Collateral Asset Summary – Loan No. 9

Vertex Pharmaceuticals HQ

Cut-off Date Balance:
Cut-off Date LTV:
U/W NCF DSCR:
U/W NOI Debt Yield:

\$30,000,000 35.5% 6.28x 17.9%







50 Northern Avenue & 11 Fan Pier Boulevard Boston, MA 02110

Collateral Asset Summary - Loan No. 9

Vertex Pharmaceuticals HQ

Cut-off Date Balance: \$30,000,000 Cut-off Date LTV: 35.5% U/W NCF DSCR: 6.28x U/W NOI Debt Yield: 17 9%

Mortgage Loan Information

Loan Seller: CGMRC Loan Purpose: Refinance Credit Assessment Aa2/A-/AA (Moody's/Fitch/DBRS)(1):

Senior Housing Properties Trust Sponsor:

Borrower: SNH Seaport LLC Original Balance⁽²⁾: \$30,000,000 Cut-off Date Balance(2): \$30,000,000 % by Initial UPB: 4.3%

Interest Rate⁽³⁾: 2.79817647% **Payment Date:** 6th of each month First Payment Date: September 6, 2016 **Maturity Date:** November 6, 2028 Anticipated Repayment Date⁽³⁾: August 6, 2026

Amortization:

Interest only, then ARD

\$395.000.000 Pari Passu Debt: Additional Debt⁽²⁾⁽⁴⁾: \$195,000,000 Mezzanine Debt Call Protection⁽⁵⁾: L(24), DorYM0.5(89), O(7)

Lockbox / Cash Management: Hard / Springing

Reserves	(6)	
	Initial	Monthly
Taxes:	\$0	Springing
Insurance:	\$0	Springing
Lease Termination Fund:	\$0	Springing

Financial In	formation	
	Whole Loan ⁽⁷⁾	Total Debt ⁽⁸⁾
Cut-off Date Balance / Sq. Ft.:	\$375	\$547
Balloon Balance / Sq. Ft.:	\$375	\$547
Cut-off Date LTV:	35.5%	51.8%
Balloon LTV ⁽⁹⁾ :	35.5%	51.8%
Underwritten NOI DSCR:	6.31x	3.43x
Underwritten NCF DSCR:	6.28x	3.42x
Underwritten NOI Debt Yield:	17.9%	12.3%
Underwritten NCF Debt Yield:	17.8%	12.2%
Underwritten NOI Debt Yield at Balloon ⁽⁹⁾ :	17.9%	12.3%
Underwritten NCF Debt Yield at Balloon ⁽⁹⁾ :	17.8%	12.2%

Property	Information

Single Asset / Portfolio: Single Asset **Property Type: CBD Office** Collateral: Fee Simple Location: Boston, MA Year Built / Renovated: 2013 / NAP Total Sq. Ft.: 1,133,723

Property Management: The RMR Group LLC

Underwritten NOI: \$76,062,408 **Underwritten NCF:** \$75,778,977 Appraised Value: \$1,198,000,000 **Appraisal Date:** June 3, 2016

Historical NOI

Most Recent NOI(10): \$70,924,928 (December 31, 2015) 2014 NOI: \$43,928,033 (December 31, 2014)

2013 NOI⁽¹²⁾: NAP 2012 NOI⁽¹²⁾: NAP

Historical Occupancy

Most Recent Occupancy⁽¹¹⁾: 99.9% (April 30, 2016) 2015 Occupancy (11): 99.6% (December 31, 2015) 2014 Occupancy(11): 100.0% (December 31, 2014)

2013 Occupancy⁽¹²⁾: NAP

- Moody's/Fitch/DBRS provided the above ratings for the Vertex Pharmaceuticals HQ Whole Loan in the context of its inclusion in the mortgage pool. On a stand-alone basis, Fitch rated the Vertex Pharmaceuticals HQ Whole Loan "BBB-".
- The Original Balance and Cut-off Date Balance of \$30.0 million represent the non-controlling Note A-5 of the \$425.0 million Vertex Pharmaceuticals HQ Whole Loan evidenced by ten part. passu notes. The Note A-5 will be included in the CD 2016-CD1 mortgage trust. controlling Note A-1, with an outstanding principal balance as of the Cut-off Date of \$80.0 million, is expected to be included in the WFCM 2016-BNK1 mortgage trust. The noncontrolling Notes A-2-1 and A-2-2, with outstanding principal balances as of the Cut-off Date of \$40.0 million and \$30.0 million, respectively, are expected to be included in the MSCI 2016-UBS11 mortgage trust. The non-controlling Notes A-2-3, A-3 and A-4, with outstanding principal balances as of the Cut-off Date of \$10.0 million, \$80.0 million and \$57.5 million, respectively, are currently held by Morgan Stanley Bank, N.A. and are expected to be contributed to one or more future securitizations. The non-controlling Note A-6-1, with outstanding principal balance as of the Cut-off Date of \$60.0 million, is expected to be included in the CGCMT 2016-C2 mortgage trust. The non-controlling Notes A-6-2 and A-7, with outstanding principal balances as of the Cut-off Date of \$15.0 million and \$22.5 million, respectively, are currently held by Citigroup Global Markets Realty Corp. and are expected to be contributed to one or more future securitizations. There can be no assurance that any particular Vertex Pharmaceuticals HQ promissory note will not be further split. For additional information on the pari passu companion loans, see "The Loan" herein.
- If the Vertex Pharmaceuticals HQ Whole Loan is not paid in full by the Anticipated Repayment Date, the interest rate will increase. For additional information, see "The Loan"
- See "Current Mezzanine or Subordinate Indebtedness" herein.
- Voluntary prepayment of the Vertex Pharmaceuticals HQ Whole Loan with payment of a prepayment fee equal to the greater of 0.5% or the yield maintenance premium is permitted after August 6, 2018. Voluntary prepayment of the Vertex Pharmaceuticals HQ Whole Loan without payment of any prepayment premium is permitted on or after the due date in February 2026. At any time after the earlier to occur of (i) the second anniversary of the last securitization of any portion of the Vertex Pharmaceuticals HQ Whole Loan and (ii) the date that is 42 months after the origination date, the Vertex Pharmaceuticals HQ Whole Loan may be defeased as more particularly set forth in the Vertex Pharmaceuticals HQ Whole Loan documents
- See "Initial Reserves" and "Ongoing Reserves" herein.
 Whole Loan DSCR, LTV, Debt Yield and Balance / Sq. Ft. calculations are based on the
 Vertex Pharmaceuticals HQ Whole Loan only, which has a principal balance of \$425.0
- Total Debt DSCR, LTV, Debt Yield and Balance / Sq. Ft. calculations are based on the aggregate total debt, which includes the Vertex Pharmaceuticals HQ Whole Loan and the mezzanine loan with an original principal balance of \$195.0 million.

 (9) Calculated as of the Anticipated Repayment Date.
- (10) The increase in Most Recent NOI over 2014 NOI is due primarily to Vertex not being in full occupancy of and paying for all of its space until the end of 2014.
- (11) Includes 7,300 sq. ft. (0.6% of NRA) of unoccupied retail space that is master leased by an affiliate of original developer of the property
- (12) The Vertex Pharmaceuticals HQ Property was constructed in 2013. As such, historical occupancy and NOI prior to 2014 is not available.

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Vertex Pharmaceuticals HQ

Cut-off Date Balance: Cut-off Date LTV: U/W NCF DSCR: U/W NOI Debt Yield: \$30,000,000 35.5% 6.28x 17.9%

Tenant Summary							
Tenant	Ratings (Fitch/Moody's/S&P)	Net Rentable Area (Sq. Ft.)	% of Net Rentable Area	U/W Base Rent PSF	% of Total U/W Base Rent	Lease Expiration	
Vertex	NR/NR/NR	1,082,417	95.5%	\$67.06	96.6%	12/31/2028 ⁽¹⁾	
Non-Major Tenants ⁽²⁾		49,906	4.4%	\$51.44	3.4%	Various	
Total Occupied Collateral		1,132,323	99.9%	\$66.37	100.0%		
Vacant		1,400	0.1%				
Total		1,133,723	100.0%				

⁽¹⁾ Vertex has one, ten-year extension option with 20 months' written notice prior to its lease expiration. Vertex has no termination or contraction options.

⁽²⁾ Non-Major Tenants are comprised of first floor retail space and include 7,300 sq. ft. (0.6% of NRA) of unoccupied space master leased by an affiliate of the original developer of the property, which represents approximately 0.7% of the Total U/W Base Rent.

			Lease	Rollover Scheo	lule ⁽¹⁾			
Year	# of Leases Expiring	Total Expiring Sq. Ft.	% of Total Sq. Ft. Expiring	Cumulative Sq. Ft. Expiring	Cumulative % of Sq. Ft. Expiring	Annual U/W Base Rent PSF	% U/W Base Rent Rolling	Cumulative % of U/W Base Rent
MTM	0	0	0.0%	0	0.0%	\$0.00	0.0%	0.0%
2016	0	0	0.0%	0	0.0%	\$0.00	0.0%	0.0%
2017	0	0	0.0%	0	0.0%	\$0.00	0.0%	0.0%
2018	0	0	0.0%	0	0.0%	\$0.00	0.0%	0.0%
2019	0	0	0.0%	0	0.0%	\$0.00	0.0%	0.0%
2020	0	0	0.0%	0	0.0%	\$0.00	0.0%	0.0%
2021	0	0	0.0%	0	0.0%	\$0.00	0.0%	0.0%
2022	0	0	0.0%	0	0.0%	\$0.00	0.0%	0.0%
2023	0	0	0.0%	0	0.0%	\$0.00	0.0%	0.0%
2024	2	8,793	0.8%	8,793	0.8%	\$62.38	0.7%	0.7%
2025	4	14,047	1.2%	22,840	2.0%	\$50.23	0.9%	1.7%
2026	1	2,746	0.2%	25,586	2.3%	\$55.00	0.2%	1.9%
Thereafter	4	1,106,737	97.6%	1,132,323	99.9%	\$66.64	98.1%	100.0%
Vacant	NAP	1,400	0.1%	1,133,723	100.0%	NAP	NAP	
Total / Wtd. Avg.	11	1,133,723	100.0%		-	\$66.37	100.0%	_

⁽¹⁾ Certain tenants have lease termination options that may become exercisable prior to the originally stated expiration date of the tenant lease that are not considered in the lease rollover schedule.

The Loan. The Vertex Pharmaceuticals HQ loan (the "Vertex Pharmaceuticals HQ Loan") is a fixed rate loan secured by the borrower's fee simple interest in a 1,133,723 sq. ft. office complex located at 50 Northern Avenue and 11 Fan Pier Boulevard in Boston, Massachusetts (the "Vertex Pharmaceuticals HQ Property"). The Vertex Pharmaceuticals HQ Loan is evidenced by the non-controlling Note A-5, with an Original Balance and Cut-off Date Balance of \$30.0 million, of a whole loan that has an aggregate original principal balance of \$425.0 million (the "Vertex Pharmaceuticals HQ Whole Loan") and is comprised of ten pari passu notes. The pari passu companion loan evidenced by the controlling Note A-1 is expected to be included in the WFCM 2016-BNK1 mortgage trust. The pari passu companion loans evidenced by the non-controlling Notes A-2-1 and A-2-2, with an aggregate original principal balance of \$70.0 million, are currently held by Morgan Stanley Bank, N.A. and are expected to be included in the MSCI 2016-UBS11 mortgage trust. The pari passu companion loans evidenced by the non-controlling Notes A-2-3, A-3 and A-4, with an aggregate original principal balance of \$147.5 million, are currently held by Morgan Stanley Bank, N.A. and are expected to be contributed to one or more future commercial mortgage securitization transactions. The pari passu companion loan evidenced by the non-controlling Note A-6-1, with an original principal balance of \$60.0 million, is currently held by Citigroup Global Markets Realty Corp. and is expected to be included in the CGCMT 2016-C2 mortgage trust. The pari passu companion loans evidenced by the non-controlling Notes A-6-2 and A-7, with an aggregate original principal balance of \$37.5 million, are currently held by Citigroup Global Markets Realty Corp. and are expected to be contributed to one or more future commercial mortgage securitization transactions. There can be no assurance that any particular Vertex Pharmaceuticals HQ promissory note will not be further split.

The relationship between the holders of the notes comprising the Vertex Pharmaceuticals HQ Whole Loan is governed by a co-lender agreement as described under "Description of the Mortgage Pool—The Whole Loans—Vertex Pharmaceuticals Headquarters Whole Loan" in the Prospectus.

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Vertex Pharmaceuticals HQ

Cut-off Date Balance: Cut-off Date LTV: U/W NCF DSCR: U/W NOI Debt Yield: \$30,000,000 35.5% 6.28x 17.9%

		Whole Loan Summary		
Note ⁽¹⁾	Original Balance	Cut-off Date Balance	Note Holder	Controlling Piece
A-1	\$80,000,000	\$80,000,000	WFCM 2016-BNK1 ⁽²⁾	Yes
A-2-1	\$40,000,000	\$40,000,000	MSCI 2016-UBS11 ⁽³⁾	No
A-2-2	\$30,000,000	\$30,000,000	MSCI 2016-UBS11 ⁽³⁾	No
A-2-3	\$10,000,000	\$10,000,000	MSBNA	No
A-3	\$80,000,000	\$80,000,000	MSBNA	No
A-4	\$57,500,000	\$57,500,000	MSBNA	No
A-5	\$30,000,000	\$30,000,000	CD 2016-CD1 ⁽⁴⁾	No
A-6-1	\$60,000,000	\$60,000,000	CGCMT 2016-C2 ⁽⁵⁾	No
A-6-2	\$15,000,000	\$15,000,000	CGMRC	No
A-7	\$22,500,000	\$22,500,000	CGMRC	No
Total Sources	\$425,000,000	\$425,000,000		

- (1) There can be no assurance that any particular Vertex Pharmaceuticals HQ promissory note will not be further split.
- (2) The initial note holder of the controlling Note A-1 is Morgan Stanley Bank, N.A. ("MSBNA"). Note A-1 is expected to be contributed to the WFCM 2016-BNK1 mortgage trust prior to the closing date for this securitization transaction.
- (3) The initial note holder of the non-controlling Notes A-2-1 and A-2-2 is MSBNA. Notes A-2-1 and A-2-2 are expected to be contributed to the MSCI 2016-UBS11 mortgage trust on the same date as the closing date for this securitization transaction.
- (4) The initial note holder of the non-controlling Note A-5 is Citigroup Global Markets Realty Corp. ("CGMRC"). Note A-5 is expected to be contributed to the CD 2016-CD1 mortgage trust.
- (5) The initial note holder of the non-controlling Note A-6-1 is CGMRC. Note A-6-1 is expected to be contributed to the CGCMT 2016-C2 mortgage trust after the closing date for this securitization transaction.

The Vertex Pharmaceuticals HQ Whole Loan has an anticipated repayment date of August 6, 2026 (the "Anticipated Repayment Date") and a stated maturity date of November 6, 2028. Prior to the Anticipated Repayment Date, the Vertex Pharmaceuticals HQ Whole Loan accrues interest at a fixed rate of 2.79817647% (the "Initial Interest Rate") and requires payments of interest only. From and after the Anticipated Repayment Date, the Vertex Pharmaceuticals HQ Whole Loan will accrue interest at a *per annum* rate equal to the sum of (1) the Initial Interest Rate, plus (2) the product of (A) the quotient of (x) the Initial Interest Rate divided by (y) 3.5300%, multiplied by (B) the difference between (x) the Aggregate Extended Interest Rate (as defined below), minus (y) 3.5300% (the "Revised Interest Rate").

"Aggregate Extended Interest Rate" means the greater of (i) 6.5300% or (ii) the sum of (1) the then effective U.S. swap rate for a swap terminating on the then effective maturity date plus (2) 5.0000%.

All interest, including interest accrued at the excess of the Revised Interest Rate over the Initial Interest Rate, is required to be paid currently on each monthly payment date through the final maturity date of the Vertex Pharmaceuticals HQ Whole Loan. If the Vertex Pharmaceuticals HQ Whole Loan is not repaid in full on or prior to the Anticipated Repayment Date, from and after the occurrence of the Anticipated Repayment Date and provided no event of default under the Vertex Pharmaceuticals HQ Whole Loan has occurred and is continuing, all excess cash flow is required to be applied to repay the principal balance of the Vertex Pharmaceuticals HQ Whole Loan and the Vertex Pharmaceuticals HQ Mezzanine Loan (as defined below) on a *pro rata* basis, based on their respective principal balances. Such excess cash flow is paid only after payment of interest on the Vertex Pharmaceuticals HQ Whole Loan, including interest at the Revised Interest Rate, and (unless there is an event of default under the Vertex Pharmaceuticals HQ Whole Loan) interest on the Vertex Pharmaceuticals HQ Mezzanine Loan at the Mezzanine Revised Interest Rate (as defined below).

The Vertex Pharmaceuticals HQ Whole Loan proceeds and the Vertex Pharmaceuticals HQ Mezzanine Loan proceeds were used to return approximately \$616.0 million of equity to the borrower sponsor and pay approximately \$4.0 million of closing costs.

Sources and Uses						
Sources	Proceeds	% of Total	Uses	Proceeds	% of Total	
Loan amount	\$425,000,000	68.5%	Return of equity ⁽¹⁾	\$616,022,218	99.4%	
Mezzanine Ioan	\$195,000,000	31.5%	Closing costs	\$3,977,782	0.6%	
Total Sources	\$620,000,000	100.0%	Total Uses	\$620,000,000	100.0%	

⁽¹⁾ The borrower sponsor, Senior Housing Properties Trust, acquired the Vertex Pharmaceuticals HQ Property in 2014 for a purchase price of \$1,125,420,000 in part by using proceeds from its unsecured revolving credit facility. The borrower sponsor has informed the lender that it expects to use proceeds of the Vertex Pharmaceuticals HQ Whole Loan and the Vertex Pharmaceuticals HQ Mezzanine Loan to repay a portion of the outstanding borrowings under the unsecured revolving credit facility and for general business purposes. Following the repayment, there will be approximately \$900 million available under the borrower sponsor's unsecured revolving credit facility.

The Borrower / Sponsor. The borrower, SNH Seaport LLC, is a single purpose Delaware limited liability company structured to be bankruptcy-remote with two independent directors in its organizational structure. The sponsor of the borrower and non-recourse carve-out guarantor is Senior Housing Properties Trust.

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Vertex Pharmaceuticals HQ U/W NCF DSCR:

Cut-off Date Balance: Cut-off Date LTV: U/W NCF DSCR: U/W NOI Debt Yield: \$30,000,000 35.5% 6.28x 17.9%

Senior Housing Properties Trust, a publicly traded real estate investment trust, owns independent living and assisted living communities, continuing care retirement communities, nursing homes, wellness centers and medical offices, and clinic and biotech laboratory buildings located throughout the United States, and focuses on owning triple net leased properties. As of March 31, 2016, Senior Housing Properties Trust owned 428 properties in 43 states and Washington, D.C.

The Property. The Vertex Pharmaceuticals HQ Property consists of the fee interest in a two-building, 15-story, class A HQ office complex totaling 1,133,723 sq. ft., located in the master-planned Fan Pier mixed use development in the Seaport District of Boston, Massachusetts. The Fan Pier development is a live-work-play development that features over 3.0 million sq. ft. of office, retail, hotel and residential buildings, multiple public parks, restaurants, and access to Boston's HarborWalk and the Institute of Contemporary Art. The Fan Pier development also features the Fan Pier Marina, a professionally managed, six-acre marina with deep-water access, as well as water taxi access to Logan International Airport. The Vertex Pharmaceuticals HQ Property features floor plates of approximately 40,000 sq. ft. on the lab floors (floors 2-8) and floor plates of approximately 28,000 sq. ft. on the office floors (floors 9-15). The Vertex Pharmaceuticals HQ Property features high end finishes, flexible floor plates that can accommodate full floor or multi-tenant users, state-of-the-art laboratory and research space, floor to ceiling glass exteriors and highly visible exterior signage. Both buildings which comprise the Vertex Pharmaceuticals HQ Property, 11 Fan Pier Boulevard and 50 Northern Avenue, have achieved LEED Gold certification. The two buildings that comprise the Vertex Pharmaceuticals HQ Property are connected via a skybridge between the 5th and 6th floors. Parking at the Vertex Pharmaceuticals HQ Property is provided by a 3-level, 740-space subterranean parking garage, resulting in a parking ratio of 0.65 spaces per 1,000 sq. ft. of net rentable area.

The Vertex Pharmaceuticals HQ Property was constructed in 2013 as a built-to-suit headquarters for Vertex Pharmaceuticals Incorporated ("Vertex Pharmaceuticals" or "Vertex"), which leases 100.0% of the Vertex Pharmaceuticals HQ Property's office, lab, storage and mechanical space. The borrower sponsor invested approximately \$161.6 million (\$149.30 PSF) for Vertex Pharmaceuticals' initial tenant improvement allowance. In addition, Vertex Pharmaceuticals subsequently invested a reported \$75.0 million (\$69.29 PSF) to convert the lower floors of the towers to lab space. Vertex Pharmaceuticals' leases run through December 31, 2028, each with one, ten-year extension option at fair market rent remaining. Vertex Pharmaceuticals is focused on developing and commercializing therapies for the treatment of cystic fibrosis and currently has two marketed medicines to treat cystic fibrosis: ORKAMBI and KALYDECO. ORKAMBI was approved by the United States Food and Drug Administration ("FDA") in July 2015 and the European Commission in November 2015 for the treatment of patients with cystic fibrosis 12 years of age and older. KALYDECO was approved in 2012 by the FDA and European Commission as a treatment for patients with cystic fibrosis six years of age and older. In addition, Vertex Pharmaceuticals has multiple other development programs in the field of cystic fibrosis, as well as other early- and midstage development programs in the areas of oncology, pain and neurology.

The Vertex Pharmaceuticals HQ Property features 49,906 sq. ft. of ground floor retail and associated storage space leased to a variety of complementary tenants, including Frank Anthony's, a gourmet market and specialty grocer, Babbo Enoteca Fp, Llc, an Italian restaurant and pizzeria, B.good, a health-conscious fast-food chain restaurant, Leader Bank, a retail bank branch, Starbucks, and Bright Horizons Children's Center, a daycare and preschool.

Environmental Matters. The Phase I environmental report dated June 10, 2016 reported that the groundwater beneath the Vertex Pharmaceuticals HQ Property exceeded the United States Environmental Protection Agency National Pollution Discharge Elimination System limits for certain metals (cyanide, antimony, copper, lead, iron, and zinc). There is currently an installed groundwater treatment system designed to manage the condition per EPA guidance and as such, the condition is considered a controlled recognized environmental condition. In the event that the environmental indemnitor does not have a long-term unsecured debt rating of at least "BBB-" by Fitch and S&P and "Baa3" by Moody's, the borrower is required to obtain an environmental impairment liability insurance policy as described in (and subject to the limitations described in) the Prospectus under "Description of the Mortgage Pool—Environmental Considerations."

Major Tenant.

Vertex (1,082,417 sq. ft.; 95.5% of NRA; 96.6% of U/W Base Rent) Vertex Pharmaceuticals (NASDAQ: VRTX) is a global biotechnology company that was founded in Cambridge, Massachusetts in 1989. Vertex Pharmaceuticals has leased 95.5% of the net rentable area on a triple-net basis with a 12-year remaining term and one, ten-year renewal option at fair market rent. Vertex Pharmaceuticals has no termination or contraction options.

	Vertex Pharmaceuticals Leased Space ⁽¹⁾						
Building	Office NRSF	Lab NRSF	Mechanical NRSF	Storage NRSF	Total Vertex Leased NRSF		
50 Northern Avenue	211,685	253,800	87,752	2,868	556,105		
11 Fan Pier Boulevard	217,462	222,870	76,984	8,996	526,312		
Total	429,147	476,670	164,736	11,864	1,082,417		

⁽¹⁾ Certain of Vertex Pharmaceuticals' net rentable sq. ft. are approximately 164,736 sq. ft. of mechanical space located on the 8th floor and penthouse areas. According to the appraisal, it is a market standard that lab tenants pay full rent for all mechanical areas. Were the subject converted to a multi-tenant office use in the future, the Vertex Pharmaceuticals HQ Property's net rentable area would most likely be reduced by the amount of the mechanical areas. Vertex Pharmaceuticals currently pays \$62.50 PSF for its office, lab and mechanical space and \$25.00 PSF for its storage space.

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Vertex Pharmaceuticals HQ U/W NCF DSCR:

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The Market. According to the appraisal, the Vertex Pharmaceuticals HQ Property is located in the Seaport District of downtown Boston, Massachusetts overlooking Boston Harbor. The Seaport District has benefitted from infrastructure improvements stemming from the completion of Boston's decades-long "Big Dig" project that concluded in 2007. The Big Dig project converted Interstate 93 from an elevated highway to an underground tunnel through the Boston central business district, and included the construction of the Ted Williams Tunnel which connects Interstate 90 to Logan International Airport under the Seaport District and Boston Harbor. With the conversion of Interstate 93 to an underground tunnel, access from the Boston central business district over the Fort Point Channel to the Seaport District was improved. The Vertex Pharmaceuticals HQ Property benefits from easy access to mass transit, located a block from the Silver Line Courthouse T Station, an approximately 15 minute walk from South Station, and an approximately 10-minute drive from Logan International Airport. Attractions in the Seaport District include the Boston Convention and Exhibition Center, the Seaport Boston Hotel & World Trade Center, the Institute of Contemporary Art/Boston and the Blue Hills Bank Pavilion amphitheater.

The Vertex Pharmaceuticals HQ Property is located in the Seaport office submarket, which contains 8.7 million sq. ft. of office space, and is part of the greater Boston central business district office market, which includes 66.6 million sq. ft. of office space, as of the first quarter of 2016. Recent corporate relocations to the Seaport office submarket include PricewaterhouseCoopers, which executed a 330,000 sq. ft. lease and relocated over 2,500 employees to its recently completed building in Seaport Square; Goodwin Procter LLP, which committed to a large built-to-suit office project totaling 378,000 sq. ft. that will bring over 800 employees to the submarket; and GE, which announced plans to move its corporate headquarters from Connecticut to the Seaport District in Boston and plans to relocate approximately 800 jobs to the area. According to the appraisal, as of the fourth quarter of 2015, the Seaport office submarket exhibited a vacancy rate of 6.4% with asking class A rents of \$63.47 PSF on a triple net basis, compared to a vacancy rate of 8.4% and asking class A rents of \$58.58 PSF on a triple net basis for the central business district office market as a whole.

The table below summarizes the comparable office leases as determined by the appraisal.

Summary of Comparable Leases ⁽¹⁾							
Property	Tenants	Distance From Subject	Net Rentable Area	Lease Area (SF)	Base Rent	Expense Basis	Lease Term (years)
Vertex Pharmaceuticals HQ Property	Vertex	NAP	1,133,723 ⁽²⁾	1,082,417 ⁽²⁾	\$67.06 ⁽²⁾	NNN	15.1 ⁽²⁾
Pier IV	Confidential	0.2 miles	376,555	200,000	\$50.00	NNN	15.5
675 West Kendall Street	Alnylam Pharmaceuticals	2.3 miles	302,919	295,000	\$67.00	NNN	15.0
60 Binney Street	Bluebird Bio	2.3 miles	530,478	267,278	\$72.50	NNN	10.3
320 Bent Street	Momenta Pharmaceuticals	2.8 miles	184,405	105,000	\$68.00	NNN	10.0
100-110 Northern Avenue	Goodwin Procter	0.2 miles	516,000	378,000	\$53.00	NNN	16.5
125 High Street	Wells Fargo	0.4 miles	980,347	150,816	\$37.00	NNN	15.0
101 Seaport Boulevard	PricewaterhouseCoopers	0.1 miles	439,058	330,000	\$39.00	NNN	15.0
Total / Wtd. Avg. (3):	_		3,329,762		\$54.90		

- (1) Source: Appraisal.
- (2) Source: Rent Roll dated April 30, 2016.
- (3) Total / Wtd. Avg. excludes the Vertex Pharmaceuticals HQ Property.

The table below summarizes comparable property sales as determined by the appraisal.

Summary of Comparable Sales ⁽¹⁾							
Property	Location	Net Rentable Area	Date of Sale	Sales Price PSF	Occupancy	Year Built	
Vertex Pharmaceuticals HQ Property	Boston, MA	1,133,723 ⁽²⁾	NAP	NAP	99.9% ⁽²⁾	2013	
101 Seaport	Boston, MA	439,058	4/2016	\$1,029	92.0%	2015	
Alexandria Center at Kendall Square	Cambridge, MA	305,212	12/2015	\$890	100.0%	2013	
640 Memorial Drive	Cambridge, MA	225,400	1/2015	\$783	100.0%	1916	
One Memorial	Cambridge, MA	352,905	2/2014	\$1,148	100.0%	1985	
Total / Wtd. Avg. ⁽³⁾ :	=	1,322,575		\$987	_		

- (1) Source: Appraisal.
- (2) Source: Rent Roll dated April 30, 2016.
- (3) Total / Wtd. Avg. excludes the Vertex Pharmaceuticals HQ Property.

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Vertex Pharmaceuticals HQ

Cut-off Date Balance: Cut-off Date LTV: U/W NCF DSCR: U/W NOI Debt Yield: \$30,000,000 35.5% 6.28x 17.9%

Cash Flow Analysis.

Cash Flow Analysis									
	2014	2015	U/W	U/W PSF					
Base Rent ⁽¹⁾	\$ 43,822,419	\$68,315,712	\$75,155,622	\$66.29					
Gross Potential Rent	\$43,822,419	\$68,315,712	\$75,155,622	\$66.29					
Total Recoveries ⁽²⁾	8,044,479	15,865,672	16,894,457	14.90					
Total Other Income	2,194,452	3,998,740	3,710,112	3.27					
Less: Vacancy ⁽³⁾	0	0	(2,336,660)	(2.06)					
Effective Gross Income	\$54,061,350	\$ 88,180,123	\$93,423,532	\$82.40					
Total Operating Expenses	10,133,318	17,255,195	17,361,124	15.31					
Net Operating Income	\$43,928,033	\$70,924,928	\$76,062,408	\$67.09					
TI/LC	0	0	0	0.00					
Capital Expenditures	0	0	283,431	0.25					
Net Cash Flow	\$43,928,033	\$70,924,928	\$75,778,977	\$66.84					

- (1) U/W Base Rent includes \$5,382,425 in straight line rent for all of Vertex Pharmaceuticals' space and \$227,225 in contractual step rents for all retail leases through May 2017.
- (2) Total Recoveries include, among other things, reimbursements for real estate taxes. Vertex Pharmaceuticals currently benefits from a tax increment financing program (the "TIF Program"), which expires June 30, 2018. The TIF Program may be revoked or reduced prior to such expiration date if Vertex Pharmaceuticals does not satisfy certain employment expansion obligations. The TIF Program has been estimated to provide a tax savings to Vertex Pharmaceuticals of approximately \$9,000,000 from its inception in 2011 to its anticipated expiration date. U/W Net Cash Flow assumes full real estate taxes are due and are fully reimbursed by Vertex Pharmaceuticals.
- (3) U/W Vacancy represents 2.4% of gross income.

Property Management. The Vertex Pharmaceuticals HQ Property is managed by The RMR Group LLC, an affiliate of the borrower.

Lockbox / Cash Management. The Vertex Pharmaceuticals HQ Whole Loan is structured with a hard lockbox and springing cash management. The Vertex Pharmaceuticals HQ Whole Loan documents also require that all rents received by the borrower or the property manager be deposited into the lockbox account within one business day of receipt. Prior to the occurrence of a Cash Management Sweep Period (as defined below), all cash flow is distributed to the borrower. During a Cash Management Sweep Period, all cash flow is swept to a lender-controlled cash management account and applied as provided in the Vertex Pharmaceuticals HQ Whole Loan documents.

A "Cash Management Sweep Period" means a period:

- (a) commencing upon an event of default under the Vertex Pharmaceuticals HQ Whole Loan documents and ending at such time as such event of default has been cured in accordance with such loan documents, or otherwise to the lender's satisfaction;
- (b) commencing upon an event of default under the Vertex Pharmaceuticals HQ Mezzanine Loan and ending at such time as such event of default has been cured in accordance with the Vertex Pharmaceuticals HQ Mezzanine Loan documents, or otherwise to the mezzanine lender's satisfaction:
- (c) commencing upon a Vertex Lease Event (as defined below) and ending at such time as (i) no monetary or material non-monetary defaults or breaches by Vertex Pharmaceuticals exist under the Vertex Pharmaceuticals lease, or (ii) the borrower enters into one or more replacement leases with tenants reasonably approved by the lender, which new leases result in a combined debt yield on the Vertex Pharmaceuticals HQ Whole Loan and the Vertex Pharmaceuticals HQ Mezzanine Loan (the "Vertex Combined Debt Yield") of at least 10% for two consecutive calendar quarters (a "Vertex Re-Leasing Event") tested as of the end of each calendar quarter;
- (d) commencing when, as of the last day of any calendar quarter from and after a Vertex Re-Leasing Event, the Vertex Combined Debt Yield is less than 8.5%, until such time as the Vertex Combined Debt Yield is at least 8.5% for two consecutive calendar quarters; or
- (e) from and after the occurrence of the Anticipated Repayment Date with respect to the Vertex Pharmaceuticals HQ Whole Loan.

A "Vertex Lease Event" means any monetary or material non-monetary default or breach by Vertex Pharmaceuticals under the lease between the borrower and Vertex Pharmaceuticals (as the same may be amended, modified, supplemented, extended, replaced and/or restated from time to time in accordance with the Vertex Pharmaceuticals HQ Whole Loan documents) beyond any applicable notice and cure periods contained in such lease.

Initial Reserves. At origination, no upfront reserves were required with respect to the Vertex Pharmaceuticals HQ Loan.

50 Northern Avenue & 11 Fan Pier Boulevard Boston, MA 02110

Collateral Asset Summary - Loan No. 9

Vertex Pharmaceuticals HQ U/W NCF DSCR:

Cut-off Date Balance: Cut-off Date LTV: U/W NCF DSCR: U/W NOI Debt Yield: \$30,000,000 35.5% 6.28x 17.9%

Ongoing Reserves. During the continuance of a Cash Management Sweep Period, the borrower is required to deposit on each monthly payment date (i) an amount equal to one-twelfth of the taxes the lender estimates will be payable in the next 12 months and (ii) an amount equal to one-twelfth of the insurance premiums the lender estimates will be payable in the next 12 months; provided that the requirement to deposit insurance premiums will be suspended if the borrower provides satisfactory evidence to the lender that the insurance coverage required by the Vertex Pharmaceuticals HQ Whole Loan documents is being provided under acceptable blanket insurance policies and the insurance premiums for such policies have been prepaid for not less than one year in advance (or for policies delivered at loan origination, such shorter period as such policies are in effect).

During the continuance of a Cash Management Sweep Period, all excess cash flow, after payment of interest on the Vertex Pharmaceuticals HQ Whole Loan and, unless there is an event of default under the Vertex Pharmaceuticals HQ Whole Loan, interest on the Vertex Pharmaceuticals HQ Mezzanine Loan (including interest at the Mezzanine Revised Interest Rate), is required to be deposited into and held in a cash trap subaccount (the "Cash Trap Funds"); provided, that during a Cash Management Sweep Period resulting solely from the occurrence of a Vertex Lease Event, all Cash Trap Funds in excess of \$75.0 million are required to be released to the borrower. In addition, during a Cash Management Sweep Period (a) in the event that borrower receives a fee, payment or other compensation from any tenant relating to or in exchange for the termination of such tenant's lease, the borrower is required to deposit such lease termination fee (the "Lease Termination Fund") with the lender and (b) resulting solely from the occurrence of a Vertex Lease Event, the borrower may obtain a release of the Cash Trap Funds upon delivery to the lender of either (i) a letter of credit meeting the requirements of the Vertex Pharmaceuticals HQ Whole Loan documents, or (ii) in the event that the guarantor, Senior Housing Properties Trust, possesses a long-term unsecured debt rating of at least "BBB-" by Fitch and S&P and "Baa3" by Moody's, an additional guaranty, in each case, in an amount equal to the portion of the Cash Trap Funds requested to be released; provided that the right to provide an additional guaranty is conditioned upon the borrower delivering a new non-consolidation opinion and such other legal opinions as may be reasonably requested by the lender in connection with the additional guaranty. Following the Anticipated Repayment Date, provided no event of default is continuing under the Vertex Pharmaceuticals HQ Whole Loan, Cash Trap Funds are required to be applied to prepay the principal of the Vertex Pharmaceuticals HQ Whole Loan and the Vertex Pharmaceuticals HQ Mezzanine Loan, pro rata, based on their respective outstanding principal balances.

Current Mezzanine or Subordinate Indebtedness. Morgan Stanley Mortgage Capital Holdings LLC and Citigroup Global Markets Realty Corp. have made a \$195.0 million mezzanine loan (the "Vertex Pharmaceuticals HQ Mezzanine Loan") to SNH Mez LLC, the sole member of the borrower under the Vertex Pharmaceuticals HQ Whole Loan.

The Vertex Pharmaceuticals HQ Mezzanine Loan has the same Anticipated Repayment Date and stated maturity date as the Vertex Pharmaceuticals HQ Whole Loan. The Vertex Pharmaceuticals HQ Mezzanine Loan accrues interest at an interest rate of 5.1250% *per annum* (the "Mezzanine Initial Interest Rate") prior to the Anticipated Repayment Date, accrues interest based on the same formula as the Vertex Pharmaceuticals HQ Whole Loan on and after its Anticipated Repayment Date (except based on the Mezzanine Initial Interest Rate rather than the Initial Interest Rate) (the "Mezzanine Revised Interest Rate"), payable currently, and requires payments of interest only until its Anticipated Repayment Date. On or after the Anticipated Repayment Date, the Vertex Pharmaceuticals HQ Mezzanine Loan is entitled to its *pro rata* share of Cash Trap Funds as described above under "Ongoing Reserves".

Future Mezzanine or Subordinate Indebtedness Permitted. None.

Mech

Office/Lab

Mechanical

Vacant

15

14

12

10

9 8M

Collateral Asset Summary – Loan No. 9 Vertex Pharmaceuticals HQ

Cut-off Date Balance: Cut-off Date LTV: U/W NCF DSCR: U/W NOI Debt Yield:

Office/Lab

Mechanical

Lab/Office

\$30,000,000 35.5% 6.28x 17.9%

VERTEX PHARMACEUTICALS HQ 50 NORTHERN AVENUE 11 FAN PIER BOULEVARD PH Mechanical PH Mechanical PH Mechanical PH Mechanical Office Office



Office

Mechanical

Retail

Building

Cut-off Date Balance: Cut-off Date LTV:

\$30,000,000 35.5% 6.28x 17.9%

