as inputs other than quoted prices that are observable for the asset or liability.
- Level 3 inputs are unobservable inputs and are not corroborated by market data.

Following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2010 and 2009.

Money market funds and equity securities: Valued at the closing price reported on the active market on which the individual securities are traded.

Mutual funds: Valued at the NAV of shares held by the Plan at year-end based on quoted market price on active markets.

Crown Castle International Corp. Common Stock Unitized Trust Fund: Investments in the Crown Castle International Corp. Stock Unitized Trust Fund are valued based on the current market value of the underlying assets of the fund. These investments include cash equivalents as well as shares of the common stock of Crown Castle International Corp., which are valued at the closing price as reported by NYSE on the last business day of the Plan year.

Common Collective Funds: Investments in collective trust funds are valued at the NAV of the respective funds on the last day of the Plan year based on audited financial statements.

Purchases and sales of securities are accounted for on a settlement-date basis. The difference between recording transactions on a trade date and a settlement date was not significant to the Plan's financial statements.

In accordance with the policy of stating investments at fair value, unrealized appreciation or depreciation on investments are reflected within investment income (loss) in the Statements of Changes in Net Assets Available for Benefits.

(e) Contributions

Participant contributions are recorded as they are withheld from the participant's wages.

(f) Distributions to Participants

Distributions to participants are recorded when paid by the Plan.

CROWN CASTLE INTERNATIONAL CORP. 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS
December 31, 2010 and 2009

(3) Investment Options

Schwab Retirement Plan Services, Inc. and State Street Bank and Trust Company serve as custodians of the Plan's assets. The funds listed below were the investment options as of December 31, 2010:

- Alger Small Cap Growth Institutional I Fund
- Artio International Equity A Fund
- Columbia Acorn Z Fund
- Crown Castle International Corp. Stock Unitized Trust Fund
- Goldman Sachs Government Income A Fund
- Goldman Sachs Mid Cap Value A Fund
- Growth Fund of America
- JPMorgan Core Bond Select
- Northern Small Cap Value Fund
- Personal Choice Retirement Account
- Schwab 1000 Index Fund
- Schwab Managed Retirement Trust 2010 CI III
- Schwab Managed Retirement Trust 2020 CI III
- Schwab Managed Retirement Trust 2030 CI III
- Schwab Managed Retirement Trust 2040 CI III
- Schwab Managed Retirement Trust 2050 CI III
- Schwab Managed Retirement Trust Income
- Schwab U.S. Treasury Money Fund
- Van Kampen Growth & Income A Fund
- Virtus Real Estate Securities A

The following are investments that represent 5% or more of the Plan's assets (see note 8):

	December 31,	
	2010	2009
Mutual Funds (valued at fair value):		
Columbia Acorn Z Fund	\$ 6,451,490	\$ 4,154,270
Growth Fund of America	11,599,267	10,352,653
Artio International Equity A Fund	8,816,587	7,160,669
Schwab 1000 Index Fund	6,747,120	4,529,251
Van Kampen Growth & Income A Fund	5,199,055	3,841,136
Common Stock Unitized Trust Fund (valued at fair value):		
Crown Castle International Corp. Stock Unitized Trust Fund	\$ 8,838,151	\$ 9,626,890

For the years ended December 31, 2010 and 2009, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated (depreciated) in fair value, as follows:

	For the Years Ended December 31,	
	2010	2009
Mutual funds and common stock	\$ 6,013,401	\$ 7,845,310
Common collective funds	1,484,062	1,689,398
Common stock unitized trust fund	950,552	5,531,399
	\$ 8,448,015	\$ 15,066,107

**CROWN CASTLE INTERNATIONAL CORP. 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS
December 31, 2010 and 2009**

(4) Fair Values

Investments measured at fair value on a recurring basis consisted of the following types of instruments as of December 31, 2010 and 2009.

	Assets at Fair Value as of December 31, 2010			
	Level 1	Level 2	Level 3	Total
Mutual funds	\$54,580,086	\$ —	\$ —	\$54,580,086
Common collective funds	—	15,800,475	—	15,800,475
Participant directed brokerage account:				
Money market funds	863,976	—	—	863,976
Common stocks	702,564	—	—	702,564
Mutual funds	1,128,065	—	—	1,128,065
Unit investment trusts and other	—	124,140	—	124,140
Total participant directed brokerage account	2,694,605	124,140	—	2,818,745
Crown Castle International Corp. Stock Unitized Trust Fund	—	8,838,151	—	8,838,151
Total	<u>\$57,274,691</u>	<u>\$24,762,766</u>	<u>\$ —</u>	<u>\$82,037,457</u>
	Assets at Fair Value as of December 31, 2009			
	Level 1	Level 2	Level 3	Total
Mutual funds	\$41,362,757	\$ —	\$ —	\$41,362,757
Common collective funds	—	11,460,020	—	11,460,020
Participant directed brokerage account:				
Money market funds	352,294	—	—	352,294
Common stocks	486,748	—	—	486,748
Mutual funds	671,913	—	—	671,913
Unit investment trusts and other	—	140,576	—	140,576
Total participant directed brokerage account	1,510,955	140,576	—	1,651,531
Crown Castle International Corp. Stock Unitized Trust Fund	—	9,626,890	—	9,626,890
Total	<u>\$42,873,712</u>	<u>\$21,227,486</u>	<u>\$ —</u>	<u>\$64,101,198</u>

(5) Federal Income Taxes

The Plan received a favorable determination letter from the Internal Revenue Service (“IRS”) dated October 29, 2004, which stated that the Plan and related trust are designed in accordance with the applicable sections of the Internal Revenue Code (IRC). Since receiving the determination letter, the Plan has been amended and restated, including the adoption of a non-standardized prototype adoption agreement effective January 1, 2009. On May 23, 2008, the prototype plan sponsor received a favorable opinion letter from the IRS. Accordingly, the accompanying financial statements do not include a provision for federal income taxes.

Accounting principles generally accepted in the United States of America require plan management to evaluate tax positions taken by the plan and recognize a tax liability (or asset) if the plan has taken an uncertain position that more likely than not would not be sustained upon examination by the Internal Revenue Service. The plan administrator has analyzed the tax positions taken by the Plan and has

**CROWN CASTLE INTERNATIONAL CORP. 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS
December 31, 2010 and 2009**

concluded that as of December 31, 2010, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The plan administrator believes it is no longer subject to income tax examinations for years prior to 2007.

(6) Party-In-Interest Transactions

Certain Plan investments are funds managed by The Charles Schwab Trust Company. The Charles Schwab Trust Company is the trustee of the Plan. Schwab Retirement Plan Services, Inc. is recordkeeper, and both Schwab Retirement Plan Services, Inc. and State Street Bank and Trust Company serve as custodians.

The Crown Castle International Corp. Stock Unitized Trust Fund holds 195,785 shares and 240,985 shares of Crown Castle International Corp. common stock as of December 31, 2010 and 2009, respectively.

Participants have notes from their fund accounts outstanding in the amount of \$1,658,378 and \$1,169,524 as of December 31, 2010 and 2009, respectively.

(7) Plan Merger

In September 2010, the Company completed the merger (“NewPath Merger”) of NewPath Networks, Inc. with and into a subsidiary of the Company. Following the completion of the NewPath Merger, NewPath Networks, LLC is an indirect subsidiary of the Company. In November 2010, the NewPath Networks, LLC 401(K) Plan merged into the Plan (the “Merged Plan”). The Merged Plan covered the eligible employees of NewPath Networks, LLC, a subsidiary of NewPath Networks, Inc. All of the assets from the Merged Plan totaling \$425,930 were transferred to the Plan in November 2010.

(8) Subsequent Events

In March 2011, the Plan eliminated the investment option for Artio International Equity A Fund and added the investment option for the Thornburg International Value R5 Fund.

CROWN CASTLE INTERNATIONAL CORP. 401(k) PLAN

EIN: 76-0470458

Plan Number: 001

Schedule H, Line 4i – Schedule of Assets (Held at End of Year)

December 31, 2010

Identity of Issuer, Borrower, Lessor or Similar Party	Description of Investment	Current Value
Mutual Funds:		
Alger Management, Inc.	Alger Small Cap Growth Institutional I Fund	\$ 2,120,540
American Funds	Growth Fund of America	11,599,267
Artio Investments Funds	Artio International Equity A Fund	8,816,587
Columbia Wagner Asset Management	Columbia Acorn Z Fund	6,451,490
Goldman Sachs Trust	Goldman Sachs Government Income A Fund	1,907,727
Goldman Sachs Trust	Goldman Sachs Mid Cap Value A Fund	4,252,040
JPMorgan Asset Management	JPMorgan Core Bond Select	4,284,161
Northern Trust	Northern Small Cap Value Fund	1,278,840
Phoenix Investment Partners, LTD	Virtus Real Estate Securities A	1,923,259
*The Charles Schwab Trust Company	Schwab 1000 Index Fund	6,747,120
Van Kampen Funds	Van Kampen Growth & Income A Fund	5,199,055
Total Mutual Funds		<u>54,580,086</u>
Common Collective Funds:		
*The Charles Schwab Trust Company	Schwab U.S. Treasury Money Fund	3,390,036
*The Charles Schwab Trust Company	Schwab Managed Retirement Trust 2010 CI III	1,083,207
*The Charles Schwab Trust Company	Schwab Managed Retirement Trust 2020 CI III	3,769,756
*The Charles Schwab Trust Company	Schwab Managed Retirement Trust 2030 CI III	3,272,662
*The Charles Schwab Trust Company	Schwab Managed Retirement Trust 2040 CI III	3,574,815
*The Charles Schwab Trust Company	Schwab Managed Retirement Trust 2050 CI III	520,262
*The Charles Schwab Trust Company	Schwab Managed Retirement Trust Income	189,737
Total Common Collective Funds		<u>15,800,475</u>
Participant Directed Brokerage Account:		
*The Charles Schwab Trust Company	Personal Choice Retirement Account	2,818,745
Unitized Trust Fund:		
*Crown Castle International Corp.	Employer Securities	8,838,151
Notes receivable from participants:		
*Participants	226 participant loans with various rates of interest from 4.25% to 9.25% and various maturity dates through January 2016	1,658,378
		<u>\$83,695,835</u>

* Party-in interest

See accompanying report of independent registered public accounting firm.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan Administrator for the Plan has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

CROWN CASTLE INTERNATIONAL CORP.

401(k) PLAN

(Name of Plan)

By /s/ ROB A. FISHER

Rob A. Fisher

Vice President and Controller

(Principal Accounting Officer)

Date: June 27, 2011

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Crown Castle International Corp.

We consent to the incorporation by reference in the registration statement (no. 333-163843) on Form S-8 of Crown Castle International Corp. of our report dated June 27, 2011 with respect to the statements of net assets available for benefits of the Crown Castle International Corp. 401(k) Plan as of December 31, 2010 and 2009, the related statements of changes in net assets available for benefits for the years then ended, and the related supplemental schedule of Schedule H, Line 4i – Schedule of Assets (Held at End of Year) as of December 31, 2010, which report appears in the December 31, 2010 annual report on Form 11-K of the Crown Castle International Corp. 401(k) Plan.

/s/ KPMG LLP
Pittsburgh, Pennsylvania
June 27, 2011