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

FORM 10-K

☐ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number 001-32205

CBRE

CBRE GROUP, INC.

(Exact name of registrant as specified in its charter)

Delaware	**94-3391143**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
2100 McKinney Avenue, Suite 1250	
Dallas, Texas	**75201**
(Address of principal executive offices)	**(Zip Code)**

(214) 979-6100
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Stock, $0.01 par value per share	"CBRE"	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firms that prepared or issued its audit report. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of June 30, 2021, the aggregate market value of Class A Common Stock held by non-affiliates of the registrant was $ 27.8 billion based upon the last sales price on June 30, 2021 on the New York Stock Exchange of $85.73 for the registrant's Class A Common Stock.

As of February 17, 2022, the number of shares of Class A Common Stock outstanding was 332,322,579.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the proxy statement for the registrant's 2022 Annual Meeting of Stockholders to be held May 18, 2022 are incorporated by reference in Part III of this Annual Report on Form 10-K.

CBRE GROUP, INC.
ANNUAL REPORT ON FORM 10-K

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PART I

Item 1. Business.

Company Overview

CBRE Group, Inc. is a Delaware corporation. References to "CBRE," "the company," "we," "us" and "our" refer to CBRE Group, Inc. and include all of its consolidated subsidiaries, unless otherwise indicated or the context requires otherwise.

We are the world's largest commercial real estate services and investment firm, based on 2021 revenue, with leading global market positions in our leasing, property sales, occupier outsourcing and valuation businesses. As of December 31, 2021, the company has more than 105,000 employees (excluding Turner & Townsend Holdings Limited employees) serving clients in more than 100 countries.

We provide services to real estate investors and occupiers. For investors, our services include capital markets (property sales, mortgage origination, sales and servicing), property leasing, investment management, property management, valuation and development services, among others. For occupiers, our services include facilities management, project management, transaction (both property sales and leasing) and consulting services, among others. We provide services under the following brand names: "CBRE" (real estate advisory and outsourcing services); "CBRE Investment Management" (investment management); "Trammell Crow Company" (U.S. development); "Telford Homes" (U.K. development); and "Turner & Townsend Holdings Limited". During 2020, CBRE sponsored a special purpose acquisition company, or SPAC, CBRE Acquisition Holdings, Inc., which merged with and into Altus Power, Inc., a leading provider of solar energy for commercial and industrial properties. Altus Power Inc. (Altus) began trading on the New York Stock Exchange (NYSE) on December 10, 2021 under the ticker symbol "AMPS."

We generate revenue from both stable, recurring (large multi-year portfolio and per project contracts) and more cyclical, non-recurring sources, including commissions on transactions. Our revenue mix has become heavily weighted towards stable revenue sources, particularly occupier outsourcing, with our dependence on highly cyclical property sales and lease transaction revenue declining markedly. We believe we are well-positioned to capture a substantial and growing share of market opportunities at a time when investors and occupiers increasingly prefer to purchase integrated, account-based services on a national and global basis.

In 2021, we generated revenue from a highly diversified base of clients, including more than 93 of the*Fortune* 100 companies. We have been an S&P 500 company since 2006 and in 2021 we were ranked #122 on the *Fortune* 500. We have been voted the most recognized commercial real estate brand in the Lipsey Company survey for 21 years in a row (including 2022). We have also been rated a World's Most Ethical Company by the Ethisphere Institute for eight consecutive years (including 2021, the most recent year the award has been announced), and have been included in the Dow Jones World Sustainability Index for three years in a row and the Bloomberg Gender-Equality Index for three years in a row.

CBRE History

We will mark our 116th year of continuous operations in 2022, tracing our origins to a company founded in San Francisco in the aftermath of the 1906 earthquake. Since then, we have grown into the largest global commercial real estate services and investment firm (in terms of 2021 revenue) through organic growth and strategic acquisitions, including our recent acquisition of a majority interest in Turner & Townsend Holdings Limited (Turner & Townsend), which closed in November 2021.

Our Business Segments and Primary Services

CBRE Group, Inc. is a holding company that conducts all of its operations through its indirect subsidiaries. CBRE Group, Inc. does not have any independent operations or employees. CBRE Services, Inc., our direct wholly owned subsidiary, is also a holding company and is the primary obligor or issuer with respect to most of our long-term indebtedness.

We report our operations through three business segments: (1) Advisory Services, (2) Global Workplace Solutions and (3) Real Estate Investments. Effective January 1, 2021, we established a new measurement of profit and loss at the business segment level known as segment operating profit. This measure isolates activities not attributed to our core business which are now reported in a "Corporate, other and elimination" segment. Our Corporate segment primarily consists of corporate headquarters costs for executive officers and certain other central functions. We track our strategic non-core non-controlling equity investments in "other" which is considered an operating segment and reported together with Corporate as it does not meet the aggregation criteria for presentation as a separate reportable segment. These activities are not allocated to the other business segments. Corporate and other also includes eliminations related to inter-segment revenue.

Effective January 1, 2021, lease and sales transaction revenue and expenses were fully reported under the Advisory Services segment and project management revenue and expenses were fully reported under the Global Workplace Solutions segment. Prior to 2021, these revenues were split between the Global Workplace Solutions and the Advisory Services segments.

Advisory Services

Advisory Services provides a comprehensive range of services globally, including property leasing, property sales, mortgage services, property management and valuation. Most of our Advisory Services operations are conducted through our indirect wholly-owned subsidiary CBRE, Inc. and its subsidiaries around the world. Our mortgage services, the vast majority of which are in the United States (U.S.), are conducted exclusively through our indirect wholly-owned subsidiary operating under the name CBRE Capital Markets, Inc. (CBRE Capital Markets) and its affiliates.

The primary services within Advisory Services are further described below.

Leasing Services

We provide strategic advice and execution for owners/investors, and occupiers/tenants of real estate, primarily in connection with the leasing of office, industrial and retail space. In 2021, we negotiated leases valued at more than $140.0 billion globally.

We generate significant business from account-based occupier clients, where we are retained to negotiate leases for all or a portion of their portfolio. This results in recurring revenue over time. We believe we are the market leader for leasing services to both occupiers and owners in most leading U.S. metropolitan statistical areas (as defined by the U.S. Census Bureau), including Atlanta, Austin, Boston, Dallas, Denver, Kansas City, Los Angeles, the Midwest, New York, Orange County, Philadelphia, Phoenix, San Francisco, Seattle and St. Louis.

Capital Markets

We provide property sales and mortgage services, which are closely integrated to meet marketplace demand for comprehensive capital markets solutions. During 2021, we closed approximately $477.8 billion of capital markets transactions globally, including $388.7 billion of property sales transactions and $89.1 billion of mortgage originations and loan sales.

We are the leading property sales advisor globally. In the U.S., we accounted for approximately 16.3% of investment sales transactions greater than $2.5 million across all property types in 2021, according to Real Capital Analytics. Our mortgage brokerage professionals arrange, originate and service commercial mortgage loans through relationships established with investment banking firms, national and regional banks, credit companies, insurance companies, U.S. Government-Sponsored Enterprises (GSEs), and pension funds.

Globally, our loan origination and sales volume in 2021 was $89.1 billion, including approximately $16.8 billion for U.S. GSEs. Most of the GSE loans were financed through revolving warehouse credit lines through a CBRE subsidiary that is dedicated exclusively for this purpose and were substantially risk mitigated by either obtaining a contractual purchase commitment from the GSE or confirming a forward-trade commitment for the issuance and purchase of a mortgage-backed security to be secured by the loan. We also oversee a loan servicing portfolio, which totaled approximately $329.7 billion globally at year-end 2021.

In many countries that we operate in (including the U.S.), our real estate services professionals (both leasing and capital markets) are compensated primarily through commissions, which are payable upon completion of an assignment. This mitigates the effect of compensation, our largest expense, on our operating margins during difficult market conditions. We strive to retain top professionals through an attractive compensation program tied to productivity as well as investments in support resources, including professional development and training, market research and data/information, technology, branding and marketing.

Property Management Services

We provide property management services on a contractual basis, primarily for owners of and investors in office, industrial and retail properties. These services include marketing, building engineering, lease administration, accounting and financial services. As of December 31, 2021, we managed 2.7 billion square feet of properties globally for property owners/investors. We are compensated for our services through a monthly management fee earned based on either a specified percentage of the monthly rental income, rental receipts generated from the property under management or a fixed fee. We are also often reimbursed for our administrative and payroll costs directly attributable to the properties under management. Our management agreements with our property management services clients may be terminated by either party with notice generally ranging between 30 to 90 days; however, we have developed long-term relationships with many of these clients and the typical contract continues for multiple years. We believe our contractual relationships with these clients put us in an advantageous position to provide other services to them, including leasing, refinancing, disposition and appraisal.

Valuation Services

We provide valuation services that include market-value appraisals, litigation support, discounted cash flow analyses, feasibility studies as well as consulting services such as property condition reports, hotel advisory and environmental consulting. Our valuation business has developed proprietary systems for data management, analysis and valuation report preparation, which we believe provide us with an advantage over our competitors. We believe that our valuation business is one of the largest in the commercial real estate industry. During 2021, we completed over 564,800 valuation, appraisal and advisory assignments, including residential valuations in Asia Pacific.

Global Workplace Solutions

Global Workplace Solutions provides a broad suite of integrated, contractually based outsourcing services to occupiers of real estate, including facilities management and project management. There is also significant cross selling of account-based Advisory services, particularly leasing, property sales and portfolio administration, for Global Workplace Solutions clients.

We believe the outsourcing of corporate real estate services is a long-term trend in our industry, with multi-national corporations, and other large occupiers of space utilizing global, full-service real estate firms to achieve better workplaces for their people, while attempting to lower their cost of occupancy. We typically enter into multi-year, often multi-service, outsourcing contracts with services delivered via dedicated account teams and/or an on-demand basis. The key outsourcing services offered through this business segment are described below.

Facilities Management Services

Facilities Management involves the day-to-day management of client-occupied space for traditional office space, such as headquarter buildings, regional offices and administrative offices, as well as facilities serving specialized industries, such as data centers, life science and medical facilities, distribution warehouses, government facilities and retail stores. Contracts for facilities management services are often structured so that we are reimbursed for client-dedicated personnel costs and subcontracted vendor costs as well as associated overhead expenses plus a monthly fee, and in some cases, annual incentives tied to agreed-upon performance targets, with any penalties typically capped. These are referred to as cost-plus contracts. In addition, we have contracts for facilities management services based on fixed-fee unit prices or guaranteed maximum prices. Fixed-fee contracts are typically structured where an agreed-upon scope of work is delivered for a fixed price while guaranteed maximum price contracts are structured with an agreed upon scope of work that will be provided to the client for a not-to-exceed price. We furnish facilities management services to clients with single or multiple-location assets as well as regional, national and global portfolios. As of December 31, 2021, we managed approximately 4.4 billion square feet of facilities on behalf of occupiers.

Our facilities management services are managed across three sub-lines of business – enterprise, local and data center services – by client type. Cost-plus contracts are most common for enterprise customers while fixed-price contracts predominate for local clients.

Project Management Services

Project management services can be provided on a one-off or programmatic basis to owners, investors and occupiers of real estate in local markets. Revenues from project management services generally include fixed management fees, variable fees, lump sum and incentive fees if certain agreed-upon performance targets are met. Revenues from project management may also include reimbursement of payroll and related costs for personnel providing the services and subcontracted vendor costs. In 2021, we were responsible for implementing project management contracts valued at approximately $133.0 billion, excluding Turner & Townsend.

On November 1, 2021 we acquired a 60% ownership interest in Turner & Townsend Holdings Limited, a global professional services company specializing in program management, project management, and cost consulting across the commercial real estate, infrastructure and natural resources sectors. Turner & Townsend complements our existing project management services for clients. Turner & Townsend's financial results, from the date of acquisition, are consolidated in our Global Workplace Solutions segment.

Real Estate Investments

Real Estate Investments includes: (i) investment management services provided globally; (ii) development services in the U.S., United Kingdom (U.K.) and Continental Europe; and (iii) legacy flexible office space solutions.

Investment Management Services

Investment management services are conducted through our indirect wholly-owned subsidiary, CBRE Investment Management, LLC (CBRE Investment Management) and its global affiliates. CBRE Investment Management provides investment management services to pension funds, insurance companies, sovereign wealth funds, foundations, endowments and other institutional investors seeking to generate returns and diversification through investment in real assets such as real estate, infrastructure, master limited partnerships and other assets. We sponsor investment programs that span the risk/return spectrum in North America, Europe, Asia and Australia. In some strategies, CBRE Investment Management and its investment teams co-invest with its limited partners. Increasingly, real estate assets we are developing through our development services business are being placed into investment management strategies creating greater operational synergies among the Real Estate Investments businesses.

CBRE Investment Management's offerings are organized into five primary categories: (1) direct real estate investments through sponsored funds; (2) direct real estate investments through separate accounts; (3) indirect real estate and infrastructure investments through listed securities; (4) indirect real estate, infrastructure and private equity investments through multi-manager investment programs; and (5) credit investments backed by real estate through sponsored funds, separate accounts or pooled strategies.

Assets under management (AUM) totaled $141.9 billion at December 31, 2021 as compared to $122.7 billion at December 31, 2020, an increase of $19.2 billion ($22.6 billion in local currency).

Development Services

Development services are conducted through our indirect wholly-owned subsidiary Trammell Crow Company, LLC, which provides commercial real estate development services in the U.S., U.K., and Continental Europe, and Telford Homes Plc (Telford), a developer of residential multi-family properties in the U.K.

Our development business pursues opportunistic, risk-mitigated development and investment strategies for users of and investors in commercial real estate, as well as for our own account. Our development business is active in industrial, office, residential multi-family/mixed-use projects, life sciences and healthcare facilities of all types (medical office buildings, hospitals and ambulatory surgery centers) and retail properties. We are compensated by our clients on a fee basis with no, or limited, ownership interest in a property; in partnership with our clients through co-investment – either on an individual project basis or through programs with certain strategic capital partners or for our own account with 100% ownership. Development services activity in which Trammell Crow Company has an ownership interest is conducted through subsidiaries that are consolidated or unconsolidated for financial reporting purposes, depending primarily on the extent and nature of our ownership interest.

At December 31, 2021, we had $18.5 billion of development projects in process, and our development pipeline (prospective projects that we estimate have a greater than 50% chance of closing or where land has been acquired and the projected construction start date is more than one year out) totaled $9.3 billion at December 31, 2021.

Legacy Flexible-Space Solution Provider

We operated our former flexible-office-space solutions business, CBRE Hana, LLC (Hana) for the first three months of 2021. In the second quarter of 2021, CBRE increased its ownership interest in Industrious National Management Company LLC (Industrious), which is reported in our Advisory Services segment, to 40%. As part of this transaction, Hana was integrated into Industrious. CBRE retains responsibility for the performance of certain legacy Hana units, the results of which were consolidated into the Real Estate Investments segment in 2021.

Competition

We face competition across our lines of business on a global, multi-national, national, regional and local level. Although we are the largest commercial real estate services firm in the world in terms of 2021 revenue, our relative competitive position varies significantly across geographic markets, property types and services. We face competition from other global, national, regional and local commercial real estate service providers; companies that traditionally competed in limited portions of our facilities management business and have expanded into other outsourcing offerings; in-house corporate real estate departments and property owners/developers that self-perform real estate services; investment banking firms, investment managers and developers that compete with us to raise and place investment capital; accounting/consulting firms that advise on real estate strategies; and providers of flexible office-space solutions that offer space directly to the occupier.

Despite ongoing consolidation, the commercial real estate services industry remains highly fragmented and competitive. Although many of our competitors are substantially smaller than we are, some of them are larger on a regional or local-market basis or have a stronger position in a specific market segment or service offering. Among our primary competitors are other large national and global firms, such as Jones Lang LaSalle Incorporated (JLL), Cushman & Wakefield plc, Colliers International Group Inc., Savills plc, and Newmark Group Inc., market-segment specialists, such as Eastdil Secured, Marcus & Millichap, Inc. and Walker & Dunlop, Inc.; firms with business lines that compete with some business lines within our occupier outsourcing business, such as ISS, and Sodexo S.A., firms engaged in project management such as Arcadis and AECOM, and firms that provide flexible office-space solutions, such as WeWork, IWG/Regus/Spaces, and Knotel. These flexible space providers also compete directly with Industrious in which we hold a 40% non-controlling interest.

Seasonality

In a typical year, a significant portion of our revenue is seasonal, which an investor should keep in mind when comparing our financial condition and results of operations on a quarter-by-quarter basis. Historically, our revenue, operating income, net income and cash flow from operating activities have tended to be lowest in the first quarter and highest in the fourth quarter of each year. Revenue, earnings and cash flow have generally been concentrated in the fourth calendar quarter due to the focus on completing sales, financing and leasing transactions prior to year-end. The ongoing impact of the Covid-19 pandemic may cause seasonality to deviate from historical patterns.

Human Capital

People & Culture

People are at the center of our strategy to deliver measurably superior outcomes for clients, and therefore we place a high priority on attracting, retaining and developing the best talent. Our human capital programs are designed to help prepare our professionals to succeed in their current and future roles, develop our leaders of tomorrow, reward our people with competitive pay and benefits, foster an engaging and inclusive workplace, and improve productivity through investments in technology, tools and resources. At December 31, 2021, we had more than 105,000 employees (excluding Turner & Townsend employees) worldwide, approximately 47% of whose costs are fully reimbursed by clients and are mostly in our Global Workplace Solutions segment and our property management line of business within our Advisory Services segment. At December 31, 2021, approximately 14% of our employees worldwide were subject to collective bargaining agreements. Our global workforce at December 31, 2021 is comprised of approximately 33% female and 67% male employees.

RISE Values

We champion four key values—Respect, Integrity, Service, Excellence—which serve as the foundation upon which our company is built and as a touchstone for how our employees conduct themselves.

Diversity, Equity & Inclusion (DE&I)

CBRE is committed to increasing the diversity of our workforce and strengthening an inclusive culture where everyone is valued and supported in achieving their full potential. These efforts are led by our Chief Responsibility Officer, a senior executive level position reporting directly to our Chief Executive Officer. We have many programs and initiatives focused on driving these outcomes. These include deploying a global unconscious bias training program and enacting a policy that focuses on having a diverse talent pool and a diverse panel to interview prospective candidates. We exceeded our goal, announced in 2020, of spending $1 billion with diverse suppliers in 2021 and are on course to lift that annual spend to $3 billion by 2025. Also, as part of our community impact initiative, announced in 2021, we made significant financial contributions to eight non-profit organizations that are helping to improve education and career development opportunities for people from diverse and disadvantaged communities. We are also committed to stepping up our volunteerism with these organizations in 2022 and beyond. These efforts will help to build the pipeline of diverse talent well into the future. Our employee business resource groups are an essential element of our DE&I activities, facilitating career and professional development and networking opportunities. We publicly report demographics, including diversity data, for our U.S. workforce annually in our Corporate Responsibility Report.

Our policies and practices have earned the company a place in the Human Rights Campaign's Corporate Equality Index for nine consecutive years and recognition on the Disability Equality Index.

Total Rewards

We provide competitive total rewards programs in all the markets in which we operate, including fixed and variable pay, and comprehensive, company-specific benefits. Additionally, managers may implement flexible work arrangements, such as compressed work weeks and flextime, after considering several factors such as the nature of the employee's work. We remain committed to providing eligible employees with meaningful and affordable benefits. We provide a variety of programs to support holistic physical and behavioral health, short and long-term financial stability, family planning and emotional resiliency for employees at any stage in their career.

Learning and Development

We prioritize and invest in a multitude of training and development programs that enable employees to build satisfying careers. These include webinars, classroom training, self-paced e-learning, coaching, mentoring and a variety of on-the-job projects. To increase diversity, equity and inclusion awareness and adoption, we also launched a diversity training program in 2020 for all employees globally. As part of this diversity training program, our senior leaders completed an intercultural development inventory self-assessment, attended a 3-hour instructor-led virtual session and developed an inclusive leader personal action plan.

Communication and Engagement

Our success depends on employees understanding how their work contributes to the company's overall strategy. We use a variety of channels to facilitate two-way communication, including open forums with executives, annual employee engagement surveys, regularly scheduled performance review processes and participation in employee resource groups (*e.g.* networking groups for African-Americans, Hispanics, Asian Pacific Islander-Americans and military veterans and other groups).

Workplace Safety and Wellbeing

We drive a culture where safety and well-being have a prominent place in virtually every business decision. We insist on high global standards and leadership accountability and strive to continually improve safety and well-being outcomes. We define well-being across five dimensions: occupational, social, environmental, physical, and intellectual. In 2021, we hosted our annual globally coordinated Safety and Wellbeing Week, themed "Connect with Purpose". We also have the "Be Well" campaign, focused on supporting employee well-being through benefits enhancements, awareness campaigns, podcast series, and engagement programs that received external recognition.

Communities and Giving

We are committed to supporting and adding value to the communities where our employees live and work around the world, as well as in communities where the need is greatest. In 2021, the CBRE Foundation launched fund-raising programs to assist the victims of the earthquake in Haiti and the tornados in the U.S. Midwest. Recently, CBRE and the CBRE Foundation, a non-profit public-benefit corporation, announced a community impact initiative whereby the company donated $7.25 million to non-profit organizations engaged in combating climate change around the world, improving education and career development opportunities for racial minorities and disadvantaged populations, and supporting community betterment initiatives in our global headquarters city of Dallas.

Intellectual Property

We regard our intellectual property as an important part of our business. We hold various trademarks and trade names worldwide, which include the "CBRE," "Turner & Townsend" and "Telford" marks. Although we believe our intellectual property plays a role in maintaining our competitive position in a number of the markets that we serve, we do not believe we would be materially, adversely affected by the expiration or termination of our trademarks or trade names or the loss of any of our other intellectual property rights other than the "CBRE" and "Trammell Crow Company" marks. We maintain trademark registrations for the "CBRE," "Turner & Townsend" and "Telford" service marks in jurisdictions where we conduct significant business.

We hold a license to use the "Trammell Crow Company" trade name pursuant to a license agreement with CF98, L.P., an affiliate of Crow Realty Investors, L.P., d/b/a Crow Holdings, which may be revoked if we fail to satisfy usage and quality control covenants under the license agreement.

In addition to trademarks and trade names, we have acquired and developed proprietary technologies for the provision of complex services and analysis. We have a number of issued and pending patent applications relating to these proprietary technologies. We will continue to file additional patent applications on new inventions, as appropriate, demonstrating our commitment to technology and innovation. We also offer proprietary research to clients through our CBRE Research and CBRE Econometric Advisors commercial real estate market information and forecasting groups and we offer proprietary investment analysis and structures through our CBRE Investment Management business.

Material Governmental Matters

Environment

Federal, state and local laws and regulations in the countries in which we do business impose environmental liabilities, controls, disclosure rules and zoning restrictions that affect the ownership, management, development, use or sale of commercial real estate. Certain of these laws and regulations may impose liability on current or previous real property owners or operators for the cost of investigating, cleaning up or removing contamination caused by hazardous or toxic substances at a property, including contamination resulting from above-ground or underground storage tanks or the presence of asbestos or lead at a property. If contamination occurs or is present during our role as a property or facility manager or developer, we could be held liable for such costs as a current "operator" of a property, regardless of the legality of the acts or omissions that caused the contamination and without regard to whether we knew of, or were responsible for, the presence of such hazardous or toxic substances. The operator of a site also may be liable under common law to third parties for damages and injuries resulting from exposure to hazardous substances or environmental contamination at a site, including liabilities arising from exposure to asbestos-containing materials. Under certain laws and common law principles, any failure by us to disclose environmental contamination at a property could subject us to liability to a buyer or lessee of the property. Further, federal, state and local governments in the countries in which we do business have enacted various laws, regulations and treaties governing environmental and climate change, particularly for "greenhouse gases," which seek to tax, penalize or limit their release. Such regulations could lead to increased operational or compliance costs over time.

While we are aware of the presence or the potential presence of regulated substances in the soil or groundwater at or near several properties owned, operated or managed by us that may have resulted from historical or ongoing activities on those properties, we are not aware of any material noncompliance with the environmental laws or regulations currently applicable to us, and we are not the subject of any material claim for liability with respect to contamination at any location. However, these laws and regulations may discourage sales and leasing activities and mortgage lending with respect to some properties, which may adversely affect both the commercial real estate services industry in general and us. Environmental contamination or other environmental liabilities may also negatively affect the value of commercial real estate assets held by entities that are managed by our investment management and development services businesses, which could adversely affect the results of operations of these business lines.

Environmental Sustainability

We have developed measurable environmental and sustainability goals for 2035, grounded in science and an assessment of where our operations have the most significant impact on the environment, as well as the areas where we can most effectively mitigate that impact. These include goals to reduce Scope 1 and 2 greenhouse gas emissions 68% from the 2019 base year. Additional information about our approach to corporate social responsibility and to environmental, social and governance (ESG) issues is available on our Corporate Responsibility website (https://www.cbre.com/about-us/corporate-responsibility#overview), including the CBRE Corporate Responsibility Report. The contents of our website and Corporate Responsibility Report are referenced for general information only and are not incorporated in this Annual Report on Form 10-K.

Available Information

Our Annual Report on Form 10-K (Annual Report), Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, Proxy Statements and amendments to those reports filed or furnished pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act), are available on the Investor Relations section of our website (https://ir.cbre.com) as soon as reasonably practicable after we electronically file such material with, or furnish it to, the U.S. Securities and Exchange Commission (the SEC). We also make available through our website other reports filed with or furnished to the SEC under the Exchange Act, including reports filed by our officers and directors under Section 16(a) of the Exchange Act. All of the information on our Investor Relations website is available to be viewed free of charge. The SEC maintains a website (https://www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

Our website (https://www.cbre.com) contains information concerning us. We routinely use our website as a channel of distribution for our information, including financial and other material information. Information contained on our website is not part of this Annual Report or our other filings with the SEC. We have included the web addresses of the company and the SEC as inactive textual references only. Except as specifically incorporated by reference into this document, information on these websites is not part of this document.

Item 1A. Risk Factors.

Set forth below and elsewhere in this Annual Report and in other documents we file with the SEC are risks and uncertainties that could cause our actual results to differ materially from the results contemplated by the forward-looking statements contained in this Annual Report and other public statements we make. Based on the information currently known to us, we believe that the matters discussed below identify the material risk factors affecting our business. However, the risks and uncertainties we face are not limited to those described below. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial, but that could later become material, may also adversely affect our business.

Risks Related to our Business Environment

Our performance is significantly related to general economic, political and regulatory conditions and, accordingly, our business, operations and financial condition could be materially adversely affected by economic slowdowns, liquidity constraints, significant public health events, fiscal or political uncertainty and possible subsequent downturns in commercial real estate asset values, property sales and leasing activities in the geographies or industry sectors that we or our clients serve.

Periods of economic weakness or recession, fiscal or political uncertainty, market volatility, declining employment levels, declining demand for commercial real estate, falling real estate values, disruption to the global capital or credit markets or the public perception that any of these events may occur, may materially and negatively affect the performance of some or all of our business lines.

Our business is significantly affected by generally prevailing economic conditions in the markets where we operate. Adverse economic conditions, political or regulatory uncertainty and significant public health events can result in declines in real estate sale and leasing volumes and the value of commercial real estate. It may also lead to a decrease in funds invested in commercial real estate assets and development projects. Such developments in turn may reduce our revenue from property management fees and commissions derived from property sales, leasing, valuation and financing, as well as revenues associated with development or investment management activities. For example, during the onset of the Covid-19 pandemic, commercial real estate markets globally were severely impacted by a sharp decline in economic activity due to the spread of Covid-19, which put downward pressure on certain parts of our business. See "*Risks Related to Our Operations—The Covid-19 pandemic has impacted our business operations, and the extent to which it will continue to do so and its impact on our future financial results are uncertain.*" below for additional risks related to the Covid-19 pandemic. Our businesses could also suffer from political or economic disruptions (or the perception that such disruptions may occur) that affect interest rates or liquidity or create financial, market or regulatory uncertainty.

We also make co-investments alongside our investor clients in our development and investment management businesses. During an economic downturn, capital for our investment activities could be constrained and it may take longer for us to dispose of real estate investments or sale prices we achieve may be lower than originally anticipated. As a result, the value of our commercial real estate investments may be reduced, and we could realize losses or diminished profitability. In addition, economic downturns may reduce the volume of loans our capital markets business originates and/or services. Fees within our property management business are generally based on a percentage of rent collections, making them sensitive to macroeconomic conditions that negatively impact rent collections and the performance of the properties we manage.

Economic, political and regulatory uncertainty as well as significant changes and volatility in the financial markets and business environment, and in the global landscape, make it difficult for us to predict our financial performance into the future. As a result, any guidance or outlook that we provide on our performance is based on then-current conditions, and there is a risk that such guidance may turn out to be inaccurate.

Adverse developments in the credit markets may materially harm our business, results of operations and financial condition.

Our investment management, development services and capital markets (including property sales and mortgage and structured financing services) businesses are sensitive to credit cost and availability as well as financial liquidity. Additionally, the revenues in all of our businesses are dependent to some extent on the overall volume of activity (and pricing) in the commercial real estate markets.

Disruptions in the credit markets may have a material adverse effect on our business of providing advisory services to owners, investors and occupiers of real estate in connection with the leasing, disposition and acquisition of property. If our clients are unable to obtain credit on favorable terms, there may be fewer property leasing, disposition and acquisition transactions. In addition, under such conditions, our investment management and development services businesses may be unable to attract capital or achieve returns sufficient to earn incentive fees and we may also experience losses of co-invested equity capital if any such disruption causes a prolonged decline in the value of investments made.

Our operations are subject to social, political and economic risks in foreign countries as well as foreign currency volatility.

We conduct a significant portion of our business and employ a substantial number of people outside of the U.S. and, as a result, we are subject to risks associated with doing business globally. During the year ended December 31, 2021, approximately 43% of our revenue was transacted in foreign currencies. Fluctuations in foreign currency exchange rates may result in corresponding fluctuations in revenue and earnings as well as the assets under management for our investment management business, which could have a material adverse effect on our business, financial condition and operating results. Due to the constantly changing currency exposures to which we are subject and the volatility of currency exchange rates, we cannot predict the effect of exchange rate fluctuations upon future operating results.

In addition, international economic trends, foreign governmental policy actions and the following factors may have a material adverse effect on the performance of our business:

- difficulties and costs of staffing and managing international operations among diverse geographies, languages and cultures;
- currency restrictions, transfer-pricing regulations and adverse tax consequences, which may affect our ability to transfer capital and profits;
- adverse changes in regulatory or tax requirements and regimes or uncertainty about the application of or the future of such regulatory or tax requirements and regimes;
- responsibility for complying with numerous, potentially conflicting and frequently complex and changing laws in multiple jurisdictions (*e.g.*, with respect to data protection, privacy regulations, corrupt practices, embargoes, trade sanctions, employment and licensing);
- the impact of regional or country-specific business cycles and economic instability, including those related to public health or safety events;
- greater difficulty in collecting accounts receivable or delays in client payments in some geographic regions;
- foreign ownership restrictions in certain countries, particularly in Asia Pacific and the Middle East, or the risk that such restrictions will be adopted in the future; and
- changes in laws or policies governing foreign trade or investment and use of foreign operations or workers, and any negative sentiments towards multinational companies as a result of any such changes to laws or policies as well as other geopolitical risks.

We maintain anti-corruption and anti-money-laundering compliance programs throughout the company as well as programs designed to enable us to comply with any potential government economic sanctions, embargoes or other import/export controls. However, coordinating our activities to deal with the broad range of complex legal and regulatory environments in which we operate presents significant challenges. We may not be successful in complying with regulations in all situations and violations may result in criminal or material civil sanctions and other costs against us or our employees, and may have a material adverse effect on our reputation and business.

We have committed additional resources to expand our worldwide sales and marketing activities, to globalize our service offerings and products in select markets and to develop local sales and support channels. If we are unable to successfully implement these plans, maintain adequate long-term strategies that successfully manage the risks associated with our global business or adequately manage operational fluctuations, our business, financial condition or results of operations could be harmed. In addition, we have established operations and seek to grow our presence in many emerging markets to further expand our global platform. However, we may not be successful in effectively evaluating and monitoring the key business, operational, legal and compliance risks specific to those markets. The political and cultural risks present in emerging countries could also harm our ability to successfully execute our operations or manage our businesses there.

Risks Related to Our Operations

The Covid-19 pandemic has impacted our business operations, and the extent to which it will continue to do so and its impact on our future financial results are uncertain.

The emergence of the Covid-19 pandemic initially resulted in a decline in real estate sales, financing, construction and leasing activity, adversely impacting deal volume in our property sales and leasing activity in our Advisory Services segment. There has since been a sharp economic and commercial real estate recovery. However, the pandemic has resulted in changes to the utilization of many types of commercial real estate. For example, the Covid-19 pandemic has accelerated the adoption of hybrid and remote work schemes, which may lead to reduced corporate office space requirements in the future. The Covid-19 pandemic has also fueled increased demand for logistics and distribution facilities. These shifts in commercial utilization may have an adverse effect on portions of our business, while benefiting others. For example, reduced office space requirements could negatively impact office sales and leasing, while higher demand for industrial and logistics properties could benefit industrial sales and leasing. We would expect a similar shift to be reflected in other business lines as well should these structural demand shifts persist. There can be no assurance, however, that any such beneficial demand shifts would be sufficient to substantially mitigate the adverse effects of such shifts on other portions of our business or the negative effects of the Covid-19 pandemic on our business, results of operations, and performance on a consolidated basis.

The extent to which the Covid-19 pandemic will impact our business and financial results in the future will depend on numerous evolving factors that we may not be able to accurately predict, including: the duration and scope of the pandemic; the emergence and virulence of new variants, which may cause and impact the severity of additional outbreaks; governmental, business and individuals' actions that have been and continue to be taken in response to the pandemic; how quickly and to what extent normal economic activity resumes; the availability and effectiveness of vaccines and treatments for Covid-19 globally; the effect on our clients and client demand for our services; our ability to provide our services on a competitive basis, including as a result of travel restrictions, the remote work environment, and staffing changes due to additional financial, family and health burdens that may negatively impact our people's mental and physical health, engagement and retention; the ability of our clients to pay for our services; the acceleration of secular changes in the use of certain commercial real estate; and any closures of our or our clients' offices and facilities. The situation continues to change rapidly and additional impacts may arise that we are not aware of currently. To the extent the Covid-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described elsewhere in this Annual Report.

We have numerous local, regional and global competitors across all of our business lines and the geographies that we serve, and further industry consolidation, fragmentation or innovation could lead to significant future competition.

We compete across a variety of business disciplines within the commercial real estate services and investment industry, including property management, facilities management, project and transaction management, tenant and landlord leasing, capital markets solutions (property sales, commercial mortgage origination and structured finance), flexible space solutions, real estate investment management, valuation, loan servicing, development services and proprietary research. Although we are the largest commercial real estate services firm in the world in terms of 2021 revenue, our relative competitive position varies significantly across geographies, property types and services and business lines.

Depending on the geography, property type or service or business line, we face competition from other commercial real estate services providers and investment firms, including outsourcing companies that traditionally competed in limited portions of our facilities management business and have expanded their offerings from time to time, in-house corporate real estate departments, developers, flexible space providers, institutional lenders, insurance companies, investment banking firms, investment managers and accounting and consulting firms. Some of these firms may have greater financial resources allocated to a particular geography, property type or service or business line than we have allocated to that geography, property type, service or business line. In addition, future changes in laws could lead to the entry of other new competitors, such as financial institutions.

Although many of our existing competitors are local or regional firms that are smaller than we are, some of these competitors are larger on a local or regional basis. We are further subject to competition from large national and multi-national firms that have similar service and investment competencies to ours, and it is possible that further industry consolidation could lead to much larger and more formidable competitors globally or in the particular geographies, property types, service or business lines that we serve. In addition, disruptive innovation by existing or new competitors could alter the competitive landscape in the future and require us to accurately identify and assess such changes and make timely and effective changes to our strategies and business model to compete effectively. Furthermore, we are substantially dependent on long-term client relationships and on revenue received for services under various service agreements. Many of these agreements may be canceled by the client for any reason with as little as 30 to 60 days' notice, as is typical in the industry.

In this competitive market, if we are unable to maintain long-term client relationships or are otherwise unable to retain existing clients and develop new clients, our business, results of operations and/or financial condition may be materially adversely affected. There is no assurance that we will be able to compete effectively, to maintain current fee levels or margins, or maintain or increase our market share.

Our growth and financial performance have benefited significantly from acquisitions, which may not perform as expected and similar opportunities may not be available in the future.

Acquisitions have accounted for a significant component of our growth over time. Any future growth through acquisitions will depend in part upon the continued availability of suitable acquisition candidates at attractive prices, terms and conditions, as well as sufficient liquidity and credit to fund these acquisitions. We may incur significant additional debt from time to time to finance any such acquisitions, which could increase the risks associated with our leverage, including our ability to service our debt. Acquisitions involve risks that business judgments made concerning the value, strengths and weaknesses of businesses acquired may prove to be incorrect. Future acquisitions and any necessary related financings also may involve significant transaction-related expenses, which could include severance, lease termination, transaction and deferred financing costs, among others.

We have had, and may continue to experience, challenges in integrating operations and information technology systems acquired from other companies. This could result in the diversion of management's attention from other business concerns and the potential loss of our key employees or clients or those of the acquired operations. The integration process itself may be costly and may adversely impact our business and the acquired company's business as it requires coordination of geographically diverse organizations and implementation of accounting and information technology systems.

We complete acquisitions with the expectation that they will result in various benefits, but the anticipated benefits of these acquisitions are subject to a number of uncertainties, including the ability to timely realize accretive benefits, the level of attrition from professionals licensed or associated with the acquired companies and whether we can successfully integrate the acquired business. Failure to achieve these anticipated benefits could result in increased costs, decreases in the amount of expected revenues and diversion of management's time and energy, which could in turn materially and adversely affect our overall business, financial condition and operating results.

Our brand and reputation are key assets of our company, and our business may be affected by how we are perceived in the marketplace.

Our brand and reputation are key assets, and we believe our continued success depends on our ability to preserve, grow and leverage the value of our brand. Our ability to attract and retain clients is highly dependent upon the external perceptions of our level of service, trustworthiness, business practices, management, workplace culture, financial condition, our response to unexpected events and other subjective qualities. Negative perceptions or publicity regarding these matters, even if related to seemingly isolated incidents and whether or not factually correct, could erode trust and confidence and damage our reputation among existing and potential clients, which could make it difficult for us to attract new clients and maintain existing ones. Negative public opinion could result from actual or alleged conduct in any number of activities or circumstances, including handling of complaints, regulatory compliance, such as compliance with government sanctions, the Foreign Corrupt Practices Act (FCPA), the U.K. Bribery Act and other antibribery, anti-money laundering and corruption laws, the use and protection of client and other sensitive information and from actions taken by regulators or others in response to such conduct. Furthermore, as a company with headquarters and operations located in the U.S., a negative perception of the U.S. arising from its political or other positions could harm the perception of our company and our brand abroad. Although we monitor developments for areas of potential risk to our reputation and brand, negative perceptions or publicity would materially and adversely affect our revenues and profitability. Social media channels can also cause rapid, widespread reputational harm to our

brand. Our brand and reputation may also be harmed by the actions of third parties that are outside of our control, including vendors and joint venture partners.

The protection of our brand, including related trademarks, may require the expenditure of significant financial and operational resources. Moreover, the steps we take to protect our brand may not adequately protect our rights or prevent third parties from infringing or misappropriating our trademarks. Even when we detect infringement or misappropriation of our trademarks, we may not be able to enforce all such trademarks. Any unauthorized use by third parties of our brand may adversely affect our brand. Furthermore, as we continue to expand our business, especially internationally, there is a risk we may face claims of infringement or other alleged violations of third-party intellectual property rights, which may restrict us from leveraging our brand in a manner consistent with our business goals.

Our Real Estate Investments businesses, including our real estate investment programs and co-investment activities, subject us to performance and real estate investment risks which could cause fluctuations in our earnings and cash flow and impact our ability to raise capital for future investments.

The revenue, net income and cash flow generated by our investment management business line within our Real Estate Investments segment can be volatile primarily because the management, transaction and incentive fees can vary as a result of market movements. In the event that any of the investment programs that our investment management business manages were to perform poorly, our revenue, net income and cash flow could decline because the value of the assets we manage would decrease, which would result in a reduction in some of our management fees, and our investment returns would decrease, resulting in a reduction in the incentive compensation we earn. Moreover, we could experience losses on co-investments of our own capital in such programs as a result of poor performance. Investors and potential investors in our programs continually assess our performance, and our ability to raise capital for existing and future programs and maintaining our current fee structure will depend on our continued satisfactory performance.

An important part of the strategy for our investment management business involves co-investing our capital in certain real estate investments with our clients, and there is an inherent risk of loss of our investments. As of December 31, 2021, we had co-invested approximately $232.4 million and had committed $127.1 million to fund future co-investments in our Real Estate Investments segment, approximately $42.6 million of which is expected to be funded during 2022. In addition to required future capital contributions, some of the co-investment entities may request additional capital from us and our subsidiaries holding investments in those assets. The failure to provide these contributions could have adverse consequences to our interests in these investments, including damage to our reputation with our co-investment partners and clients, as well as the necessity of obtaining alternative funding from other sources that may be on disadvantageous terms for us and the other co-investors. Participating as a co-investor is an important part of our investment management line of business, which might suffer if we were unable to make these investments.

Selective investment in real estate projects is critical to our development services business strategy within our Real Estate Investments segment, and there is an inherent risk of loss of our investments. As of December 31, 2021, we were involved as a principal in 26 real estate projects that were consolidated in our financial statements with invested equity of $439.3 million and co-invested with our clients in approximately 125 unconsolidated real estate subsidiaries with invested equity of $219.0 million. We had committed additional capital of $40.7 million to the unconsolidated subsidiaries and of $141.6 million to consolidated projects, as of December 31, 2021.

During the ordinary course of business within our development services business line, we provide numerous completion and budget guarantees requiring us to complete the relevant project within a specified timeframe and/or within a specified budget, with us potentially being liable for costs to complete in excess of such timeframe or budget. There can be no assurance that we will not have to perform under any such guarantees. If we are required to perform under a significant number of such guarantees, it could harm our business, results of operations and financial condition.

Because the disposition of a single significant investment can affect our financial performance in any period, our real estate investment activities could cause fluctuations in our net earnings and cash flow. In many cases, we have limited control over the timing of the disposition of these investments and the recognition of any related gain or loss, or incentive participation fee.

The success of our Global Workplace Solutions segment depends on our ability to enter into mutually beneficial contracts, deliver high quality levels of service and accurately assess working capital requirements.

Contracts for our Global Workplace Solutions clients often include complex terms regarding payment of fees, risk transfer, liability limitations, termination, due diligence and transition timeframes. Further, the facilities management and project management businesses within our Global Workplace Solutions segment are often impacted by transition activities in the first year of a contract as well as the timing of starting operations on these large client contracts. If we are unable to negotiate contracts with our clients in a timely manner and on mutually beneficial terms, or there is a delay in becoming fully operational, our business and results of operation may be negatively impacted. Further, if we fail to deliver the high-quality levels of service expected by our clients, it may result in reputational and financial damage, and could impact our ability to retain existing clients and attract new clients.

Our Global Workplace Solutions segment also requires us to accurately model the working capital needs of this business. Should we fail to accurately assess working capital requirements, the cash flow generated by this business may be adversely impacted. In addition, if we do not accurately assess the creditworthiness of a client or if a client's creditworthiness changes during the term of the contract, we could potentially be unable to collect on any outstanding payments.

A significant portion of our loan origination and servicing business depends upon our relationships with U.S. Government Sponsored Enterprises.

A significant portion of our loan origination and servicing business (which we conduct through certain of our wholly-owned subsidiaries) depends upon our relationship with the Federal National Mortgage Association (Fannie Mae), and the Federal Home Loan Mortgage Corporation (Freddie Mac), collectively the Government Sponsored Enterprises (GSEs). As an approved seller/servicer for the GSEs, we are required to comply with various eligibility criteria and are required to originate and service loans in accordance with their individual program requirements**,** including participation in loss sharing and repurchase arrangements. Failure to comply with these requirements may result in termination or withdrawal of our approval to sell and service the GSE loans.

A failure by third parties to comply with service level agreements or regulatory or legal requirements could result in economic and reputational harm to us.

We rely on third parties, and in some cases subcontractors, to perform activities on behalf of our organization to improve quality, increase efficiencies, cut costs and lower operational risks across our business and support functions. We have instituted a Supplier Code of Conduct, which is intended to communicate to our vendors the standards of conduct we expect them to uphold. Our contracts with vendors typically impose a contractual obligation to comply with our Supplier Code of Conduct. In addition, we leverage technology to help us better screen vendors, with the aim of gaining a deeper understanding of the compliance, data privacy, health and safety, environmental, sustainability and other risks posed to our business by potential and existing vendors. If our third parties do not have the proper safeguards and controls in place, or appropriate oversight cannot be provided, we could be exposed to increased operational, regulatory, financial or reputational risks. A failure by third parties to comply with service level agreements or regulatory or legal requirements in a high quality and timely manner could result in economic and reputational harm to us. In addition, these third parties face their own technology, operating, business and economic risks, and any significant failures by them, including the improper use or disclosure of our confidential client, employee or company information, could cause damage to our reputation and harm to our business.

Our success depends upon the retention of our senior management, as well as our ability to attract and retain qualified and experienced employees.

Our continued success is highly dependent upon the efforts of our executive officers and other key employees. While certain of our executive officers and key employees are subject to long-term compensatory arrangements, there can be no assurance that we will be able to retain all key members of our senior management. We also are highly dependent upon the retention of our property sales and leasing professionals, who generate a significant amount of our revenues, as well as other revenue producing professionals. The departure of any of our key employees, or the loss of a significant number of key revenue producers, if we are unable to quickly hire and integrate qualified replacements, could cause our business, financial condition and results of operations to materially suffer. Competition for employee talent is intense and increasing and we may not be able to successfully recruit, integrate or retain sufficiently qualified personnel. In addition, the growth of our business is largely dependent upon our ability to attract and retain qualified personnel in all areas of our business. If we were to experience significant employee attrition or turnover, it could lead to increased recruitment and training costs as well as operating

inefficiencies that could adversely impact our results of operation. We and our competitors use equity incentives and sign-on and retention bonuses to help attract, retain and incentivize key personnel. As competition is significant for the services of such personnel, the expense of such incentives and bonuses may increase, which could negatively impact our profitability, or result in our inability to attract or retain such personnel to the same extent that we have in the past. Any significant decline in, or failure to grow, our stock price may result in an increased risk of loss of these key personnel. If we are unable to attract and retain these qualified personnel, our growth may be limited, and our business and operating results could materially suffer.

If we are unable to manage the organizational challenges associated with our global operations, we might be unable to achieve our business objectives

Our global operations present significant management and organizational challenges. It might become increasingly difficult to maintain effective standards across a large enterprise and effectively institutionalize our knowledge. It might also become more difficult to maintain our culture, effectively manage and monitor our personnel and operations and effectively communicate our core values, policies and procedures, strategies and goals. The size of our employee base increases the possibility that we will have individuals who engage in unlawful or fraudulent activity, or otherwise expose us to business and reputational risks. If we are not successful in continuing to develop and implement the processes and tools designed to manage our enterprise and instill our culture and core values into all of our employees, our reputation and ability to compete successfully and achieve our business objectives could be impaired. In addition, from time to time, we have made, and may continue to make, changes to our operating model, including how we are organized, as the needs and size of our business change. If we do not successfully implement any such changes, our business and results of operation may be negatively and materially impacted.

Our policies, procedures and programs to safeguard the health, safety and security of our employees and others may not be adequate.

We have more than 105,000 employees (excluding Turner & Townsend employees) as well as independent contractors working in over 100 countries. We have undertaken to implement what we believe to be best practices to safeguard the health, safety and security of our employees, independent contractors, clients and others at our worksites. However, if these policies, procedures and programs are not adequate, or employees do not receive related adequate training or follow them for any reason, the consequences may be severe to us, including serious injury or loss of life, which could impair our operations and cause us to incur significant legal liability or fines as well as reputational damage. Our insurance may not cover, or may be insufficient to cover, any legal liability or fines that we incur for health, safety or security incidents.

We may be subject to actual or perceived conflicts of interest.

Similar to other global services companies with different business lines and a broad client base, we may be subject to potential conflicts of interests in the provision of our services. For example, conflicts may arise from our role in advising or representing both owners and tenants in commercial real estate lease transactions. In certain cases, we are also subject to fiduciary obligations to our clients. In such situations, our policies are designed to give full disclosure and transparency to all parties as well as implement appropriate barriers on information-sharing and other activities to ensure each party's interests are protected; however, there can be no assurance that our policies will be successful in every case. If we fail, or appear to fail, to identify, disclose and appropriately address potential conflicts of interest or fiduciary obligations, there could be an adverse effect on our business or reputation regardless of whether any such claims have merit. In addition, it is possible that in some jurisdictions, regulations could be changed to limit our ability to act for certain parties where potential conflicts may exist even with informed consent, which could limit our market share in those markets. There can be no assurance that potential conflicts of interest will not materially adversely affect us.

Infrastructure disruptions may disrupt our ability to manage real estate for clients or may adversely affect the value of real estate investments we make on behalf of clients.

Our ability to conduct a global business may be adversely impacted by disruptions to the infrastructure that supports our businesses and the communities in which they are located. This may include disruptions as a result of political instability, public health crises, attacks on our information technology systems, terrorist attacks, interruptions or delays in services from third-party data center hosting facilities or cloud computing platform providers, employee errors or malfeasance, building defects, utility outages, the effects of climate change and natural disasters such as fires, earthquakes, floods and hurricanes. The infrastructure disruptions we may experience as a result of such events could also disrupt our ability to manage real estate for clients or may adversely affect the value of our real estate investments in our investment management and development services businesses.

The buildings we manage for clients, which include some of the world's largest office properties and retail centers, are used by people daily. We also manage the critical facilities (including data centers) that our clients rely on to serve the public and their customers, where unplanned downtime could potentially disrupt other parts of their businesses or society. As a result, fires, earthquakes, floods, hurricanes, other natural disasters, building defects, terrorist attacks, mass shootings or infrastructure disruptions can result in significant loss of life or injury, and, to the extent we are held to have been negligent in connection with our management of the affected properties, we could incur significant financial liabilities and reputational harm.

Our joint venture activities and affiliate program involve risks that are often outside of our control and that, if realized, could materially harm our business.

We have utilized joint ventures for commercial investments, select local brokerage and other affiliations both in the U.S. and internationally, and we may acquire interests in other joint ventures in the future. Under our affiliate program, we enter into contractual relationships with local brokerage, property management or other operations pursuant to which we license to that operation our name and make available certain of our resources, in exchange for a royalty or economic participation in that operation's revenue, profits or transactional activity. In many of these joint ventures and affiliations, we may not have the right or power to direct the management and policies of the joint ventures or affiliates, and other participants or operators of affiliates may take action contrary to our instructions or requests and against our policies and objectives. In addition, the other participants and operators may become bankrupt or have economic or other business interests or goals that are inconsistent with ours. If a joint venture participant or affiliate acts contrary to our interest, it could harm our brand, business, results of operations and financial condition.

A significant portion of our revenue is seasonal, which could cause our financial results to fluctuate significantly.

A significant portion of our revenue is seasonal. Historically, our revenue, operating income, net income and cash flow from operating activities tend to be lowest in the first calendar quarter, and highest in the fourth calendar quarter of each year. Earnings and cash flow have generally been concentrated in the fourth calendar quarter due to the focus on completing sales, financing and leasing transactions prior to calendar year-end. This variance among periods makes it difficult to compare our financial condition and results of operations on a quarter-by-quarter basis. In addition, as a result of the seasonal nature of our business, political, economic or other unforeseen disruptions occurring in the fourth quarter, particularly those that impact our ability to close large transactions, may have a proportionally larger effect on our financial condition and results of operations.

Risks Related to Our Indebtedness

Our debt instruments impose operating and financial restrictions on us, and in the event of a default, all of our borrowings would become immediately due and payable.

As of December 31, 2021, our total debt, excluding notes payable on real estate (which are generally non-recourse to us) and warehouse lines of credit (which are recourse only to our wholly-owned subsidiary, CBRE Capital Markets, and are secured by our related warehouse receivables), was $1.6 billion. For the year ended December 31, 2021, our interest expense was $68.3 million.

Our debt instruments impose, and the terms of any future debt may impose, operating and other restrictions on us and many of our subsidiaries. These restrictions affect, and in many respects limit or prohibit, our ability to:

- plan for or react to market conditions;
- meet capital needs or otherwise restrict our activities or business plans; and
- finance ongoing operations, strategic acquisitions, investments or other capital needs or to engage in other business activities that would be in our interest, including:
  - incurring or guaranteeing additional indebtedness;
  - entering into mergers and consolidations;
  - creating liens; and
  - entering into sale/leaseback transactions.

Our credit agreement requires us to maintain a minimum interest coverage ratio of consolidated EBITDA (as defined in the credit agreement) to consolidated interest expense (as defined in the credit agreement) and a maximum leverage ratio of total debt (as defined in the credit agreement) less available cash (as defined in the credit agreement) to consolidated EBITDA as of the end of each fiscal quarter. Our ability to meet these financial ratios may be affected by events beyond our control, and we cannot give assurance that we will be able to meet those ratios when required. We continue to monitor our projected compliance with these financial ratios and other terms of our credit agreement.

A breach of any of these restrictive covenants or the inability to comply with the required financial ratios could result in a default under our debt instruments. If any such default occurs, the lenders under our credit agreement may elect to declare all outstanding borrowings, together with accrued interest and other fees, to be immediately due and payable. The lenders under our credit agreement also have the right in these circumstances to terminate any commitments they have to provide further borrowings. In addition, a default under our credit agreement could trigger a cross default or cross acceleration under our other debt instruments.

We have limited restrictions on the amount of additional recourse debt we are able to incur, which may intensify the risks associated with our leverage, including our ability to service our indebtedness. In addition, in the event of a credit-ratings downgrade, our ability to borrow and the costs of such borrowings could be adversely affected.

Subject to the maximum amounts of indebtedness permitted by our credit agreement covenants, we are not restricted in the amount of additional recourse debt we are able to incur, and so we may in the future incur such indebtedness in order to finance our operations and investments. In addition, Moody's Investors Service, Inc. and Standard & Poor's Ratings Services, rate our significant outstanding debt. These ratings, and any downgrades of them, may affect our ability to borrow as well as the costs of our current and future borrowings.

Risks Related to our Information Technology, Cybersecurity and Data Protection

Failure to maintain and execute information technology strategies and ensure that our employees adapt to changes in technology could materially and adversely affect our ability to remain competitive in the market.

Our business relies heavily on information technology, including solutions provided by third parties, to deliver services that meet the needs of our clients. If we are unable to effectively execute or maintain our information technology strategies or adopt new technologies and processes relevant to our service platform, our ability to deliver high-quality services may be materially impaired. In addition, we make significant investments in new systems and tools to achieve competitive advantages and efficiencies. Implementation of such investments in information technology could exceed estimated budgets and we may experience challenges that prevent new strategies or technologies from being realized according to anticipated schedules. If we are unable to maintain current information technology and processes or encounter delays, or fail to exploit new technologies, then the execution of our business plans may be disrupted. Similarly, our employees require effective tools and techniques to perform functions integral to our business. Failure to successfully provide such tools and systems, or ensure that employees have properly adopted them, could materially and adversely impact our ability to achieve positive business outcomes.

Interruption or failure of our information technology, communications systems or data services could impair our ability to provide our services effectively, which could damage our reputation and materially harm our operating results.

Our business requires the continued operation of information technology and communication systems and network infrastructure. Our ability to conduct our global business may be materially adversely affected by disruptions to these systems or our infrastructure. Our information technology and communications systems are vulnerable to damage or disruption from fire, power loss, telecommunications failure, system malfunctions, computer viruses, cyberattacks, natural disasters such as hurricanes, earthquakes and floods, acts of war or terrorism, employee errors or malfeasance, or other events which are beyond our control. With respect to cyberattacks and viruses, these pose growing threats to many companies, and we have been a target and may continue to be a target of such threats, which could expose us to liability, reputational harm and significant remediation costs and cause material harm to our business and financial results. In addition, the operation and maintenance of these systems and networks is in some cases dependent on third-party technologies, systems and service providers for which there is no certainty of uninterrupted availability. Any of these events could cause system interruption, delays and loss, corruption or exposure of critical data or intellectual property and may also disrupt our ability to provide services to or interact with our clients, contractors and vendors, and we may not be able to successfully implement contingency plans that depend on communication or travel. Furthermore, while we have certain business interruption and cyber insurance coverage and various contractual arrangements that can serve to mitigate costs, damages and liabilities, any such event could result in substantial recovery and remediation costs and liability to customers, business partners and other third parties. We have crises management, business continuity and disaster recovery plans and backup systems to reduce the potentially adverse effect of such events, but our disaster recovery planning may not be sufficient and cannot account for all eventualities, and a catastrophic event that results in the destruction or disruption of any of our data centers and third-party cloud hosting providers or our critical business or information technology systems could severely affect our ability to conduct normal business operations, and as a result, our future operating results could be materially adversely affected.

Our business relies heavily on the use of commercial real estate data. A portion of this data is purchased or licensed from third-party providers for which there is no certainty of uninterrupted availability. A disruption of our ability to provide data to our professionals and/or our clients or an inadvertent exposure of proprietary data could damage our reputation and competitive position, and our operating results could be adversely affected.

Failure to maintain the security of our information and technology networks, including personally identifiable and client information, intellectual property and proprietary business information could materially adversely affect us.

Security breaches and other disruptions of our information and technology networks, as well as that of third-party vendors, could compromise our information and intellectual property and expose us to liability, reputational harm and significant remediation costs, which could cause material harm to our business and financial results. In the ordinary course of our business, we collect and store sensitive data, including our proprietary business information and intellectual property, and that of our clients and personally identifiable information of our employees, contractors and vendors, in our data centers, networks and third-party cloud hosting providers. The secure processing, maintenance and transmission of this information are critical to our operations. Although we and our vendors continue to implement new security measures and regularly conduct employee training, our information technology and infrastructure may nevertheless be vulnerable to cyberattacks by third

parties or breached due to employee error, malfeasance or other disruptions. An increasing number of companies that rely on information and technology networks have disclosed breaches of their security, some of which have involved sophisticated and highly targeted attacks on portions of their websites or infrastructure. The techniques used to obtain unauthorized access, disable, or degrade service, or sabotage systems, change frequently, may be difficult to detect, and often are not recognized until launched against a target. To date, we have not yet experienced any cybersecurity breaches that have been material, either individually or in the aggregate. However, there can be no assurance that we will be able to prevent any material events from occurring in the future.

We are subject to numerous laws and regulations designed to protect sensitive information, such as the European Union's General Data Protection Regulation, China's Cyber Security Laws, various U.S. federal and state laws governing the protection of health or other personally identifiable information, including the California Consumer Privacy Act, and data privacy and cybersecurity laws in other regions. These laws and regulations are increasing in severity, complexity and number, change frequently, and increasingly conflict among the various countries in which we operate, which has resulted in greater compliance risk and cost for us.

A significant actual or potential theft, loss, corruption, exposure, fraudulent use or misuse of client, employee or other personally identifiable or proprietary business data, whether by third parties or as a result of employee malfeasance or otherwise, non-compliance with our contractual or other legal obligations regarding such data or intellectual property or a violation of our privacy and security policies with respect to such data could result in significant remediation and other costs, fines, litigation or regulatory actions against us. Such an event could additionally disrupt our operations and the services we provide to clients, harm our relationships with contractors and vendors, damage our reputation, result in the loss of a competitive advantage, impact our ability to provide timely and accurate financial data and cause a loss of confidence in our services and financial reporting, which could adversely affect our business, revenues, competitive position and investor confidence. Additionally, we rely on third parties to support our information and technology networks, including cloud storage solution providers, and as a result have less direct control over our data and information technology systems. Such third parties are also vulnerable to security breaches and compromised security systems, for which we may not be indemnified and which could materially adversely affect us and our reputation.

Legal and Regulatory Related Risks

We are subject to various litigation and regulatory risks and may face financial liabilities and/or damage to our reputation as a result of litigation or regulatory investigations or proceedings.

Our businesses are exposed to various litigation and regulatory risks, especially within our valuations business. Although we maintain insurance coverage for most of this risk, insurance coverage is unavailable at commercially reasonable pricing for certain types of exposures. Additionally, our insurance policies may not cover us in the event of grossly negligent or intentionally wrongful conduct. Accordingly, an adverse result in a litigation against us, or a lawsuit that results in a substantial legal liability for us (and particularly a lawsuit that is not insured), could have a disproportionate and material adverse effect on our business, financial condition and results of operations. Furthermore, an adverse result in regulatory proceedings, if applicable, could result in fines or other liabilities or adversely impact our operations. Prolonged or complex investigations, even if they do not result in regulatory or other proceedings or adverse findings, may result in significant costs that may not be covered by insurance and in diversion of employee resources. In addition, we depend on our business relationships and our reputation for high-caliber professional services to attract and retain clients. As a result, allegations against us, or the announcement of a regulatory investigation involving us, irrespective of the ultimate outcome of that allegation or investigation, may harm our professional reputation and as such materially damage our business and its prospects.

Our businesses, financial condition, results of operations and prospects could be adversely affected by new laws or regulations or by changes in existing laws or regulations or the application thereof. If we fail to comply with laws and regulations applicable to us, or make incorrect determinations in complex tax regimes, we may incur material financial penalties.

We are subject to numerous federal, state, local and non-U.S. laws and regulations specific to the services we perform in our business. Brokerage of real estate sales and leasing transactions and the provision of property management and valuation services require us and our employees to maintain applicable licenses in each U.S. state and certain non-U.S. jurisdictions in which we perform these services. If we and our employees fail to maintain our licenses or conduct these activities without a license, or violate any of the regulations covering our licenses, we may be required to pay fines (including treble damages in certain states) or return commissions received or have our licenses suspended or revoked. A number of our services, including

the services provided by our indirect wholly-owned subsidiaries, CBRE Capital Markets and CBRE Investment Management, are subject to regulation by the SEC, Financial Industry Regulatory Authority (FINRA), or other self-regulatory organizations and state securities regulators and compliance failures or regulatory action could adversely affect our business. We could be subject to disciplinary or other actions in the future due to claimed noncompliance with these regulations, which could have a material adverse effect on our operations and profitability.

We are also subject to laws of broader applicability, such as tax, securities, environmental, employment laws and anti-bribery, anti-money laundering and corruption laws, including the Fair Labor Standards Act, occupational health and safety regulations, U.S. state wage-and-hour laws, the U.S. FCPA and the U.K. Bribery Act. Failure to comply with these requirements could result in the imposition of significant fines by governmental authorities, awards of damages to private litigants and significant amounts paid in legal fees or settlements of these matters.

As the size and scope of our business has increased significantly, compliance with numerous licensing and other regulatory requirements and the possible loss resulting from non-compliance have both increased. New or revised legislation or regulations applicable to our business, both within and outside of the U.S., as well as changes in administrations or enforcement priorities may have an adverse effect on our business, including increasing the costs of regulatory compliance or preventing us from providing certain types of services in certain jurisdictions or in connection with certain transactions or clients. We are unable to predict how any of these new laws, rules, regulations and proposals will be implemented or in what form, or whether any additional or similar changes to laws or regulations, including the interpretation or implementation thereof, will occur in the future. Any such action could affect us in substantial and unpredictable ways and could have an adverse effect on our businesses, financial condition, results of operations and prospects.

Exposure to additional tax liabilities and changes in tax laws and regulations or could adversely affect our financial results.

We operate in many jurisdictions with complex and varied tax regimes and are subject to different forms of taxation resulting in a variable effective tax rate. Due to the different tax laws in the many jurisdictions where we operate, we are often required to make subjective determinations. The tax authorities in the various jurisdictions where we carry on business may not agree with the determinations that are made by us with respect to the application of tax law. Such disagreements could result in disputes and, ultimately, in the payment of additional funds to the government authorities in the jurisdictions where we carry on business, which could have an adverse effect on our results of operations. In addition, changes in tax rules or the outcome of tax assessments and audits could have an adverse effect on our results in any particular quarter.

In addition, changes in tax laws or regulations, including developments arising from proposed U.S. tax legislation, the final form of which is uncertain and multi-jurisdictional changes enacted in response to the action items provided by the Organization for Economic Co-operation and Development (OECD), increase tax uncertainty and could impact the company's effective tax rate and provision for income taxes. Given the unpredictability of possible further changes to and the potential interdependency of the United States or foreign tax laws and regulations, it is difficult to predict the cumulative effect of such tax laws and regulations on the company's results of operations.

We may be subject to environmental liability as a result of our role as a property or facility manager or developer of real estate.

Various laws and regulations impose liability on real property owners or operators for the cost of investigating, cleaning up or removing contamination caused by hazardous or toxic substances at a property. In our role as a property or facility manager or developer, we could be held liable as an operator for such costs. This liability may be imposed without regard to the legality of the original actions and without regard to whether we knew of, or were responsible for, the presence of the hazardous or toxic substances. If we fail to disclose environmental issues, we could also be liable to a buyer or lessee of a property. If we incur any such liability, our business could suffer significantly as it could be difficult for us to develop or sell such properties, or borrow funds using such properties as collateral. In the event of a substantial liability, our insurance coverage might be insufficient to pay the full damages, or the scope of available coverage may not cover certain of these liabilities. Additionally, liabilities incurred to comply with more stringent future environmental requirements could adversely affect any or all of our lines of business.

Risks Related to our Internal Controls and Accounting Policies

If we are unable to implement and maintain effective internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and our results of operations and stock price could be materially adversely affected.

The accuracy of our financial reporting is dependent on the effectiveness of our internal controls. We are required to provide a report from management to our stockholders on our internal control over financial reporting that includes an assessment of the effectiveness of these controls. As disclosed in Part II, Item 9A, during the fourth quarter of 2019, management identified several material weaknesses in internal control related to our Global Workplace Solutions segment in the Europe, Middle East & Africa region, or GWS EMEA. We made significant progress during the prior and the current fiscal year and remediated certain material weaknesses. Even though a material misstatement was not identified in the GWS EMEA financial statements, it was determined that there was a reasonable possibility that a material misstatement in the GWS EMEA revenue & receivables, and journal entries would not have been prevented or detected on a timely basis and, therefore, management concluded that our internal control over financial reporting was not effective as of December 31, 2021. Internal control over financial reporting has inherent limitations, including human error, the possibility that controls could be circumvented or become inadequate because of changed conditions, and fraud. Because of these inherent limitations, internal control over financial reporting might not prevent or detect all misstatements or fraud. If we are unable to remediate the material weaknesses in a timely manner, or are otherwise unable to maintain and execute adequate internal control over financial reporting or implement required new or improved controls that provide reasonable assurance of the reliability of the financial reporting and preparation of our financial statements for external use, we could suffer harm to our reputation, incur incremental compliance costs, fail to meet our public reporting requirements on a timely basis, be unable to properly report on our business and our results of operations, or be required to restate our financial statements, and our results of operations, our stock price and our ability to obtain new business could be materially adversely affected.

Our goodwill and other intangible assets could become impaired, which may require us to take material non-cash charges against earnings.

Under current accounting guidelines, we must assess, at least annually and potentially more frequently, whether the value of our goodwill and other intangible assets has been impaired. Any impairment of goodwill or other intangible assets as a result of such analysis would result in a non-cash charge against earnings, and such charge could materially adversely affect our reported results of operations, stockholders' equity and our stock price. A significant and sustained decline in our future cash flows, a significant adverse change in the economic environment, slower growth rates or if our stock price falls below our net book value per share for a sustained period, could result in the need to perform additional impairment analysis in future periods. If we were to conclude that a future write-down of goodwill or other intangible assets is necessary, then we would record such additional charges, which could materially adversely affect our results of operations.

Risks Related to our Investments

We have equity investments in certain companies that we do not control, which subject us to risks related to their respective businesses.

As of December 31, 2021, we had $1.2 billion invested in unconsolidated subsidiaries that were accounted for under the cost method of accounting, equity method or fair value. This included $368 million associated with our investment in Altus Power, Inc., which merged with a SPAC that we sponsored. These investments are subject to risks related to the businesses in which we invest, which may be different than the risks inherent in our own business. Factors beyond our control can significantly influence the value of these investments and may cause their fair value to decrease or adversely impact our ability to recognize a gain on such investments. These factors include decisions made by management or controlling stockholders of such businesses, who may have interests different than those of CBRE, and instability in the capital markets. Any of these factors, among others, could cause realized and/or unrealized losses in future periods, which could have an adverse effect on our financial condition and results of operations. In the future, we may acquire more equity investments that are not consolidated and may sponsor additional SPACs, which could increase our exposure to the risks described above.

Cautionary Note on Forward-Looking Statements

This Annual Report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act) and Section 21E of the Exchange Act. The words "anticipate," "believe," "could," "should," "propose," "continue," "estimate," "expect," "intend," "may," "plan," "predict," "project," "will" and similar terms and phrases are used in this Annual Report to identify forward-looking statements. Except for historical information contained herein, the matters addressed in this Annual Report are forward-looking statements. These statements relate to analyses and other information based on forecasts of future results and estimates of amounts not yet determinable. These statements also relate to our future prospects, developments and business strategies.

These forward-looking statements are made based on our management's expectations and beliefs concerning future events affecting us and are subject to uncertainties and factors relating to our operations and business environment, all of which are difficult to predict and many of which are beyond our control. These uncertainties and factors could cause our actual results to differ materially from those matters expressed in or implied by these forward-looking statements.

The following factors are among those, but are not only those, that may cause actual results to differ materially from the forward-looking statements:

- disruptions in general economic, political and regulatory conditions and significant public health events, particularly in geographies or industry sectors where our business may be concentrated;
- volatility or adverse developments in the securities, capital or credit markets, interest rate increases and conditions affecting the value of real estate assets, inside and outside the U.S.;
- poor performance of real estate investments or other conditions that negatively impact clients' willingness to make real estate or long-term contractual commitments and the cost and availability of capital for investment in real estate;
- foreign currency fluctuations and changes in currency restrictions, trade sanctions and import/export and transfer pricing rules;
- disruptions to business, market and operational conditions related to the Covid-19 pandemic and the impact of government rules and regulations intended to mitigate the effects of this pandemic, including, without limitation, rules and regulations that impact us as a loan originator and servicer for U.S. GSEs;
- our ability to compete globally, or in specific geographic markets or business segments that are material to us;
- our ability to identify, acquire and integrate accretive businesses;
- costs and potential future capital requirements relating to businesses we may acquire;
- integration challenges arising out of companies we may acquire;
- increases in unemployment and general slowdowns in commercial activity;
- trends in pricing and risk assumption for commercial real estate services;
- the effect of significant changes in capitalization rates across different property types;
- a reduction by companies in their reliance on outsourcing for their commercial real estate needs, which would affect our revenues and operating performance;
- client actions to restrain project spending and reduce outsourced staffing levels;
- our ability to further diversify our revenue model to offset cyclical economic trends in the commercial real estate industry;
- our ability to attract new user and investor clients;

- our ability to retain major clients and renew related contracts;
- our ability to leverage our global services platform to maximize and sustain long-term cash flow;
- our ability to continue investing in our platform and client service offerings;
- our ability to maintain expense discipline;
- the emergence of disruptive business models and technologies;
- negative publicity or harm to our brand and reputation;
- the failure by third parties to comply with service level agreements or regulatory or legal requirements;
- the ability of our investment management business to maintain and grow assets under management and achieve desired investment returns for our investors, and any potential related litigation, liabilities or reputational harm possible if we fail to do so;
- our ability to manage fluctuations in net earnings and cash flow, which could result from poor performance in our investment programs, including our participation as a principal in real estate investments;
- the ability of CBRE Capital Markets to periodically amend, or replace, on satisfactory terms, the agreements for its warehouse lines of credit;
- declines in lending activity of U.S. GSEs, regulatory oversight of such activity and our mortgage servicing revenue from the commercial real estate mortgage market;
- changes in U.S. and international law and regulatory environments (including relating to anti-corruption, anti-money laundering, trade sanctions, tariffs, currency controls and other trade control laws), particularly in Asia, Africa, Russia, Eastern Europe and the Middle East, due to the level of political instability in those regions;
- litigation and its financial and reputational risks to us;
- our exposure to liabilities in connection with real estate advisory and property management activities and our ability to procure sufficient insurance coverage on acceptable terms;
- our ability to retain, attract and incentivize key personnel;
- our ability to manage organizational challenges associated with our size;
- liabilities under guarantees, or for construction defects, that we incur in our development services business;
- variations in historically customary seasonal patterns that cause our business not to perform as expected;
- our leverage under our debt instruments as well as the limited restrictions therein on our ability to incur additional debt, and the potential increased borrowing costs to us from a credit-ratings downgrade;
- our and our employees' ability to execute on, and adapt to, information technology strategies and trends;
- cybersecurity threats or other threats to our information technology networks, including the potential misappropriation of assets or sensitive information, corruption of data or operational disruption;
- our ability to comply with laws and regulations related to our global operations, including real estate licensure, tax, labor and employment laws and regulations, as well as data privacy and protection regulations, and the anti-corruption laws and trade sanctions of the U.S. and other countries;
- changes in applicable tax or accounting requirements;
- any inability for us to implement and maintain effective internal controls over financial reporting;
- the effect of implementation of new accounting rules and standards or the impairment of our goodwill and intangible assets;
- the performance of our equity investments in companies we do not control; and
- the other factors described elsewhere in this Annual Report, included under the headings "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies," "Quantitative and Qualitative Disclosures About Market Risk" or as described in the other documents and reports we file with the SEC.

Forward-looking statements speak only as of the date the statements are made. You should not put undue reliance on any forward-looking statements. We assume no obligation to update forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information, except to the extent required by applicable securities laws. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements. Additional information concerning these and other risks and uncertainties is contained in our other periodic filings with the SEC.

Investors and others should note that we routinely announce financial and other material information using our Investor Relations website (https://ir.cbre.com), SEC filings, press releases, public conference calls and webcasts. We use these channels of distribution to communicate with our investors and members of the public about our company, our services and other items of interest. Information contained on our website is not part of this Annual Report or our other filings with the SEC.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

As of December 31, 2021, we occupied offices, excluding affiliates, in the following geographical regions:

	Sales Offices[1]	Corporate Offices	Total
Americas	243	1	244
Europe, Middle East and Africa (EMEA)	227	1	228
Asia Pacific	116	1	117
Total	586	3	589

(1) Includes 99 offices acquired as part of Turner & Townsend, including 21 in the Americas, 46, in EMEA, and 32 offices in APAC regions.

Some of our offices house employees from more than one of our business segments (i.e. an office might house employees from all three of our business segments). As such, we have provided the above office totals by geographic region rather than by business segment in order to avoid double counting or triple counting our offices.

We do not own any material real property and generally lease our office space and believe it is adequate for our current needs. The most significant terms of the leasing arrangements for our offices are the length of the lease and rent. Our leases have terms varying in duration. The rent payable under our office leases varies significantly from location to location as a result of differences in prevailing commercial real estate rates in different geographic areas. Our management believes that no single office lease is material to our business, results of operations or financial condition. In addition, we believe there is adequate alternative office space available at acceptable rental rates to meet our needs, although adverse movements in rental rates in some markets may negatively affect our profits in those markets when we enter into new leases.

Item 3. Legal Proceedings.

We are a party to a number of pending or threatened lawsuits arising out of, or incident to, our ordinary course of business. We believe that any losses in excess of the amounts accrued therefore as liabilities on our consolidated financial statements are unlikely to be significant, but litigation is inherently uncertain and there is the potential for a material adverse effect on our consolidated financial statements if one or more matters are resolved in a particular period in an amount materially in excess of what we anticipated.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Stock Price Information

Our Class A common stock has traded on the NYSE under the symbol "CBRE" since March 19, 2018. Prior to that, from June 10, 2004 to March 18, 2018, our Class A common stock traded on the NYSE under the symbol "CBG."

As of February 17, 2022, there were 48 stockholders of record of our Class A common stock.

Dividend Policy

We have not declared or paid any cash dividends on any class of our common stock since our inception on February 20, 2001. Any future determination to pay cash dividends will be at the discretion of our board of directors and will depend on our financial condition, acquisition or other opportunities to invest capital, results of operations, capital requirements and other factors that the board of directors deems relevant.

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

Open market share repurchase activity during the three months ended December 31, 2021 was as follows (dollars in thousands, except per share amounts):

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs [1]
October 1, 2021 - October 31, 2021	—	$ —	—	
November 1, 2021 - November 30, 2021	478,318	102.29	478,318	
December 1, 2021 - December 31, 2021	1,319,255	102.88	1,319,255	
	1,797,573	$ 102.72	1,797,573	$ 1,977,088

[1] During 2019, our board of directors authorized a program for the company to repurchase up to $500.0 million of our Class A common stock over three years. In November 2021, our board of directors authorized a new program for the company to repurchase up to $2.0 billion of our Class A common stock over five years, effective November 19, 2021, bringing the total authorized amount under both programs to a total of $2.5 billion. During the fourth quarter of 2021, we repurchased $184.6 million of our common stock under these programs. The remaining $1.98 billion in the table represents the amount available to repurchase shares under the authorized repurchase programs as of December 31, 2021.

Our stock repurchase programs do not obligate us to acquire any specific number of shares. Under these programs, shares may be repurchased in privately negotiated and/or open market transactions, including under plans complying with Rule 10b5-1 under the Exchange Act. Our stock repurchases have been funded with cash on hand and we intend to continue funding future repurchases with existing cash. We may utilize our stock repurchase programs to continue offsetting the impact of our stock-based compensation program and on a more opportunistic basis if we believe our stock presents a compelling investment compared to other discretionary uses. The timing of any future repurchases and the actual amounts repurchased will depend on a variety of factors, including the market price of our common stock, general market and economic conditions and other factors.

Equity Compensation Plan Information

The following table summarizes information about our equity compensation plans as of December 31, 2021. All outstanding awards relate to our Class A common stock.

	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders [1]	9,584,956	$ —	3,435,020
Equity compensation plans not approved by security holders	—	—	—
Total	9,584,956	$ —	3,435,020

[1] Consists of restricted stock units (RSUs) issued under our 2019 Equity Incentive Plan (the 2019 Plan), our 2017 Equity Incentive Plan (the 2017 Plan) and our 2012 Equity Incentive Plan (the2012 Plan). Our 2012 Plan terminated in May 2017 in connection with the adoption of the 2017 Plan. Our 2017 Plan terminated in May 2019 in connection with the adoption of the 2019 Plan. We cannot issue any further awards under both the 2012 Plan and the 2017 Plan.

In addition:

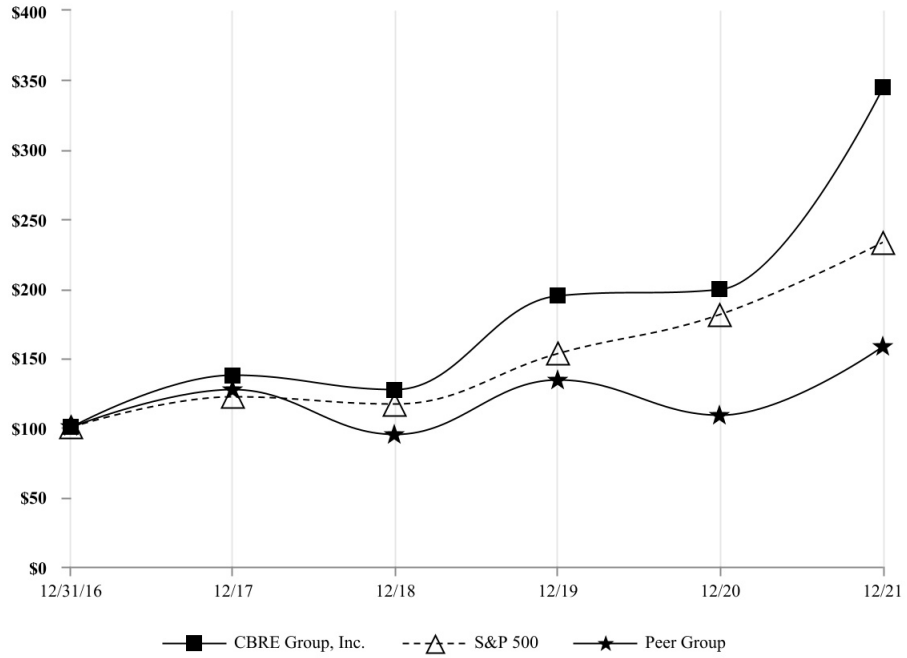
- The figures in the foregoing table include:
  - 5,978,890 RSUs that are performance vesting in nature, with the figures in the table reflecting the maximum number of RSUs that may be issued if all performance-based targets are satisfied and
  - 3,606,066 RSUs that are time vesting in nature.

Stock Performance Graph

The graph below matches the 5 Year Cumulative Total Return of holders of CBRE Group, Inc.'s common stock with the cumulative total returns of the S&P 500 Index and a customized peer group of nine companies that includes: JLL, a global commercial real estate services company publicly traded in the U.S., as well as the following companies that have significant commercial real estate or real estate capital markets businesses within the U.S. or globally, that in each case are publicly traded in the U.S. or abroad: Colliers International Group Inc., Cushman & Wakefield plc, ISS A/S, Marcus & Millichap, Inc., Newmark Group Inc., Savills plc, Sodexo S.A., and Walker & Dunlop, Inc. These companies are or include divisions with business lines reasonably comparable to some or all of ours, and which represent our current primary competitors.

The graph assumes that the value of the investment in our common stock, in each index, and in the peer group (including reinvestment of dividends) was $100 on December 31, 2016 and tracks it through December 31, 2021. Our stock price performance shown in the graph below is not necessarily indicative of future stock price performance.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN [1]
AMONG CBRE GROUP, INC., THE S&P 500 INDEX [2],
AND PEER GROUP [3]



	12/31/16	12/17	12/18	12/19	12/20	12/21
CBRE Group, Inc.	$ 100.00	$ 137.54	$ 127.15	$ 194.63	$ 199.17	$ 344.59
S&P 500	100.00	121.83	116.49	153.17	181.35	233.41
Peer Group	100.00	127.30	94.64	133.83	108.67	158.17

(1) $100 invested on December 31, 2016 in stock or index-including reinvestment of dividends. Fiscal year ending December 31.

(2) Copyright© 2022 Standard & Poor's, a division of S&P Global. All rights reserved.

(3) Peer group contains companies with the following ticker symbols: JLL, CIGI, CWK, ISS, MMI, NMRK, SVS.L (London), EXHO.PA and WD.

This graph shall not be deemed incorporated by reference by any general statement incorporating by reference this Annual Report into any filing under the Securities Act or the Exchange Act, except to the extent that we specifically incorporate this information by reference therein, and shall not otherwise be deemed filed under the Securities Act or the Exchange Act.

Item 6. [Reserved]

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

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is designed to provide the reader of our financial statements with a narrative from the perspective of management on our financial condition, results of operations, liquidity and certain other factors that may affect future results. This MD&A should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Annual Report. Discussion regarding our financial condition and results of operations for the year ended December 31, 2019 and comparisons between the years ended December 31, 2020 and 2019 is included in Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the company's Annual Report filed with the SEC on February 24, 2021.

Overview

We are the world's largest commercial real estate services and investment firm, based on 2021 revenue, with leading global market positions in our leasing, property sales, occupier outsourcing and valuation businesses. As of December 31, 2021, the company has more than 105,000 employees (excluding Turner & Townsend employees) serving clients in more than 100 countries.

We provide services to real estate investors and occupiers. For investors, our services include capital markets (property sales, mortgage origination, sales and servicing), property leasing, investment management, property management, valuation and development services, among others. For occupiers, our services include facilities management, project management, transaction (both property sales and leasing) and consulting services, among others. We provide services under the following brand names: "CBRE" (real estate advisory and outsourcing services); "CBRE Investment Management" (investment management); "Trammell Crow Company" (U.S. development); "Telford Homes" (U.K. development); and "Turner & Townsend Holdings Limited". During 2020, CBRE sponsored a special purpose acquisition company, or SPAC, CBRE Acquisition Holdings, Inc., which merged with and into Altus Power, Inc., a leading provider of solar energy for commercial and industrial properties. Altus Power Inc. (Altus) began trading on the New York Stock Exchange (NYSE) on December 10, 2021 under the ticker symbol "AMPS."

We generate revenue from both stable, recurring (large multi-year portfolio and per project contracts) and more cyclical, non-recurring sources, including commissions on transactions. Our revenue mix has become heavily weighted towards stable revenue sources, particularly occupier outsourcing, with our dependence on highly cyclical property sales and lease transaction revenue declining markedly. We believe we are well-positioned to capture a substantial and growing share of market opportunities at a time when investors and occupiers increasingly prefer to purchase integrated, account-based services on a national and global basis.

In 2021, we generated revenue from a highly diversified base of clients, including more than 93 of the*Fortune* 100 companies. We have been an S&P 500 company since 2006 and in 2021 we were ranked #122 on the *Fortune* 500. We have been voted the most recognized commercial real estate brand in the Lipsey Company survey for 21 years in a row (including 2021). We have also been rated a World's Most Ethical Company by the Ethisphere Institute for eight consecutive years (including 2021, the most recent year the award has been announced), and included in the Dow Jones World Sustainability Index for three years in a row and the Bloomberg Gender-Equality Index for three years in a row.

Critical Accounting Policies

Our consolidated financial statements have been prepared in accordance with GAAP, which require us to make estimates and assumptions that affect reported amounts. The estimates and assumptions are based on historical experience and on other factors that we believe to be reasonable. Actual results may differ from those estimates. We believe that the following critical accounting policies represent the areas where more significant judgments and estimates are used in the preparation of our consolidated financial statements.

Revenue Recognition

To recognize revenue in a transaction with a customer, we evaluate the five steps of the Accounting Standards Codification (ASC) Topic 606 revenue recognition framework: (1) identify the contract; (2) identify the performance obligations(s) in the contract; (3) determine the transaction price; (4) allocate the transaction price to the performance obligation(s) and (5) recognize revenue when (or as) the performance obligations are satisfied.

Our revenue recognition policies are consistent with this five step framework. Understanding the complex terms of agreements and determining the appropriate time, amount, and method to recognize revenue for each transaction requires significant judgement. These significant judgements include: (i) determining what point in time or what measure of progress depicts the transfer of control to the customer; (ii) applying the series guidance to certain performance obligations satisfied over time; (iii) estimating how and when contingencies, or other forms of variable consideration, will impact the timing and amount of recognition of revenue and (iv) determining whether we control third party services before they are transferred to the customer in order to appropriately recognize the associated fees on either a gross or net basis. The timing and amount of revenue recognition in a period could vary if different judgments were made. Our revenues subject to the most judgment are brokerage commission revenue, incentive-based management fees, development fees and third party fees associated with our occupier outsourcing and property management services. For a detailed discussion of our revenue recognition policies, see the Revenue Recognition section within Note 2 of the Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

Business Combinations, Goodwill and Other Intangible Assets

Our acquisitions require the application of purchase accounting, which results in tangible and identifiable intangible assets and liabilities of the acquired entity being recorded at fair value. The difference between the purchase price and the fair value of net assets acquired is recorded as goodwill. Deferred consideration arrangements granted in connection with a business combination are evaluated to determine whether all or a portion is, in substance, additional purchase price or compensation for services. Additional purchase price is added to the fair value of consideration transferred in the business combination and compensation is included in operating expenses in the period it is incurred. In determining the fair values of assets and liabilities acquired in a business combination, we use a variety of valuation methods including present value, depreciated replacement cost, market values (where available) and selling prices less costs to dispose. We are responsible for determining the valuation of assets and liabilities and for the allocation of purchase price to assets acquired and liabilities assumed.

Assumptions must often be made in determining fair values, particularly where observable market values do not exist. Assumptions may include discount rates, growth rates, cost of capital, royalty rates, tax rates and remaining useful lives. These assumptions can have a significant impact on the value of identifiable assets and accordingly can impact the value of goodwill recorded. Different assumptions could result in different values being attributed to assets and liabilities. Since these values impact the amount of annual depreciation and amortization expense, different assumptions could also impact our statement of operations and could impact the results of future asset impairment reviews.

We are required to test goodwill and other intangible assets deemed to have indefinite useful lives for impairment at least annually, or more often if circumstances or events indicate a change in the impairment status, in accordance with ASC Topic 350, "*Intangibles – Goodwill and Other*" (Topic 350). We have the option to perform a qualitative assessment with respect to any of our reporting units to determine whether a quantitative impairment test is needed. We are permitted to assess based on qualitative factors whether it is more likely than not that a reporting unit's fair value is less than its carrying amount before applying the quantitative goodwill impairment test. If it is more likely than not that the fair value of a reporting unit is less than its carrying amount, we would conduct a quantitative goodwill impairment test. If not, we do not need to apply the quantitative test. The qualitative test is elective and we can go directly to the quantitative test rather than making a more-likely-than-not assessment based on an evaluation of qualitative factors. When performing a quantitative test, we use a discounted cash flow approach to estimate the fair value of our reporting units. Management's judgment is required in developing the assumptions for the discounted cash flow model. These assumptions include revenue growth rates, profit margin percentages, discount rates, etc. Due to the many variables inherent in the estimation of a business's fair value and the relative size of our goodwill, if different assumptions and estimates were used, it could have an adverse effect on our impairment analysis.

For additional information on goodwill and intangible asset impairment testing, see Notes 2 and 9 of the Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

Income Taxes

Income taxes are accounted for under the asset and liability method in accordance with the "*Accounting for Income Taxes*," Topic of the FASB ASC (Topic 740). Deferred tax assets and liabilities are determined based on temporary differences between the financial reporting and tax basis of assets and liabilities and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured by applying enacted tax rates and laws and are released in the years in which the temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are provided against deferred tax assets when it is more likely than not that some portion or all of the deferred tax asset will not be realized.

Accounting for tax positions requires judgments, including estimating reserves for potential uncertainties. We also assess our ability to utilize tax attributes, including those in the form of carryforwards, for which the benefits have already been reflected in the financial statements. We do not record valuation allowances for deferred tax assets that we believe will be realized in future periods. While we believe the resulting tax balances as of December 31, 2021 and 2020 are appropriately accounted for in accordance with Topic 740, as applicable, the ultimate outcome of such matters could result in favorable or unfavorable adjustments to our consolidated financial statements and such adjustments could be material.

Our future effective tax rate could be adversely affected by earnings being lower than anticipated in countries that have lower statutory rates and higher than anticipated in countries that have higher statutory rates, changes in the valuation of our deferred tax assets or liabilities, or changes in tax laws, regulations, or accounting principles, as well as certain discrete items.

See Note 15 of the Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report for further information regarding income taxes.

New Accounting Pronouncements

See New Accounting Pronouncements discussion within Note 3 of the Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

The SEC issued Release No. 33-10890 "Management's Discussion and Analysis, Selected Financial Data, Supplementary Financial Information" which became fully effective on August 9, 2021. This release was adopted to modernize, simplify, and enhance certain financial disclosure requirements in Regulation S-K. Specifically, the requirement for Selected Financial Data was eliminated, the requirement to disclose Supplementary Financial Information was streamlined, and certain elements of required MD&A disclosures were amended. These amendments are intended to eliminate duplicative disclosures and modernize and enhance MD&A disclosures for the benefit of investors, while simplifying compliance efforts for registrants.

With our adoption of this release, we have applied the required amendments where applicable to form 10-K for the year ended December 31, 2021.

Seasonality

In a typical year, a significant portion of our revenue is seasonal, which an investor should keep in mind when comparing our financial condition and results of operations on a quarter-by-quarter basis. Historically, our revenue, operating income, net income and cash flow from operating activities have tended to be lowest in the first quarter and highest in the fourth quarter of each year. Revenue, earnings and cash flow have generally been concentrated in the fourth calendar quarter due to the focus on completing sales, financing and leasing transactions prior to year-end. The ongoing impact of the Covid-19 pandemic may cause seasonality to deviate from historical patterns.

Inflation

Our commissions and other variable costs related to revenue are primarily affected by commercial real estate market supply and demand, which may be affected by inflation. For example, input costs for construction materials in our development business have increased as a result of inflation related to supply chain issues and worker shortages, respectively. However, these increases have been more than offset by rising property values. We believe that our business has significant inherent protections against inflation, and to date, general inflation has not had a material impact upon our operations. The company continues to monitor inflation, potential monetary policy changes in response to high inflation and potentially adverse effects to our business from either higher inflation or interest rates, or both.

Items Affecting Comparability

When you read our financial statements and the information included in this Annual Report, you should consider that we have experienced, and continue to experience, several material trends and uncertainties (particularly those caused or exacerbated by Covid-19) that have affected our financial condition and results of operations that make it challenging to predict our future performance based on our historical results. We believe that the following material trends and uncertainties are crucial to an understanding of the variability in our historical earnings and cash flows and the potential for continued variability in the future.

Macroeconomic Conditions

Economic trends and government policies affect global and regional commercial real estate markets as well as our operations directly. These include overall economic activity and employment growth, with specific sensitivity to growth in office-based employment; interest rate levels and changes in interest rates; the cost and availability of credit; and the impact of tax and regulatory policies. Periods of economic weakness or recession, significantly rising interest rates, fiscal uncertainty, declining employment levels, decreasing demand for commercial real estate, falling real estate values, disruption to the global capital or credit markets, or the public perception that any of these events may occur, will negatively affect the performance of our business.

Compensation is our largest expense and our sales and leasing professionals generally are paid on a commission and/or bonus basis that correlates with their revenue production. As a result, the negative effects on our operating margins of difficult market conditions, such as the environment that prevailed in the early months of the Covid-19 pandemic, are partially mitigated by the inherent variability of our compensation cost structure. In addition, when negative economic conditions have been particularly severe, like during the current Covid-19 pandemic, we have moved decisively to lower operating expenses to improve financial performance. Additionally, our contractual revenue has increased primarily as a result of growth in our outsourcing business, and we believe this contractual revenue should help offset the negative impacts that macroeconomic deterioration could have on other parts of our business. We also believe that we have significantly improved the resiliency of our business through a four-dimension diversification strategy that expanded the business strategically across asset types, clients, geographies and lines of business. Nevertheless, adverse global and regional economic trends could pose significant risks to the performance of our consolidated operations and financial condition.

Effects of Acquisitions and Investments

We have historically made significant use of strategic acquisitions to add and enhance service capabilities around the world. On November 1, 2021, we acquired a 60% controlling ownership interest in Turner & Townsend Holdings Limited (Turner & Townsend). We believe that this partnership will help us advance our diversification strategy across four dimensions including asset types, lines of business, clients, and geographies. Turner & Townsend is a leading professional services company specializing in program management, project management, cost and commercial management and advisory services across the real estate, infrastructure and natural resources sectors, and is consolidated and reported in our Global Workplace Solutions segment. Turner & Townsend was acquired for £960.0 million, or $1.3 billion along with the acquisition of $44.0 million (£32.2 million) in cash. The Turner & Townsend Acquisition was funded with cash on hand and gross deferred purchase consideration of $591.2 million (£432.0 million).

Strategic in-fill acquisitions have also played a key role in strengthening our service offerings. The companies we acquired have generally been regional or specialty firms that complement our existing platform, or independent affiliates, which, in some cases, we held a small equity interest. In early 2022, we acquired a Spanish project management company.

During 2021, we completed eight in-fill acquisitions: a U.S. firm that provides construction and project management services, a professional service advisory firm in Australia, a U.S. firm focused on investment banking and investment sales in the global gaming real estate market, a leading facilities management firm in the Netherlands, a workplace interior design and project management company in Singapore, a property management firm in France, a residential brokerage in the Netherlands, and an occupancy management company based in the U.S.

During 2020, we completed six in-fill acquisitions: leading local facilities management firms in Spain and Italy, a U.S. firm that helps companies reduce telecommunications costs, a technology-focused project management firm based in Florida, a firm specializing in performing real estate valuations in South Korea, and a facilities management and technical maintenance firm in Australia.

Also, during 2021, we made an incremental investment in Industrious, a leading provider of premium flexible workplace solutions in the U.S., bringing its current non-controlling ownership stake to 40%. As part of this investment, we contributed Hana, our legacy flexible office space business, into Industrious. During the fourth quarter of 2021, our company-sponsored SPAC merged with and into Altus Power, Inc. Our investment in common shares of Altus and related interests were approximately $368 million at December 31, 2021.

We believe strategic acquisitions can significantly decrease the cost, time and resources necessary to attain a meaningful competitive position – or expand our capabilities – within targeted markets or business lines. In general, however, most acquisitions will initially have an adverse impact on our operating income and net income as a result of transaction-related expenditures, including severance, lease termination, transaction and deferred financing costs, as well as costs and charges associated with integrating the acquired business and integrating its financial and accounting systems into our own.

Our acquisition structures often include deferred and/or contingent purchase consideration in future periods that are subject to the passage of time or achievement of certain performance metrics and other conditions. As of December 31, 2021, we have accrued deferred purchase and contingent considerations totaling $630.1 million, which is included in “Accounts payable and accrued expenses” and in “Other long-term liabilities” in the accompanying consolidated balance sheets set forth in Item 8 of this Annual Report.

International Operations

We conduct a significant portion of our business and employ a substantial number of people outside of the U.S. As a result, we are subject to risks associated with doing business globally. Our Real Estate Investments business has a significant amount of euro-denominated assets under management, as well as associated revenue and earnings in Europe. In addition, our Global Workplace Solutions business also has a significant amount of its revenue and earnings denominated in foreign currencies, such as the euro and British pound sterling. Fluctuations in foreign currency exchange rates have resulted and may continue to result in corresponding fluctuations in our AUM, revenue and earnings.

Our businesses could suffer from the effects of public health crises (such as the ongoing Covid-19 pandemic), political or economic disruptions (or the perception that such disruptions may occur) that affect interest rates or liquidity or create financial, market or regulatory uncertainty.

During the year ended December 31, 2021, approximately 43% of our revenue was transacted in foreign currencies. The following table sets forth our revenue derived from our most significant currencies (dollars in thousands):

	Year Ended December 31,			
	2021		2020	
United States dollar	$ 15,700,279	56.6 %	$ 13,472,013	56.5 %
British pound sterling	3,617,504	13.0 %	3,083,810	13.0 %
euro	2,840,203	10.2 %	2,612,421	11.0 %
Canadian dollar	1,068,838	3.9 %	788,497	3.3 %
Australian dollar	613,847	2.2 %	417,060	1.8 %
Chinese yuan	475,185	1.7 %	387,099	1.6 %
Indian rupee	454,859	1.6 %	469,977	2.0 %
Swiss franc	391,062	1.4 %	334,558	1.4 %
Japanese yen	373,828	1.3 %	341,447	1.4 %
Singapore dollar	309,376	1.1 %	259,721	1.1 %
Other currencies [1]	1,901,055	7.0 %	1,659,592	6.9 %
Total revenue	$ 27,746,036	100.0 %	$ 23,826,195	100.0 %

[1] Approximately 48 currencies comprise 7.0% of our revenue for the year ended December 31, 2021, and approximately 40 currencies comprise 6.9% of our revenue for the year ended December 31, 2020.

Although we operate globally, we report our results in U.S. dollars. As a result, the strengthening or weakening of the U.S. dollar may positively or negatively impact our reported results. For example, we estimate that had the British pound sterling-to-U.S. dollar exchange rates been 10% higher during the year ended December 31, 2021, the net impact would have been an increase in pre-tax income of $8.3 million. Had the euro-to-U.S. dollar exchange rates been 10% higher during the year ended December 31, 2021, the net impact would have been an increase in pre-tax income of $18.1 million. These hypothetical calculations estimate the impact of translating results into U.S. dollars and do not include an estimate of the impact that a 10% change in the U.S. dollar against other currencies would have had on our foreign operations.

Fluctuations in foreign currency exchange rates may result in corresponding fluctuations in revenue and earnings as well as the assets under management for our investment management business, which could have a material adverse effect on our business, financial condition and operating results. Due to the constantly changing currency exposures to which we are subject and the volatility of currency exchange rates, we cannot predict the effect of exchange rate fluctuations upon future operating results. In addition, fluctuations in currencies relative to the U.S. dollar may make it more difficult to perform period-to-period comparisons of our reported results of operations. Our international operations also are subject to, among other things, political instability and changing regulatory environments, which affect the currency markets and which as a result may adversely affect our future financial condition and results of operations. We routinely monitor these risks and related costs and evaluate the appropriate amount of oversight to allocate towards business activities in foreign countries where such risks and costs are particularly significant.

Results of Operations

The following table sets forth items derived from our consolidated statements of operations for the years ended December 31, 2021 and 2020 (dollars in thousands):

	Year Ended December 31,			
	2021		2020 [1]	
Revenue:				
Net revenue:				
Facilities management	$ 4,872,230	17.6 %	$ 4,489,972	18.9 %
Property management	1,691,948	6.1 %	1,618,565	6.8 %
Project management	1,537,215	5.5 %	1,322,267	5.5 %
Valuation	733,523	2.6 %	614,158	2.6 %
Loan servicing	305,736	1.1 %	239,596	1.0 %
Advisory leasing	3,306,548	11.9 %	2,460,392	10.3 %
Capital markets:				
Advisory sales	2,789,573	10.1 %	1,663,959	7.0 %
Commercial mortgage origination	701,368	2.5 %	577,864	2.4 %
Investment management	556,154	2.0 %	474,939	2.0 %
Development services	535,562	1.9 %	356,591	1.4 %
Corporate, other and eliminations	(20,356)	0.0 %	(27,930)	(0.1)%
Total net revenue	17,009,501	61.3 %	13,790,373	57.9 %
Pass through costs also recognized as revenue	10,736,535	38.7 %	10,035,822	42.1 %
Total revenue	27,746,036	100.0 %	23,826,195	100.0 %
Costs and expenses:				
Cost of revenue	21,579,507	77.8 %	19,047,620	79.9 %
Operating, administrative and other	4,074,184	14.7 %	3,306,205	13.9 %
Depreciation and amortization	525,871	1.9 %	501,728	2.1 %
Asset impairments	—	0.0 %	88,676	0.4 %
Total costs and expenses	26,179,562	94.4 %	22,944,229	96.3 %
Gain on disposition of real estate	70,993	0.3 %	87,793	0.4 %
Operating income	1,637,467	5.9 %	969,759	4.1 %
Equity income from unconsolidated subsidiaries	618,697	2.2 %	126,161	0.5 %
Other income	203,609	0.7 %	17,394	0.1 %
Interest expense, net of interest income	50,352	0.2 %	67,753	0.3 %
Write-off of financing costs on extinguished debt	—	0.0 %	75,592	0.3 %
Income before provision for income taxes	2,409,421	8.7 %	969,969	4.1 %
Provision for income taxes	567,506	2.0 %	214,101	0.9 %
Net income	1,841,915	6.6 %	755,868	3.2 %
Less: Net income attributable to non-controlling interests	5,341	0.0 %	3,879	0.0 %
Net income attributable to CBRE Group, Inc.	1,836,574	6.6 %	751,989	3.2 %
Consolidated Adjusted EBITDA [2]	$ 3,074,412	11.1 %	$ 1,896,264	8.0 %
Adjusted EBITDA attributable to non-controlling interests [2]	$ 13,435		$ 3,879	
Adjusted EBITDA attributable to CBRE Group, Inc. [2]	$ 3,060,977		$ 1,892,385	

[1] See discussion in segment operations for organization changes effective January 1, 2021. Prior period results have been recast to conform with these changes.

[2] In conjunction with the acquisition of a 60% interest in Turner & Townsend in the fourth quarter of 2021, we modified our definition of Consolidated Adjusted EBITDA and Segment Operating Profit (SOP) to be inclusive of net income attributable to non-controlling interests and have recast prior periods to conform to this definition. The attribution of Adjusted EBITDA and SOP to non-controlling interests for prior periods was deemed to be materially the same as net income attributable to non-controlling interests in such periods.

Net revenue and consolidated adjusted EBITDA are not recognized measurements under accounting principles generally accepted in the United States, or GAAP. When analyzing our operating performance, investors should use these measures in addition to, and not as an alternative for, their most directly comparable financial measure calculated and presented in accordance with GAAP. We generally use these non-GAAP financial measures to evaluate operating performance and for other discretionary purposes. We believe these measures provide a more complete understanding of ongoing operations, enhance comparability of current results to prior periods and may be useful for investors to analyze our financial performance because they eliminate the impact of selected costs and charges that may obscure the underlying performance of our business and related trends. Because not all companies use identical calculations, our presentation of net revenue and consolidated adjusted EBITDA may not be comparable to similarly titled measures of other companies.

Net revenue is gross revenue less costs largely associated with subcontracted vendor work performed for clients and generally has no margin. Prior to 2021, the company utilized fee revenue to analyze the overall financial performance. Fee revenue excluded additional reimbursed costs, primarily related to employees dedicated to clients, some of which included minimal margin.

We use consolidated adjusted EBITDA as an indicator of consolidated financial performance. It represents earnings before the portion attributable to non-controlling interests, net interest expense, write-off of financing costs on extinguished debt, income taxes, depreciation and amortization, asset impairments, adjustments related to certain carried interest incentive compensation expense (reversal) to align with the timing of associated revenue, fair value adjustments to real estate assets acquired in the Telford acquisition (purchase accounting) that were sold in the period, costs incurred related to legal entity restructuring, costs associated with workforce optimization, transformation initiatives and integration and other costs related to acquisitions. We believe that investors may find these measures useful in evaluating our operating performance compared to that of other companies in our industry because their calculations generally eliminate the effects of acquisitions, which would include impairment charges of goodwill and intangibles created from acquisitions, the effects of financings and income taxes and the accounting effects of capital spending.

Consolidated adjusted EBITDA is not intended to be a measure of free cash flow for our discretionary use because it does not consider certain cash requirements such as tax and debt service payments. This measure may also differ from the amounts calculated under similarly titled definitions in our credit facilities and debt instruments, which are further adjusted to reflect certain other cash and non-cash charges and are used by us to determine compliance with financial covenants therein and our ability to engage in certain activities, such as incurring additional debt. We also use consolidated adjusted EBITDA as a significant component when measuring our operating performance under our employee incentive compensation programs.

Consolidated adjusted EBITDA is calculated as follows (dollars in thousands):

	Year Ended December 31,	
	2021	2020
Net income attributable to CBRE Group, Inc.	$ 1,836,574	$ 751,989
Net income attributable to non-controlling interests	5,341	3,879
Net income	1,841,915	755,868
Add:		
Depreciation and amortization	525,871	501,728
Asset impairments	—	88,676
Interest expense, net of interest income	50,352	67,753
Write-off of financing costs on extinguished debt	—	75,592
Provision for income taxes	567,506	214,101
Costs associated with transformation initiatives [1]	—	155,148
Carried interest incentive compensation expense (reversal) to align with the timing of associated revenue	49,941	(22,912)
Impact of fair value adjustments to real estate assets acquired in the Telford acquisition (purchase accounting) that were sold in period	(5,725)	11,598
Costs incurred related to legal entity restructuring	—	9,362
Integration and other costs related to acquisitions	44,552	1,756
Costs associated with workforce optimization efforts [2]	—	37,594
Consolidated Adjusted EBITDA	$ 3,074,412	$ 1,896,264

(1) During 2020, management began the implementation of certain transformation initiatives to enable the company to reduce costs, streamline operations and support future growth. The majority of expenses incurred were cash in nature and primarily related to employee separation benefits, lease termination costs and professional fees. See Note 21 of our Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

(2) Primarily represents costs incurred related to workforce optimization initiated and executed in the second quarter of 2020 as part of management's cost containment efforts in response to the Covid-19 pandemic. The charges are cash expenditures primarily for severance costs incurred related to this effort. Of the total costs, $7.4 million was included within the "Cost of revenue" line item and $30.2 million was included in the "Operating, administrative, and other" line item in the accompanying consolidated statements of operations for the year ended December 31, 2020.

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

We reported consolidated net income of $1.8 billion for the year ended December 31, 2021 on revenue of $27.7 billion as compared to consolidated net income of $752.0 million on revenue of $23.8 billion for the year ended December 31, 2020.

Our revenue on a consolidated basis for the year ended December 31, 2021 increased by $3.9 billion, or 16.5%, as compared to the year ended December 31, 2020. Overall revenue generated by the Advisory Services segment increased by 32.7%, primarily due to a notable rebound in sales and lease revenue as we continue to recover from the impacts of the pandemic across our major markets. The increase was also due to an uptick in revenue from our commercial mortgage origination and loan servicing line of business primarily driven by an active private lending market. Revenue generated by our Global Workplace Solutions segment increased 8.2% as compared to 2020 led by growth in our facilities management line of business, driven by its contractual nature, and also in the project management space supported by Turner & Townsend which contributed approximately $194.0 million in total revenue. Our Asset Under Management (AUM) portfolio grew substantially during the year contributing to an increase in asset management fees in our Real Estate Investments segment. Revenue generated from sales in our development service line of business increased dramatically this year as we continue to recover from market activity that was generally suppressed due to the pandemic last year. Foreign currency translation had a 2.0% positive impact on total revenue during the year ended December 31, 2021, primarily driven by strength in the Canadian dollar, British pound sterling and euro, partially offset by weakness in the Argentine peso and Brazilian real.

Our cost of revenue on a consolidated basis increased by $2.5 billion, or 13.3%, during the year ended December 31, 2021 as compared to the same period in 2020. This increase was primarily due to higher costs associated with our Global Workplace Solutions segment due to growth in our facilities management and project management business and higher costs associated with our Advisory Services segment primarily due to significant growth in our sales and leasing business. Foreign currency translation had a 2.0% negative impact on total cost of revenue during the year ended December 31, 2021. Cost of revenue as a percentage of revenue decreased from 79.9% for the year ended December 31, 2020 to 77.8% for the year ended December 31, 2021. This was primarily driven by an increase in the Real Estate Investment segment investment management

fees due to growth in AUM that does not have an associated cost of revenue as well as a shift in the overall composition of revenue with Advisory Services contributing more to current year revenue than it did last year.

Our operating, administrative and other expenses on a consolidated basis increased by $768.0 million, or 23.2%, during the year ended December 31, 2021 as compared to the same period in 2020. Operating expenses as a percentage of revenue increased from 13.9% for the year ended December 31, 2020 to 14.7% for the year ended December 31, 2021. The increase was primarily due to higher integration and other acquisition costs (primarily due to the Turner & Townsend Acquisition), higher expenses associated with maintenance of our operational infrastructure, and an increase in overall compensation expense, including support staff compensation and related benefits, overall bonus accrual, and stock compensation expense which are primarily tied to significant improvement in the business performance for the year ended December 31, 2021 as compared to the year ended December 31, 2020. This was partially offset by lower expenses associated with bad debt write off and associated provision expenses. Foreign currency translation also had a 2.1% negative impact on total operating expenses during the year ended December 31, 2021.

Our depreciation and amortization expense on a consolidated basis increased by $24.1 million, or 4.8%, during the year ended December 31, 2021 as compared to the same period in 2020. This increase was primarily attributable to accelerated amortization of mortgage servicing rights due to early loan payoffs in our loan servicing business line. In addition, we recorded approximately $19.7 million in depreciation and amortization expense primarily related to definite-lived intangibles identified as part of the Turner & Townsend Acquisition.

We did not record any asset impairments during the year ended December 31, 2021. Our asset impairments on a consolidated basis totaled $88.7 million during the year ended December 31, 2020 and consisted of a $50.2 million of non-cash asset impairment charges in our Global Workplace Solutions segment, a non-cash goodwill impairment charge of $25.0 million and non-cash asset impairment charges of $13.5 million in our Real Estate Investments segment. These impairments were recorded primarily due to triggering events associated with Covid-19.

Our gain on disposition of real estate on a consolidated basis decreased by $16.8 million, or 19.1%, during the year ended December 31, 2021 as compared to the same period in 2020. These gains resulted from decreased activity related to property sales on consolidated deals within our Real Estate Investments segment.

Our equity income from unconsolidated subsidiaries on a consolidated basis increased by $492.5 million, or 390.4%, during the year ended December 31, 2021 as compared to the same period in 2020, primarily driven by higher equity earnings associated with property sales reported in our Real Estate Investments segment, our positive fair value adjustment related to our investment in Industrious and higher equity earnings associated with certain non-controlling equity investments reported in our Corporate and other segment.

Our other income on a consolidated basis was $203.6 million for the year ended December 31, 2021 versus $17.4 million for the same period in the prior year. The increase was primarily due to a non-cash gain of $187.5 million that was recorded as part of the deconsolidation of CBRE Acquisition Holdings upon its merger with and into Altus Power, Inc. at which point we recorded our equity investment and related interests in Altus at fair value.

Our consolidated interest expense, net of interest income, decreased by $17.4 million, or 25.7%, for the year ended December 31, 2021 as compared to the same period in 2020. This decrease was primarily due to interest expense associated with the 5.25% senior note which was fully paid off in December 31, 2020, and offset by interest expense associated with a favorable term 2.500% senior note issued in March 2021.

We did not incur any write-off of financing costs on extinguished debt on a consolidated basis for the year ended December 31, 2021 as compared to $75.6 million for the year ended December 31, 2020. The costs for the year ended December 31, 2020 included a $73.6 million premium paid and the write-off of $2.0 million of unamortized premium and debt issuance costs in connection with the redemption, in full, of the $425.0 million aggregate outstanding principal amount of our 5.25% senior notes.

Our provision for income taxes on a consolidated basis was $567.5 million for the year ended December 31, 2021 as compared to $214.1 million for the same period in 2020. Our effective tax rate increased from 22.0% for the year ended December 31, 2020 to 23.6% for the year ended December 31, 2021. The increase is primarily due to an increase in the provision for state income taxes, net of federal benefit, and a decrease of tax credits in 2021.

Segment Operations

We organize our operations around, and publicly report our financial results on, three global business segments: (1) Advisory Services; (2) Global Workplace Solutions; and (3) Real Estate Investments. For additional information on our segments, see Note 19 of the Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

Advisory Services

The following table summarizes our results of operations for our Advisory Services operating segment for the years ended December 31, 2021 and 2020 (dollars in thousands):

	Year Ended December 31,			
	2021		2020	
Revenue:				
Net revenue:				
Property management	$ 1,691,948	17.7 %	$ 1,618,565	22.4 %
Valuation	733,523	7.7 %	614,158	8.5 %
Loan servicing	305,736	3.2 %	239,596	3.3 %
Advisory leasing	3,306,548	34.5 %	2,460,392	34.1 %
Capital markets:				
Advisory sales	2,789,573	29.1 %	1,663,959	23.1 %
Commercial mortgage origination	701,368	7.3 %	577,864	8.0 %
Total segment net revenue	9,528,696	99.5 %	7,174,534	99.4 %
Pass through costs also recognized as revenue	47,063	0.5 %	40,028	0.6 %
Total segment revenue	9,575,759	100.0 %	7,214,562	100.0 %
Costs and expenses:				
Cost of revenue	5,642,202	58.9 %	4,313,550	59.9 %
Operating, administrative and other	1,886,308	19.7 %	1,669,761	23.1 %
Depreciation and amortization	311,397	3.3 %	311,445	4.3 %
Operating income	1,735,852	18.1 %	919,806	12.7 %
Equity income from unconsolidated subsidiaries	24,778	0.3 %	4,526	0.1 %
Other (loss) income	(8,800)	(0.1)%	3,937	0.1 %
Add-back: Depreciation and amortization	311,397	3.3 %	311,445	4.3 %
Adjustments:				
Costs associated with transformation initiatives [1]	—	0.0 %	95,453	1.3 %
Costs associated with workforce optimization efforts [2]	—	0.0 %	12,659	0.2 %
Segment operating profit and segment operating profit on revenue margin	$ 2,063,227	21.5 %	$ 1,347,826	18.7 %
Segment operating profit on net revenue margin		21.7 %		18.8 %
Segment operating profit attributable to non-controlling interests	$ 1,913		$ 858	
Segment operating profit attributable to CBRE Group, Inc.	$ 2,061,314		$ 1,346,968	

[1] During 2020, management began the implementation of certain transformation initiatives to enable the company to reduce costs, streamline operations and support future growth. The majority of expenses incurred were cash in nature and primarily related to employee separation benefits, lease termination costs and professional fees. See Note 21 of our Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

[2] Primarily represents costs incurred related to workforce optimization initiated and executed in the second quarter of 2020 as part of management's cost containment efforts in response to the Covid-19 pandemic. The charges are cash expenditures primarily for severance costs incurred related to this effort. Of the total costs, $6.3 million was included within the "Cost of revenue" line item and $6.4 million was included in the "Operating, administrative, and other" line item in the accompanying consolidated statements of operations for the year ended December 31, 2020.

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenue increased by $2.4 billion, or 32.7%, for the year ended December 31, 2021 as compared to the year ended December 31, 2020. The revenue increase consisted of following - leasing revenue increased 34.4%, sales revenue increased 67.6%, commercial mortgage origination and loan servicing income increased an average of 24.5%, and valuation revenue increased 19.4%. Sales and lease revenue grew across all geographies with a dramatic increase in sales revenue in the Americas which was up 79.6% as compared to the prior year. Growth in industrial leasing and continued recovery in demand for office space were key contributors to the increase in leasing revenue. Industrial and multifamily sales, particularly in the US, have increased as capital inflows continue. Our loan servicing portfolio grew 23% as compared to last year resulting in an elevated loan servicing income. In addition, we recorded higher mortgage origination revenue as we experienced a robust increase in mortgage volume led by private lending. Valuation revenue was up during the year, primarily due to increased activities in the Americas and the Asia Pacific regions, due to ongoing improvement in the market conditions and higher average fees fueled by demand. Foreign currency translation had a 1.9% positive impact on total revenue during the year ended December 31, 2021, primarily driven by strength in British pound sterling, euro and Canadian dollar, partially offset by weakness in the Argentine peso and Brazilian real.

Cost of revenue increased by $1.3 billion, or 30.8%, for the year ended December 31, 2021 as compared to the same period in 2020, primarily due to increased commission expense resulting from higher sales and leasing revenue and increased professional compensation to support the growth in the business. Additionally, we recorded $39.3 million in employee separation benefits as cost of revenue as part of the workforce optimization and transformation initiatives during 2020. Foreign currency translation had a 2.0% negative impact on total cost of revenue during the year ended December 31, 2021. Cost of revenue as a percentage of revenue decreased to 58.9% for the year ended December 31, 2021 versus 59.9% for the same period in 2020.

Operating, administrative and other expenses increased by $216.5 million, or 13.0%, for the year ended December 31, 2021 as compared to the year ended December 31, 2020. This increase was primarily due to higher overall compensation expense primarily influenced by solid segment performance this year as compared to last year. This includes higher bonus expense, stock compensation expense and other incentive compensation expense. In addition, salaries and related benefits for the support staff was up this year to sustain the growth in the business. This was partially offset by lower occupancy expense and severance expense that were significant last year as part of the company's transformation initiatives and workspace rationalization measures. There was also an increase in consulting expense as we hired third party service providers to assist us with transition of certain back office processes to our shared service centers which is expected to drive future efficiencies. Foreign currency translation had a 2.0% negative impact on total operating expenses during the year ended December 31, 2021.

For the year ended December 31, 2021, mortgage servicing rights (MSRs) contributed to operating income $185.1 million of gains recognized in conjunction with the origination and sale of mortgage loans, offset by $172.3 million of amortization of related intangible assets. For the year ended December 31, 2020, MSRs contributed $207.8 million of gains recognized in conjunction with the origination and sale of mortgage loans, offset by $134.3 million of amortization of related intangible assets. The increase in amortization of MSRs was primarily due to accelerated amortization related to early payoff of underlying loans during the year.

Equity income from unconsolidated subsidiaries was up $20.3 million primarily driven by a positive fair value mark up on equity investments. Other income (loss) decreased by $12.7 million during the current year. This loss was primarily due to negative valuation adjustment recorded on a revolving facility extended to an unconsolidated subsidiary.

Global Workplace Solutions

The following table summarizes our results of operations for our Global Workplace Solutions operating segment for the years ended December 31, 2021 and 2020 (dollars in thousands):

	Year Ended December 31,			
	2021		2020	
Revenue:				
Net revenue:				
Facilities management	$ 4,872,230	28.5 %	$ 4,489,972	28.4 %
Project management	1,537,215	9.0 %	1,322,267	8.4 %
Total segment net revenue	6,409,445	37.5 %	5,812,239	36.8 %
Pass through costs also recognized as revenue	10,689,472	62.5 %	9,995,794	63.2 %
Total segment revenue	17,098,917	100.0 %	15,808,033	100.0 %
Costs and expenses:				
Cost of revenue	15,601,137	91.2 %	14,581,908	92.3 %
Operating, administrative and other	839,117	4.9 %	695,179	4.4 %
Depreciation and amortization	158,757	0.9 %	134,383	0.9 %
Asset impairments	—	0.0 %	50,171	0.3 %
Operating income	499,906	3.0 %	346,392	2.1 %
Equity income from unconsolidated subsidiaries	1,720	0.0 %	90	0.0 %
Other income	3,104	0.1 %	1,197	0.0 %
Add-back: Depreciation and amortization	158,757	0.9 %	134,383	0.9 %
Add-back: Asset impairments	—	0.0 %	50,171	0.3 %
Adjustments:				
Integration and other costs related to acquisitions	44,552	0.3 %	—	0.0 %
Costs associated with transformation initiatives [1]	—	0.0 %	38,188	0.2 %
Costs associated with workforce optimization efforts [2]	—	0.0 %	4,878	0.1 %
Segment operating profit and segment operating profit on revenue margin	$ 708,039	4.1 %	$ 575,299	3.6 %
Segment operating profit on net revenue margin		11.0 %		9.9 %
Segment operating profit attributable to non-controlling interests	$ 7,170		$ 30	
Segment operating profit attributable to CBRE Group, Inc.	$ 700,869		$ 575,269	

[1] During 2020, management began the implementation of certain transformation initiatives to enable the company to reduce costs, streamline operations and support future growth. The majority of expenses incurred were cash in nature and primarily related to employee separation benefits, lease termination costs and professional fees. See Note 21 of our Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

[2] Primarily represents costs incurred related to workforce optimization initiated and executed in the second quarter of 2020 as part of management's cost containment efforts in response to the Covid-19 pandemic. The charges are cash expenditures primarily for severance costs incurred related to this effort. Of the total costs, $1.1 million was included within the "Cost of revenue" line item and $3.8 million was included in the "Operating, administrative, and other" line item in the accompanying consolidated statements of operations for the year ended December 31, 2020.

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenue increased by $1.3 billion, or 8.2%, for the year ended December 31, 2021 as compared to the year ended December 31, 2020. The revenue increase was primarily attributable to growth in our project management line of business, which increased 18% (excluding Turner & Townsend), supplemented by a moderate growth in facilities management revenue. We recorded approximately $194.0 million in revenue from our acquisition of Turner & Townsend in November 2021. The remaining growth in project management was primarily due to an elevated demand as we emerge from the pandemic. In 2021, we were responsible for implementing project management contracts, excluding Turner & Townsend, valued at approximately $133.0 billion versus $93.0 billion last year. Foreign currency translation had a 2.0% positive impact on total revenue during the year ended December 31, 2021, primarily driven by weakness in the Argentine peso and Brazilian real partially offset by strength in the British pound sterling and euro.

Cost of revenue increased by $1.0 billion, or 7.0%, for the year ended December 31, 2021 as compared to the same period in 2020, driven by higher revenue leading to higher pass through costs and increased professional compensation. Foreign currency translation had a 1.9% negative impact on total cost of revenue during the year ended December 31, 2021. Cost of revenue as a percentage of revenue decreased slightly at 91.2% for the year ended December 31, 2021 versus 92.3% for the same period in 2020 as the business continues to manage related costs. Additionally, we recorded $10.0 million in employee separation benefits last year as part of the workforce optimization and transformation initiatives that did not recur this year.

Operating, administrative and other expenses increased by $143.9 million, or 20.7%, for the year ended December 31, 2021 as compared to the year ended December 31, 2020. This increase was due to operating expenses recorded from our consolidation of Turner & Townsend, $44.6 million related to acquisition and integration costs related to Turner & Townsend deal, higher bonus accrual tied to improved segment and consolidated results, stock compensation expense and continued investments to sustain the growth in the business in form of office management and administrative salaries. These increases were partially offset by minimal severance expense this year as compared to last when the company was executing programs such as workforce optimization and transformation initiatives. In addition, we recorded lower write-offs related to trade receivables and lower provisions. Foreign currency translation also had a 2.4% negative impact on total operating expenses during the year ended December 31, 2021.

Real Estate Investments

The following table summarizes our results of operations for our Real Estate Investments (REI) operating segment for the years ended December 31, 2021 and 2020 (dollars in thousands):

	Year Ended December 31,			
	2021		2020	
Revenue:				
Investment management	$ 556,154	50.9 %	$ 474,939	57.1 %
Development services	535,562	49.1 %	356,591	42.9 %
Total segment revenue	1,091,716	100.0 %	831,530	100.0 %
Costs and expenses:				
Cost of revenue	349,432	32.0 %	173,541	20.9 %
Operating, administrative and other	896,375	82.1 %	609,099	73.3 %
Depreciation and amortization	27,111	2.5 %	27,367	3.3 %
Asset impairments	—	0.0 %	38,505	4.6 %
Gain on disposition of real estate	70,993	6.5 %	87,793	10.6 %
Operating (loss) income	(110,209)	(10.1)%	70,811	8.5 %
Equity income from unconsolidated subsidiaries	555,341	50.9 %	123,548	14.9 %
Other income (loss)	3,542	0.3 %	(1,127)	(0.1)%
Add-back: Depreciation and amortization	27,111	2.5 %	27,367	3.3 %
Add-back: Asset impairments	—	0.0 %	38,505	4.6 %
Adjustments:				
Carried interest incentive compensation expense (reversal) to align with the timing of associated revenue	49,941	4.6 %	(22,912)	(2.8)%
Impact of fair value adjustments to real estate assets acquired in the Telford acquisition (purchase accounting) that were sold in period	(5,725)	(0.5)%	11,598	1.4 %
Costs associated with workforce optimization efforts [1]	—	0.0 %	5,172	0.6 %
Costs associated with transformation initiatives [2]	—	0.0 %	2,982	0.4 %
Integration and other costs related to acquisitions	—	0.0 %	1,756	0.2 %
Segment operating profit	$ 520,001	47.7 %	$ 257,700	31.0 %
Segment operating profit attributable to non-controlling interests	$ 4,352		$ 2,992	
Segment operating profit attributable to CBRE Group, Inc.	$ 515,649		$ 254,708	

(1) Primarily represents costs incurred related to workforce optimization initiated and executed in the second quarter of 2020 as part of management's cost containment efforts in response to the Covid-19 pandemic. The charges are cash expenditures primarily for severance costs incurred related to this effort and were included in the "Operating, administrative and other" line in the accompanying consolidated statements of operations for the year ended December 31, 2020.

(2) During 2020, management began the implementation of certain transformation initiatives to enable the company to reduce costs, streamline operations and support future growth. The majority of expenses incurred were cash in nature and primarily related to employee separation benefits, lease termination costs and professional fees. See Note 21 of our Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenue increased by $260.2 million, or 31.3%, for the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily driven by an increase in real estate sales in our development services line of business, primarily in the U.K. as we bounce back from the pandemic, and an increase in investment management fees related to growth in AUM, slightly muted by lower carried interest than the year before. Foreign currency translation had a 4.3% positive impact on total revenue during the year ended December 31, 2021 primarily driven by strength in the British pound sterling and euro.

Cost of revenue increased by $175.9 million, or 101.4%, for the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily driven by an increase in real estate development which is consistent with an increase in sales in our development service line of business. Foreign currency translation had a 7.7% negative impact on total cost of revenue during the year ended December 31, 2021.

Operating, administrative and other expenses increased by $287.3 million, or 47.2%, for the year ended December 31, 2021 as compared to the same period in 2020, primarily due to an increase in general compensation and related benefits, incentive compensation and bonuses in our development services and investment management line of business consistent with higher revenue growth. Foreign currency translation had a 2.8% negative impact on total operating expenses during the year ended December 31, 2021.

Equity income from unconsolidated subsidiaries increased by $431.8 million, or 349.5%, during the year ended December 31, 2021 as compared to the same period in 2020, primarily driven by higher equity earnings associated with property sales reported in the Development line of business.

A roll forward of our AUM by product type for the year ended December 31, 2021 is as follows (dollars in billions):

	Funds	Separate Accounts	Securities	Total
Balance at December 31, 2020	$ 47.2	$ 67.9	$ 7.6	$ 122.7
Inflows	10.8	7.1	3.6	21.5
Outflows	(5.6)	(5.1)	(1.9)	(12.6)
Market appreciation	4.2	3.7	2.4	10.3
Balance at December 31, 2021	$ 56.6	$ 73.6	$ 11.7	$ 141.9

AUM generally refers to the properties and other assets with respect to which we provide (or participate in) oversight, investment management services and other advice, and which generally consist of real estate properties or loans, securities portfolios and investments in operating companies and joint ventures. Our AUM is intended principally to reflect the extent of our presence in the real estate market, not the basis for determining our management fees. Our assets under management consist of:

- the total fair market value of the real estate properties and other assets either wholly-owned or held by joint ventures and other entities in which our sponsored funds or investment vehicles and client accounts have invested or to which they have provided financing. Committed (but unfunded) capital from investors in our sponsored funds is not included in this component of our AUM. The value of development properties is included at estimated completion cost. In the case of real estate operating companies, the total value of real properties controlled by the companies, generally through joint ventures, is included in AUM; and
- the net asset value of our managed securities portfolios, including investments (which may be comprised of committed but uncalled capital) in private real estate funds under our fund of funds investments.

Our calculation of AUM may differ from the calculations of other asset managers, and as a result, this measure may not be comparable to similar measures presented by other asset managers.

Corporate and Other

Our Corporate segment primarily consists of corporate overhead costs. Other consists of activities from strategic non-core non-controlling equity investments and is considered an operating segment but does not meet the aggregation criteria for presentation as a separate reportable segment and is, therefore, combined with Corporate and reported as Corporate and other. The following table summarizes our results of operations for our Corporate and other segment for the years ended December 31, 2021 and 2020 (dollars in thousands):

	Year Ended December 31, [1]	
	2021	2020
Elimination of inter-segment revenue	$ (20,356)	$ (27,930)
Costs and expenses:		
Cost of revenue	(13,264)	(21,379)
Operating, administrative and other	452,384	332,166
Depreciation and amortization	28,606	28,533
Operating loss	(488,082)	(367,250)
Equity income (loss) from unconsolidated subsidiaries	36,858	(2,003)
Other income	205,763	13,387
Add-back: Depreciation and amortization	28,606	28,533
Adjustments:		
Costs associated with transformation initiatives [2]	—	18,525
Costs associated with workforce optimization efforts [3]	—	14,885
Costs incurred related to legal entity restructuring	—	9,362
Segment operating loss	$ (216,855)	$ (284,561)

[1] Percentage of revenue calculations are not meaningful and therefore not included.

[2] Primarily represents costs incurred related to workforce optimization initiated and executed in the second quarter of 2020 as part of management's cost containment efforts in response to the Covid-19 pandemic. The charges are cash expenditures primarily for severance costs incurred related to this effort and were included in the "Operating, administrative and other" line in the accompanying consolidated statements of operations for the year ended December 31, 2020.

[3] During 2020, management began the implementation of certain transformation initiatives to enable the company to reduce costs, streamline operations and support future growth. The majority of expenses incurred were cash in nature and primarily related to employee separation benefits, lease termination costs and professional fees. See Note 21 of our Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

Operating, administrative and other expenses were approximately $452.4 million during the year ended December 31, 2021, an increase of 36.2% as compared to the prior year. This was primarily due to an increase in general compensation and related benefits, as well as in stock compensation expense, bonus and other incentive compensation expense primarily tied to the overall profitability of the organization. In addition, operating expenses associated with our sponsorship of CBRE Acquisitions Holdings, Inc. (now known as Altus Power, Inc.) up until its merger with and into Altus on December 9, 2021 were also recorded in this segment.

Equity income from unconsolidated subsidiaries was approximately $36.9 million, as compared to the year ended December 31, 2020. This was primarily due to elevated capital markets activity coupled with mark to market adjustments for investments where the fair value option has been elected. We recorded favorable fair value adjustments on our non-controlling investments, including a $6.5 million fair value adjustment on our equity investment and related interests in Altus from the merger date through December 31, 2021. The valuation of common shares, private placement warrants and alignment shares are dependent on Altus' stock price which could be volatile and subject to wide fluctuations in response to various market conditions.

Other income of $205.8 million is primarily comprised of $187.5 million in non-cash gain that was recorded as part of our deconsolidation of CBRE Acquisition Holdings, Inc. upon it merging with and into Altus. As part of this transaction, we recorded our interest in Altus' alignment shares and private placement warrants at fair value which factored into the recognition of the above gain. The remaining activity relates to unrealized and realized gain/loss on equity and available for sale debt securities owned by our wholly-owned captive insurance company and our non-controlling interest in additional equity securities.

Liquidity and Capital Resources

We believe that we can satisfy our working capital and funding requirements with internally generated cash flow and, as necessary, borrowings under our revolving credit facility. Our expected capital requirements for 2022 include up to approximately $305 million of anticipated capital expenditures, net of tenant concessions. During the year ended December 31, 2021, we incurred $178.7 million of capital expenditures, net of tenant concessions received, which includes approximately $36.3 million related to technology enablement. As of December 31, 2021, we had aggregate commitments of $127.1 million to fund future co-investments in our Real Estate Investments business, $42.6 million of which is expected to be funded in 2022. Additionally, as of December 31, 2021, we are committed to fund additional capital of $40.7 million and $141.6 million to unconsolidated subsidiaries and to consolidated projects, respectively, within our Real Estate Investments business. As of December 31, 2021, we had $3.2 billion of borrowings available under our revolving credit facility and $2.3 billion of cash and cash equivalents available for general corporate use.

We have historically relied on our internally generated cash flow and our revolving credit facility to fund our working capital, capital expenditure and general investment requirements (including strategic in-fill acquisitions) and have not sought other external sources of financing to help fund these requirements. In the absence of extraordinary events or a large strategic acquisition, we anticipate that our cash flow from operations and our revolving credit facility would be sufficient to meet our anticipated cash requirements for the foreseeable future, and at a minimum for the next 12 months. Given compensation is our largest expense and our sales and leasing professionals are generally paid on a commission and/or bonus basis that correlates with their revenue production, the negative effect of difficult market conditions is partially mitigated by the inherent variability of our compensation cost structure. In addition, when negative economic conditions have been particularly severe, we have moved decisively to lower operating expenses to improve financial performance, and then have restored certain expenses as economic conditions improved. We may seek to take advantage of market opportunities to refinance existing debt instruments, as we have done in the past, with new debt instruments at interest rates, maturities and terms we deem attractive. We may also, from time to time in our sole discretion, purchase, redeem, or retire our existing senior notes, through tender offers, in privately negotiated or open market transactions, or otherwise.

On December 28, 2020, we redeemed the $425.0 million aggregate outstanding principal amount of our 5.25% senior notes due 2025 in full. We funded this redemption using cash on hand. In March 2021, we took advantage of favorable market conditions and low interest rates and conducted a new issuance for $500.0 million in aggregate principal amount of 2.500% senior notes due 2031. On November 23, 2021, we redeemed the $300.0 million aggregate outstanding principal amount of our tranche A term loan facility due 2024 in full. We funded this redemption using cash on hand.

As noted above, we believe that any future significant acquisitions we may make could require us to obtain additional debt or equity financing. In the past, we have been able to obtain such financing for material transactions on terms that we believed to be reasonable. However, it is possible that we may not be able to obtain acquisition financing on favorable terms, or at all, in the future if we decide to make any further significant acquisitions.

Our long-term liquidity needs, other than those related to ordinary course obligations and commitments such as operating leases, are generally comprised of three elements. The first is the repayment of the outstanding and anticipated principal amounts of our long-term indebtedness. If our cash flow is insufficient to repay our long-term debt when it comes due, then we expect that we would need to refinance such indebtedness or otherwise amend its terms to extend the maturity dates. We cannot make any assurances that such refinancing or amendments would be available on attractive terms, if at all.

The second long-term liquidity need is the payment of obligations related to acquisitions. Our acquisition structures often include deferred and/or contingent purchase consideration in future periods that are subject to the passage of time or achievement of certain performance metrics and other conditions. As of December 31, 2021 and 2020, we had accrued deferred purchase consideration totaling $630.1 million ($32.0 million of which was a current liability) and $82.5 million ($14.3 million of which was a current liability), respectively, which was included in “Accounts payable and accrued expenses” and in “Other liabilities” in the accompanying consolidated balance sheets set forth in Item 8 of this Annual Report.

Lastly, as described in Note 16 of the Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report, in February 2019, our board of directors authorized a program for the repurchase of up to $500.0 million of our Class A common stock over three years (the 2019 program). During the year ended December 31, 2021, we repurchased 3,122,054 shares of our Class A common stock at an average price of $92.03 per share for $287.3 million under the 2019 program. As of December 31, 2021, we had $62.7 million of capacity remaining under the 2019 program.

In November 2021, our board of directors authorized a new program for the company to repurchase up to $2.0 billion of our Class A common stock over five years, effective November 19, 2021 (the 2021 program). During the year ended December 31, 2021, we spent $85.6 million to repurchase 832,315 shares of our Class A common stock at an average price of $102.82 per share using cash on hand. As of December 31, 2021, we had $1.9 billion of capacity remaining under the 2021 program for a total capacity of approximately $1.98 billion. As of February 17, 2022, we had $1.91 billion of total capacity remaining under the above programs.

Our stock repurchases have been funded with cash on hand and we intend to continue funding future repurchases with existing cash. We may utilize our stock repurchase programs to continue offsetting the impact of our stock-based compensation program and on a more opportunistic basis if we believe our stock presents a compelling investment compared to other discretionary uses. The timing of any future repurchases and the actual amounts repurchased will depend on a variety of factors, including the market price of our common stock, general market and economic conditions and other factors.

Historical Cash Flows

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Operating Activities

Net cash provided by operating activities totaled $2.4 billion for the year ended December 31, 2021, an increase of $0.5 billion as compared to the year ended December 31, 2020. The primary drivers that contributed to the net increase were as follows - the company's net income more than doubled in 2021 as compared to 2020. This was partially muted by certain key non-cash items such as a $187.5 million gain recognized upon deconsolidation of CBRE Acquisition Holdings, Inc., and higher equity income than distributions received from unconsolidated subsidiaries. In addition, there were some non-cash charges during 2020 that did not occur in 2021, such as $88.7 million in asset impairment, that are offsetting the net increase in operating cash activities for 2021. We also experienced a drag on our working capital which negatively impacted the overall increase in operating cash flows by approximately $362.4 million. This was primarily due to a significant increase in our trade receivables fueled by revenue growth but our cash collection efforts fell behind. This was mitigated to some extent by an increase in accrued commission as our brokerage professionals are generally not paid until cash has been collected on the transaction. Additionally, a smaller change in our real estate under development asset balance this year as compared to previous year contributed to the overall positive change in operating cash flow.

Investing Activities

Net cash used in investing activities totaled $1.3 billion for the year ended December 31, 2021, an increase of $536.8 million as compared to the year ended December 31, 2020. This increase was primarily driven by (i) our investment in Industrious, (ii) a significant increase in mergers and acquisitions related activities with the major one being Turner & Townsend, and (iii) an investment of $220.0 million in Altus' common shares. The increase in net cash used in investing activities was partially offset by an outflow from purchase of marketable securities from the SPAC trust account in 2020 of $402.5 million versus a $212.7 million inflow of proceeds from sale of marketable securities from the SPAC trust account in 2021.

Financing Activities

Net cash used in financing activities totaled $490.6 million for the year ended December 31, 2021, an increase of $267.9 million as compared to the year ended December 31, 2020. The increase was primarily due to an additional $318.6 million that was used to repurchase shares during the year ended December 31, 2021 as compared to December 31, 2020, as well as, in 2021, a repayment of senior term loans of $300.0 million, and net payments of notes payable on real estate of $96.9 million. This was partially offset by the net proceeds of $492.3 million from the issuance of our 2.500% senior notes during 2021. Net cash used in financing activities during 2021 was also impacted by the payment of $205.1 million for redemption of non-controlling interest for CBRE Acquisition Holdings, Inc. and payment of deferred underwriting costs related to its initial public offering. Net cash used in financing in 2020 was impacted by our redemption in full of 5.25% senior notes in December 2020, partially offset by $393.7 million in proceeds from the sale of non-controlling interest from the SPAC.

Summary of Contractual Obligations and Other Commitments

The following is a summary of our various contractual obligations and other commitments as of December 31, 2021 (dollars in thousands):

	Payments Due by Period	
Contractual Obligations	**Total**	**Less than 1 year**
Total gross long-term debt [1]	$ 1,555,166	$ —
Short-term borrowings [2]	1,310,119	1,310,119
Operating leases [3]	1,515,273	233,249
Financing leases [3]	321,349	38,058
Total gross notes payable on real estate [4]	49,207	34,207
Deferred purchase consideration [5]	630,067	32,036
Total contractual obligations	$ 5,381,181	$ 1,647,669

	Amount of Other Commitments Expiration	
Other Commitments	**Total**	**Less than 1 year**
Self-insurance reserves [6]	$ 153,372	$ 153,372
Tax liabilities [7]	54,761	—
Co-investments [8] [9]	167,820	83,376
Letters of credit [8]	159,091	159,091
Guarantees [8] [10]	50,859	50,859
Total other commitments	$ 585,903	$ 446,698

The table above excludes estimated payment obligations for our qualified defined benefit pension plans. For information about our future estimated payment obligations for these plans, see Note 14 of our Notes to the Consolidated Financial Statements set forth in Item 8 of this Annual Report.

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[1] Reflects gross outstanding long-term debt balances as of December 31, 2021, assumed to be paid at maturity, excluding unamortized discount, premium and deferred financing costs. See Note 11 of our Notes to the Consolidated Financial Statements set forth in Item 8 of this Annual Report. Figures do not include scheduled interest payments. Assuming each debt obligation is held until maturity, we estimate that we will make $244.1 million of interest payments, $45.2 million of which will be made in 2022.

[2] The majority of this balance represents our warehouse lines of credit, which are recourse only to our wholly-owned subsidiary CBRE Capital Markets, Inc. (CBRE Capital Markets) and are secured by our related warehouse receivables. See Notes 5 and 11 of our Notes to the Consolidated Financial Statements set forth in Item 8 of this Annual Report.

[3] See Note 12 of our Notes to the Consolidated Financial Statements set forth in Item 8 of this Annual Report.

[4] Reflects gross outstanding notes payable on real estate as of December 31, 2021 (none of which is recourse to us, beyond being recourse to the single-purpose entity that held the real estate asset and was the primary obligor on the note payable), assumed to be paid at maturity, excluding unamortized deferred financing costs. Amounts do not include scheduled interest payments. The notes have either fixed or variable interest rates, ranging from 2.00% to 3.33% at December 31, 2021.

[5] Represents deferred obligations related to previous acquisitions, which are included in accounts payable and accrued expenses and other long-term liabilities in the consolidated balance sheets at December 31, 2021 set forth in Item 8 of this Annual Report.

[6] Represents outstanding reserves for claims under certain insurance programs, which are included in other current and other long-term liabilities in the consolidated balance sheets at December 31, 2021 set forth in Item 8 of this Annual Report. Due to the nature of this item, payments could be due at any time upon the occurrence of certain events. Accordingly, the entire balance has been reflected as expiring in less than one year.

[7] As of December 31, 2021, we have a remaining federal tax liability of $54.8 million associated with the Transition Tax on mandatory deemed repatriation of cumulative foreign earnings as of December 31, 2017. We are paying the federal tax liability for the Transition Tax in annual interest-free installments over a period of eight years through 2025 as allowed by the Tax Act. The next installment is due in 2023.

In addition, as of December 31, 2021, our gross unrecognized tax benefits, totaled $191.9 million. Of this amount, we can reasonably estimate that none will require cash settlement in less than one year. We are unable to reasonably estimate the timing of the effective settlement of tax positions for the remaining $191.9 million. See Note 15 of our Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

[8] See Note 13 of our Notes to the Consolidated Financial Statements set forth in Item 8 of this Annual Report.

[9] Includes $127.1 million to fund future co-investments in our Real Estate Investments segment, $42.6 million of which is expected to be funded in 2022, and $40.7 million committed to invest in unconsolidated real estate subsidiaries, which is callable at any time. This amount does not include capital committed to consolidated projects of $141.6 million as of December 31, 2021.

[10] Due to the nature of guarantees, payments could be due at any time upon the occurrence of certain triggering events, including default. Accordingly, all guarantees are reflected as expiring in less than one year.

Indebtedness

Our level of indebtedness increases the possibility that we may be unable to pay the principal amount of our indebtedness and other obligations when due. In addition, we may incur additional debt from time to time to finance strategic acquisitions, investments, joint ventures or for other purposes, subject to the restrictions contained in the documents governing our indebtedness. If we incur additional debt, the risks associated with our leverage, including our ability to service our debt, would increase.

Long-Term Debt

We maintain credit facilities with third-party lenders, which we use for a variety of purposes. On March 4, 2019, CBRE Services, Inc. (CBRE Services) entered into an incremental assumption agreement with respect to its credit agreement, dated October 31, 2017 (such agreement, as amended by a December 20, 2018 incremental term loan assumption agreement and such March 4, 2019 incremental assumption agreement, collectively, the 2019 Credit Agreement), which (i) extended the maturity of the U.S. dollar tranche A term loans under such credit agreement, (ii) extended the termination date of the revolving credit commitments available under such credit agreement and (iii) made certain changes to the interest rates and fees applicable to such tranche A term loans and revolving credit commitments under such credit agreement. The proceeds from a new tranche A term loan facility under the 2019 Credit Agreement were used to repay the $300.0 million of tranche A term loans outstanding under the credit agreement in effect prior to the entry into the 2019 incremental assumption agreement. On July 9, 2021, CBRE Services entered into an additional incremental assumption agreement with respect to the 2019 Credit Agreement for purposes of increasing the revolving credit commitments available under the 2019 Credit Agreement by an aggregate principal amount of $350.0 million (the 2019 Credit Agreement, as amended by the July 9, 2021 incremental assumption agreement is collectively referred to in this Annual Report as the 2021 Credit Agreement). On December 10, 2021, CBRE Services and certain of the other borrowers entered into an amendment of the 2021 Credit Agreement which (i) changed the interest rate applicable to revolving borrowings denominated in Sterling from a LIBOR-based rate to a rate based on the Sterling Overnight Index Average (SONIA) and (ii) changed the interest rate applicable to revolving borrowings denominated in Euros from a LIBOR-based rate to a rate based on EURIBOR. The revised interest rates effect described above went into effect as of January 1, 2022. We are evaluating the effect that this guidance will have on our consolidated financial statements and related disclosures.

The 2021 Credit Agreement is a senior unsecured credit facility that is guaranteed by us. On May 21, 2021, we entered into a definitive agreement whereby our subsidiary guarantors were released as guarantors from the 2021 Credit Agreement. As of December 31, 2021, the 2021 Credit Agreement provided for the following: (1) a $3.15 billion revolving credit facility, which includes the capacity to obtain letters of credit and swingline loans and terminates on March 4, 2024; (2) a $300.0 million tranche A term loan facility maturing on March 4, 2024, requiring quarterly principal payments unless our leverage ratio (as defined in the 2021 Credit Agreement) is less than or equal to 2.50x on the last day of the fiscal quarter immediately preceding any such payment date and (3) a €400.0 million term loan facility due and payable in full at maturity on December 20, 2023. On November 23, 2021, we repaid our $300.0 million tranche A term loan facility under the 2021 Credit Agreement.

On March 18, 2021, CBRE Services issued $500.0 million in aggregate principal amount of 2.500% senior notes due April 1, 2031 at a price equal to 98.451% of their face value (the 2.500% senior notes). The 2.500% senior notes are unsecured obligations of CBRE Services, senior to all of its current and future subordinated indebtedness, but effectively subordinated to all of its current and future secured indebtedness. Interest accrues at a rate of 2.500% per year and is payable semi-annually in arrears on April 1 and October 1 of each year, beginning on October 1, 2021. The 2.500% senior notes are redeemable at our option, in whole or in part, on or after January 1, 2031 at a redemption price of 100% of the principal amount on that date, plus accrued and unpaid interest, if any, to, but excluding the date of redemption. At any time prior to January 1, 2031, we may redeem all or a portion of the notes at a redemption price equal to the greater of (1) 100% of the principal amount of the notes to be redeemed and (2) the sum of the present value at the date of redemption of the remaining scheduled payments of principal and interest thereon to January 1, 2031, assuming the notes matured on January 1, 2031, discounted to the date of redemption on a semi-annual basis at an adjusted rate equal to the treasury rate plus treasury rate plus 20 basis points basis points, minus accrued and unpaid interest to, but excluding, the date of redemption, plus, in either case, accrued and unpaid interest, if any, to, but not including, the redemption date. The amount of the 2.500% senior notes, net of unamortized discount and unamortized debt issuance costs, included in the accompanying consolidated balance sheet was $488.1 million at December 31, 2021.

On August 13, 2015, CBRE Services issued $600.0 million in aggregate principal amount of 4.875% senior notes due March 1, 2026 at a price equal to 99.24% of their face value. The 4.875% senior notes are unsecured obligations of CBRE Services, senior to all of its current and future subordinated indebtedness, but effectively subordinated to all of its current and future secured indebtedness. The 4.875% senior notes are jointly and severally guaranteed on a senior basis by us and each domestic subsidiary of CBRE Services that guarantees our 2019 Credit Agreement. Interest accrues at a rate of 4.875% per year and is payable semi-annually in arrears on March 1 and September 1.

On September 26, 2014, CBRE Services issued $300.0 million in aggregate principal amount of 5.25% senior notes due March 15, 2025. On December 12, 2014, CBRE Services issued an additional $125.0 million in aggregate principal amount of 5.25% senior notes due March 15, 2025 at a price equal to 101.5% of their face value, plus interest deemed to have accrued from September 26, 2014. The 5.25% senior notes were unsecured obligations of CBRE Services, senior to all of its current and future subordinated indebtedness, but effectively subordinated to all of its current and future secured indebtedness. The 5.25% senior notes were jointly and severally guaranteed on a senior basis by us and each domestic subsidiary of CBRE Services that guaranteed our 2019 Credit Agreement. Interest accrued at a rate of 5.25% per year and was payable semi-annually in arrears on March 15 and September 15. We redeemed these notes in full on December 28, 2020 and incurred charges of $75.6 million, including a premium of $73.6 million and the write-off of $2.0 million of unamortized premium and debt issuance costs. We funded this redemption using cash on hand.

The indentures governing our 4.875% senior notes and 2.500% senior notes contain restrictive covenants that, among other things, limit our ability to create or permit liens on assets securing indebtedness, enter into sale/leaseback transactions and enter into consolidations or mergers.

On May 21, 2021, we released all existing subsidiary guarantors from their guarantees of our 2021 Credit Agreement, 4.875% senior notes and 2.500% senior notes. Our 2021 Credit Agreement, 4.875% senior notes and 2.500% senior notes remain fully and unconditionally guaranteed by CBRE Group, Inc. Combined summarized financial information for CBRE Group, Inc. (parent) and CBRE Services (subsidiary issuer) is as follows (dollars in thousands):

	December 31,	
	2021	2020 [1]
Balance Sheet Data:		
Current assets	$ 8,604	$ 3,307,147
Noncurrent assets [2]	34,711	5,252,455
Total assets [2]	43,315	8,559,602
Current liabilities	$ 17,610	$ 3,241,264
Noncurrent liabilities	1,083,584	1,884,629
Total liabilities	1,101,194	5,125,893

	Year Ended December 31,	
	2021	2020 [1]
Statement of Operations Data:		
Revenue	$ —	$ 13,117,846
Operating (loss) income	(2,246)	363,829
Net income	27,487	353,068

[1] Amounts include activity related to our subsidiaries that were still listed as guarantors for the period presented.

[2] Includes $25.3 million and $360.0 million of intercompany loan receivables from non-guarantor subsidiaries as of December 31, 2021 and 2020, respectively. All intercompany balances and transactions between CBRE Group, Inc., and CBRE Services have been eliminated.

For additional information on all of our long-term debt, see Note 11 of the Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

Short-Term Borrowings

We maintain a $3.15 billion revolving credit facility under the 2021 Credit Agreement and warehouse lines of credit with certain third-party lenders. For additional information on all of our short-term borrowings, see Notes 5 and 11 of the Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Our exposure to market risk primarily consists of foreign currency exchange rate fluctuations related to our international operations and changes in interest rates on debt obligations. We manage such risk primarily by managing the amount, sources, and duration of our debt funding and by using derivative financial instruments. We apply FASB ASC (Topic 815), "*Derivatives and Hedging,*" when accounting for derivative financial instruments. In all cases, we view derivative financial instruments as a risk management tool and, accordingly, do not use derivatives for trading or speculative purposes.

Exchange Rates

Our foreign operations expose us to fluctuations in foreign exchange rates. These fluctuations may impact the value of our cash receipts and payments in terms of our functional (reporting) currency, which is the U.S. dollar. See the discussion of international operations, which is included in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the caption "International Operations" and is incorporated by reference herein.

Interest Rates

We manage our interest expense by using a combination of fixed and variable rate debt. Historically, we have entered into interest rate swap agreements to attempt to hedge the variability of future interest payments due to changes in interest rates. As of December 31, 2021, we do not have any outstanding interest rate swap agreements.

The estimated fair value of our senior term loans was approximately $451.8 million at December 31, 2021. Based on dealers' quotes, the estimated fair value of our 4.875% and 2.500% senior notes was $671.7 million and $502.1 million, respectively, at December 31, 2021.

We utilize sensitivity analyses to assess the potential effect on our variable rate debt. If interest rates were to increase 100 basis points on our outstanding variable rate debt at December 31, 2021, the net impact of the additional interest cost would be a decrease of $4.6 million on pre-tax income and a decrease of $4.6 million in cash provided by operating activities for the year ended December 31, 2021.

Item 8. Financial Statements and Supplementary Data.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULES

All other schedules are omitted because they are either not applicable, not required or the information required is included in the Consolidated Financial Statements, including the notes thereto.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
CBRE Group, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of CBRE Group, Inc. and subsidiaries (the Company) as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive income, cash flows, and equity for each of the years in the three-year period ended December 31, 2021, and the related notes and financial statement schedule II (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in I*nternal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 28, 2022 expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Assessment of Gross Unrecognized Tax Benefits

As discussed in Notes 2 and 15 to the consolidated financial statements, the Company has recorded gross unrecognized tax benefits of $191.9 million as of December 31, 2021. The Company utilizes a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the available evidence indicates there is more than a 50% likelihood that the position will be sustained upon examination, including resolution of related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement.

We identified the assessment of the gross unrecognized tax benefits as a critical audit matter. Complex auditor judgment and the involvement of tax professionals with specialized skills and knowledge were required in evaluating the Company's interpretation of tax law and its estimate of the resolution of the tax positions underlying the unrecognized tax benefits.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's unrecognized tax benefits process, including the interpretation of tax law and the estimate of the unrecognized tax benefits. Since tax law is complex and often subject to interpretations, we involved tax professionals with specialized skills and knowledge, who assisted in:

- Obtaining an understanding of the Company's tax planning strategies including changes in legal entity structures and intercompany financing arrangements,
- Evaluating the Company's interpretation of tax law and the potential impact on the Company's tax positions,
- Inspecting correspondence with applicable taxing authorities, and assessing the expiration of statutes of limitations, and
- Performing an independent assessment of certain of the Company's tax positions and comparing the results to the Company's assessment.

Initial measurement of the fair value of the acquired customer relationship intangible asset

As discussed in Notes 2 and 4 to the consolidated financial statements, on November 1, 2021, the Company acquired 60% of the outstanding share capital of Turner & Townsend Holdings Limited (Turner & Townsend) in a business combination. As a result of the transaction, the Company acquired a customer relationship intangible asset associated with the generation of future income from Turner & Townsend's existing customers and services. The allocation of the purchase price based on the estimated acquisition-date fair value of the customer relationship intangible asset was $753.9 million.

We identified the evaluation of the initial measurement of the fair value of the customer relationship intangible asset acquired in the Turner & Townsend business combination as a critical audit matter. A high degree of subjectivity was required to assess the assumptions used to determine the fair value of the customer relationship intangible asset, specifically the forecasted revenue attributable to customer contracts, estimated annual attrition rate of existing

customers, and discount rate used in the multi-period excess earnings method under the income approach. Subjective auditor judgment was required as there was limited observable market information and the estimated fair value of the customer relationship intangible asset was sensitive to possible changes to these assumptions.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's initial measurement valuation process, including certain controls over the development of the assumptions noted above. We compared the Company's estimate of forecasted revenue attributable to customer contracts used in the valuation to the historical results of Turner & Townsend and similar market participants. We evaluated the Company's estimated annual attrition rate of existing customers by comparing to the historical customer retention rate of Turner & Townsend. We involved valuation professionals with specialized skills and knowledge, who assisted in:

- Assessing the reasonableness of the Company's revenue growth projections by comparing to those of a market participant,
- Calculating an annual attrition rate of existing customers using Turner & Townsend 's historical data and comparing that result to the attrition rate used by the Company, and
- Comparing inputs and assumptions comprising the selected discount rate with external market and industry data and considering whether the assumptions were consistent with evidence obtained in other areas of the audit.

/s/ KPMG LLP

We have served as the Company's auditor since 2008.

Los Angeles, California

February 28, 2022

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
CBRE Group, Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited CBRE Group, Inc. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2021, based on criteria established in*Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, because of the effect of the material weaknesses, described below, on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive income, cash flows, and equity for each of the years in the three-year period ended December 31, 2021, and the related notes and financial statement schedule II (collectively, the consolidated financial statements), and our report dated February 28, 2022 expressed an unqualified opinion on those consolidated financial statements.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses identified related to GWS EMEA resources not being sufficiently trained to operate controls related to financial reporting risks, resulting in process level controls that did not operate effectively in the revenue & receivables and journal entries processes. These material weaknesses have been identified and included in management's assessment. The material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2021 consolidated financial statements, and this report does not affect our report on those consolidated financial statements.

The Company acquired a controlling interest in Turner & Townsend Holdings Limited during 2021, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2021, Turner & Townsend Holdings Limited's internal control over financial reporting associated with total assets of $417 million and total revenues of $194 million included in the consolidated financial statements of the Company as of and for the year ended December 31, 2021. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of Turner & Townsend Holdings Limited.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP (185)

Los Angeles, California

February 28, 2022

CBRE GROUP, INC.
CONSOLIDATED BALANCE SHEETS
(Dollars in thousands, except share data)

	December 31, 2021	December 31, 2020
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 2,430,951	$ 1,896,188
Restricted cash	108,830	143,059
Receivables, less allowance for doubtful accounts of $ 97,588 and $ 95,533 at December 31, 2021 and 2020, respectively	5,150,473	4,394,954
Warehouse receivables	1,303,717	1,411,170
Contract assets	338,749	318,191
Prepaid expenses	333,885	294,992
Income taxes receivable	44,104	93,756
Other current assets	371,656	293,321
Total Current Assets	10,082,365	8,845,631
Property and equipment, net of accumulated depreciation and amortization of $ 1,288,509 and $ 1,074,887 at December 31, 2021 and 2020, respectively	816,092	815,009
Goodwill	4,995,175	3,821,609
Other intangible assets, net of accumulated amortization of $ 1,725,280 and $ 1,556,537 at December 31, 2021 and 2020, respectively	2,409,427	1,367,913
Operating lease assets	1,046,377	1,020,352
Investments in unconsolidated subsidiaries (with $ 813,031 and $ 116,314 at fair value at December 31, 2021 and 2020, respectively)	1,196,088	452,365
Non-current contract assets	135,626	153,636
Real estate under development	326,416	277,630
Non-current income taxes receivable	33,150	43,555
Deferred tax assets, net	157,032	91,529
Investments held in trust - special purpose acquisition company	—	402,501
Other assets, net	875,743	747,413
Total Assets	$ 22,073,491	$ 18,039,143
LIABILITIES AND EQUITY		
Current Liabilities:		
Accounts payable and accrued expenses	$ 2,916,331	$ 2,692,939
Compensation and employee benefits payable	1,539,291	1,287,383
Accrued bonus and profit sharing	1,694,590	1,183,786
Operating lease liabilities	232,423	208,526
Contract liabilities	280,659	162,045
Income taxes payable	246,035	57,892
Warehouse lines of credit (which fund loans that U.S. Government Sponsored Enterprises have committed to purchase)	1,277,451	1,383,964
Other short-term borrowings	32,668	5,330
Current maturities of long-term debt	—	1,514
Other current liabilities	199,421	160,604
Total Current Liabilities	8,418,869	7,143,983
Long-term debt, net of current maturities	1,538,123	1,380,202
Non-current operating lease liabilities	1,116,562	1,116,795
Non-current income taxes payable	54,761	54,761
Non-current tax liabilities	144,884	87,954
Deferred tax liabilities, net	405,258	124,485
Other liabilities	1,035,917	625,303
Total Liabilities	12,714,374	10,533,483
Commitments and contingencies	—	—
Non-controlling interest subject to possible redemption - special purpose acquisition company	—	385,573
Equity:		
CBRE Group, Inc. Stockholders' Equity:		
Class A common stock; $ 0.01 par value; 525,000,000 shares authorized; 332,875,959 and 335,561,345 shares issued and outstanding at December 31, 2021 and 2020, respectively	3,329	3,356
Additional paid-in capital	798,892	1,074,639
Accumulated earnings	8,366,631	6,530,057
Accumulated other comprehensive loss	(640,659)	(529,726)
Total CBRE Group, Inc. Stockholders' Equity	8,528,193	7,078,326
Non-controlling interests	830,924	41,761
Total Equity	9,359,117	7,120,087
Total Liabilities and Equity	$ 22,073,491	$ 18,039,143

The accompanying notes are an integral part of these consolidated financial statements.

CBRE GROUP, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Dollars in thousands, except share and per share data)

	Year Ended December 31,		
	2021	**2020**	**2019**
Revenue	$ 27,746,036	$ 23,826,195	$ 23,894,091
Costs and expenses:			
Cost of revenue	21,579,507	19,047,620	18,689,013
Operating, administrative and other	4,074,184	3,306,205	3,436,009
Depreciation and amortization	525,871	501,728	439,224
Asset impairments	—	88,676	89,787
Total costs and expenses	26,179,562	22,944,229	22,654,033
Gain on disposition of real estate	70,993	87,793	19,817
Operating income	1,637,467	969,759	1,259,875
Equity income from unconsolidated subsidiaries	618,697	126,161	160,925
Other income	203,609	17,394	28,907
Interest expense, net of interest income	50,352	67,753	85,754
Write-off of financing costs on extinguished debt	—	75,592	2,608
Income before provision for income taxes	2,409,421	969,969	1,361,345
Provision for income taxes	567,506	214,101	69,895
Net income	1,841,915	755,868	1,291,450
Less: Net income attributable to non-controlling interests	5,341	3,879	9,093
Net income attributable to CBRE Group, Inc.	$ 1,836,574	$ 751,989	$ 1,282,357
Basic income per share:			
Net income per share attributable to CBRE Group, Inc.	$ 5.48	$ 2.24	$ 3.82
Weighted average shares outstanding for basic income per share	335,232,840	335,196,296	335,795,654
Diluted income per share:			
Net income per share attributable to CBRE Group, Inc.	$ 5.41	$ 2.22	$ 3.77
Weighted average shares outstanding for diluted income per share	339,717,401	338,392,210	340,522,871

The accompanying notes are an integral part of these consolidated financial statements.

CBRE GROUP, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Dollars in thousands)

	Year Ended December 31,		
	2021	**2020**	**2019**
Net income	$ 1,841,915	$ 755,868	$ 1,291,450
Other comprehensive (loss) income:			
Foreign currency translation (loss) gain	(159,722)	124,260	(14,092)
Amounts reclassified from accumulated other comprehensive loss to interest expense, net of $151, $156 and $471 income tax expense for the years ended December 31, 2021, 2020 and 2019, respectively	431	426	1,320
Unrealized holding (losses) gains on available for sale debt securities, net of $415 income tax benefit and $382 and $559 income tax expense for the years ended December 31, 2021, 2020 and 2019, respectively	(1,964)	1,436	2,101
Pension liability adjustments, net of $8,281, $1,663 and $194 income tax expense for the years ended December 31, 2021, 2020 and 2019, respectively	35,304	7,343	944
Legal entity restructuring, net of $17,694 income tax expense for the year ended December 31, 2019	—	—	63,149
Other, net of $699 and $3,068 income tax expense and $3,795 income tax benefit for the years ended December 31, 2021, 2020 and 2019, respectively	3,164	16,772	(14,946)
Total other comprehensive (loss) income	(122,787)	150,237	38,476
Comprehensive income	1,719,128	906,105	1,329,926
Less: Comprehensive (loss) income attributable to non-controlling interests	(6,513)	4,094	9,048
Comprehensive income attributable to CBRE Group, Inc.	$ 1,725,641	$ 902,011	$ 1,320,878

The accompanying notes are an integral part of these consolidated financial statements.

CBRE GROUP, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Dollars in thousands)

	Year Ended December 31,		
	2021	**2020**	**2019**
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income	$ 1,841,915	$ 755,868	$ 1,291,450
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	525,871	501,728	439,224
Amortization and write-off of financing costs on extinguished debt	8,315	82,705	8,662
Gains related to mortgage servicing rights, premiums on loan sales and sales of other assets	(142,929)	(297,980)	(246,690)
Asset impairments	—	88,676	89,787
Net realized and unrealized losses, primarily from investments	(41,982)	(17,394)	(28,907)
Provision for doubtful accounts	24,489	44,366	20,373
Net compensation expense for equity awards	184,934	60,391	127,738
Equity income from unconsolidated subsidiaries	(618,697)	(126,161)	(160,925)
Gain recognized upon deconsolidation of SPAC	(187,456)	—	—
Distribution of earnings from unconsolidated subsidiaries	520,382	155,975	199,011
Proceeds from sale of mortgage loans	17,194,606	20,937,521	19,805,060
Origination of mortgage loans	(17,015,839)	(21,268,114)	(19,389,979)
(Decrease) increase in warehouse lines of credit	(106,513)	406,789	(351,586)
Tenant concessions received	31,176	48,030	21,249
Purchase of equity securities	(7,154)	(11,113)	(83,001)
Proceeds from sale of equity securities	8,709	13,741	46,949
(Increase) decrease in real estate under development	(54,658)	(105,619)	31,420
(Increase) decrease in receivables, prepaid expenses and other assets (including contract and lease assets)	(765,959)	371,009	(821,134)
Increase in accounts payable and accrued expenses and other liabilities (including contract and lease liabilities)	104,749	105,491	306,677
Increase (decrease) in compensation and employee benefits payable and accrued bonus and profit sharing	729,703	(100,142)	244,895
Decrease (increase) in net income taxes receivable/payable	248,293	173,648	(274,436)
Other operating activities, net	(117,777)	11,364	(52,457)
Net cash provided by operating activities	2,364,178	1,830,779	1,223,380
CASH FLOWS FROM INVESTING ACTIVITIES:			
Capital expenditures	(209,851)	(266,575)	(293,514)
Acquisition of businesses, including net assets acquired, intangibles and goodwill, net of cash acquired	(781,489)	(27,848)	(355,926)
Contributions to unconsolidated subsidiaries	(334,544)	(146,409)	(105,947)
Distributions from unconsolidated subsidiaries	75,853	88,731	33,289
Investment in Altus Power, Inc. Class A stock	(220,001)	—	—
Proceeds from sale of marketable securities - special purpose acquisition company trust account	212,722	—	—
Purchase of marketable securities - special purpose acquisition company trust account	—	(402,500)	—
Other investing activities, net	(23,587)	10,516	1,074
Net cash used in investing activities	(1,280,897)	(744,085)	(721,024)

The accompanying notes are an integral part of these consolidated financial statements.

CBRE GROUP, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Dollars in thousands)

	Year Ended December 31,		
	2021	**2020**	**2019**
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from senior term loans	—	—	300,000
Repayment of senior term loans	(300,000)	—	(300,000)
Proceeds from revolving credit facility	26,599	835,671	3,609,000
Repayment of revolving credit facility	—	(835,671)	(3,609,000)
Repayment of 5.25% senior notes (including premium)	—	(499,652)	—
Repayment of debt assumed in acquisition of Telford Homes	—	—	(110,687)
Sale of non-controlling interest - special purpose acquisition company	—	393,661	—
Redemption of non-controlling interest-special purpose acquisition company and payment of deferred underwriting commission	(205,110)	—	—
Proceeds from notes payable on real estate	78,428	90,552	6,694
Repayment of notes payable on real estate	(109,461)	(24,704)	—
Proceeds from issuance of 2.500% senior notes	492,255	—	—
Repurchase of common stock	(368,603)	(50,028)	(145,137)
Acquisition of businesses (cash paid for acquisitions more than three months after purchase date)	(17,769)	(44,700)	(42,147)
Units repurchased for payment of taxes on equity awards	(38,864)	(43,835)	(18,426)
Non-controlling interest contributions	862	2,173	46,612
Non-controlling interest distributions	(4,572)	(4,330)	(3,957)
Other financing activities, net	(44,396)	(41,893)	(4,901)
Net cash used in financing activities	(490,631)	(222,756)	(271,949)
Effect of currency exchange rate changes on cash and cash equivalents and restricted cash	(92,116)	81,564	(606)
NET INCREASE IN CASH AND CASH EQUIVALENTS AND RESTRICTED CASH	500,534	945,502	229,801
CASH AND CASH EQUIVALENTS AND RESTRICTED CASH, AT BEGINNING OF YEAR	2,039,247	1,093,745	863,944
CASH AND CASH EQUIVALENTS AND RESTRICTED CASH, AT END OF YEAR	$ 2,539,781	$ 2,039,247	$ 1,093,745
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Cash paid during the year for:			
Interest	$ 41,068	$ 67,463	$ 86,666
Income tax payments, net	$ 330,426	$ 51,681	$ 365,065
Non-cash investing and financing activities:			
Deferred purchase consideration - Turner & Townsend	$ 485,414	$ —	$ —
Non-controlling interest as part of Turner & Townsend Acquisition	774,122	—	—
Investment in alignment shares and private placement warrants of Altus Power, Inc.	141,871	—	—
Reduction in redeemable non-controlling interest - special purpose acquisition company	211,501	—	—
Reduction of trust account - special purpose acquisition company	189,801	—	—

The accompanying notes are an integral part of these consolidated financial statements.

CBRE GROUP, INC.
CONSOLIDATED STATEMENTS OF EQUITY
(Dollars in thousands, except share data)

	CBRE Group, Inc. Stockholders'							
					Accumulated other comprehensive loss			
	Shares	Class A common stock	Additional paid-in capital	Accumulated earnings	Minimum pension liability	Foreign currency translation and other	Non-controlling interests	Total
Balance at December 31, 2018	336,912,783	$ 3,369	$ 1,149,013	$ 4,504,684	$ (147,907)	$ (570,362)	$ 71,105	$ 5,009,902
Net income	—	—	—	1,282,357	—	—	9,093	1,291,450
Pension liability adjustments, net of tax	—	—	—	—	944	—	—	944
Restricted stock awards vesting	920,407	9	(9)	—	—	—	—	—
Compensation expense for equity awards	—	—	127,738	—	—	—	—	127,738
Units repurchased for payment of taxes on equity awards	—	—	(18,426)	—	—	—	—	(18,426)
Repurchase of common stock	(3,080,907)	(31)	(145,106)	—	—	—	—	(145,137)
Foreign currency translation loss	—	—	—	—	—	(14,047)	(45)	(14,092)
Amounts reclassified from accumulated other comprehensive loss to interest expense, net of tax	—	—	—	—	—	1,320	—	1,320
Unrealized holding gains on available for sale debt securities, net of tax	—	—	—	—	—	2,101	—	2,101
Contributions from non-controlling interests	—	—	—	—	—	—	46,612	46,612
Distributions to non-controlling interests	—	—	—	—	—	—	(3,957)	(3,957)
Deconsolidation of investments	—	—	—	—	—	—	(76,349)	(76,349)
Legal entity restructuring, net	—	—	—	—	—	63,149	—	63,149
Other	—	1	2,734	6,108	—	(14,946)	(6,040)	(12,143)
Balance at December 31, 2019	334,752,283	3,348	1,115,944	5,793,149	(146,963)	(532,785)	40,419	6,273,112
Net income	—	—	—	751,989	—	—	3,879	755,868
Pension liability adjustments, net of tax	—	—	—	—	7,343	—	—	7,343
Restricted stock awards vesting	1,859,146	19	(19)	—	—	—	—	—
Compensation expense for equity awards	—	—	60,391	—	—	—	—	60,391
Units repurchased for payment of taxes on equity awards	—	—	(43,835)	—	—	—	—	(43,835)
Repurchase of common stock	(1,050,084)	(11)	(50,017)	—	—	—	—	(50,028)
Foreign currency translation gain	—	—	—	—	—	124,045	215	124,260

The accompanying notes are an integral part of these consolidated financial statements.

CBRE GROUP, INC.
CONSOLIDATED STATEMENTS OF EQUITY
(Dollars in thousands, except share data)

	CBRE Group, Inc. Stockholders'							
					Accumulated other comprehensive loss			
	Shares	Class A common stock	Additional paid-in capital	Accumulated earnings	Minimum pension liability	Foreign currency translation and other	Non-controlling interests	Total
Amounts reclassified from accumulated other comprehensive loss to interest expense, net of tax	—	—	—	—	—	426	—	426
Unrealized holding gains on available for sale debt securities, net of tax	—	—	—	—	—	1,436	—	1,436
Contributions from non-controlling interests	—	—	—	—	—	—	2,173	2,173
Distributions to non-controlling interests	—	—	—	—	—	—	(4,330)	(4,330)
Other	—	—	(7,825)	(15,081)	—	16,772	(595)	(6,729)
Balance at December 31, 2020	335,561,345	3,356	1,074,639	6,530,057	(139,620)	(390,106)	41,761	7,120,087
Net income	—	—	—	1,836,574	—	—	5,341	1,841,915
Pension liability adjustments, net of tax	—	—	—	—	35,304	—	—	35,304
Restricted stock awards vesting	1,268,983	13	(13)	—	—	—	—	—
Compensation expense for equity awards	—	—	184,934	—	—	—	—	184,934
Units repurchased for payment of taxes on equity awards	—	—	(38,864)	—	—	—	—	(38,864)
Repurchase of common stock	(3,954,369)	(40)	(372,909)	—	—	—	—	(372,949)
Foreign currency translation loss	—	—	—	—	—	(147,868)	(11,854)	(159,722)
Amounts reclassified from accumulated other comprehensive loss to interest expense, net of tax	—	—	—	—	—	431	—	431
Unrealized holding losses on available for sale debt securities, net of tax	—	—	—	—	—	(1,964)	—	(1,964)
Contributions from non-controlling interests	—	—	—	—	—	—	862	862
Distributions to non-controlling interests	—	—	—	—	—	—	(4,572)	(4,572)
Acquisition of non-controlling interests	—	—	—	—	—	—	808,633	808,633
Other	—	—	(48,895)	—	—	3,164	(9,247)	(54,978)
Balance at December 31, 2021	332,875,959	$ 3,329	$ 798,892	$ 8,366,631	$ (104,316)	$ (536,343)	$ 830,924	$ 9,359,117

The accompanying notes are an integral part of these consolidated financial statements.

1. Nature of Operations

CBRE Group, Inc., a Delaware corporation (which may be referred to in these financial statements as "the company," "we," "us" and "our"), was incorporated on February 20, 2001. We are the world's largest commercial real estate services and investment firm, based on 2021 revenue, with leading global market positions in our leasing, property sales, occupier outsourcing and valuation businesses.

Our business is focused on providing services to real estate investors and occupiers. For investors, we provide capital markets (property sales, mortgage origination, sales and servicing), property leasing, investment management, property management, valuation and development services, among others. For occupiers, we provide facilities management, project management, transaction (both property sales and leasing) and consulting services, among others. We generate revenue from both management fees (large multi-year portfolio and per-project contracts) and commissions on transactions. As of December 31, 2021, the company has more than 105,000 employees (excluding Turner & Townsend employees) serving clients in more than 100 countries providing services under the following brand names: "CBRE" (real estate advisory and outsourcing services); "CBRE Investment Management" (investment management); "Trammell Crow Company" (U.S. development); "Telford Homes" (U.K. development). CBRE sponsored a special purpose acquisition company, or SPAC, CBRE Acquisition Holdings, Inc, which merged with and into Altus Power, Inc. (the SPAC Merger), a leading provider of solar energy for commercial and industrial properties. Altus Power Inc. (Altus) began trading as a public company on the NYSE on December 10, 2021 under the ticker symbol "AMPS."

Considerations Related to the Covid-19 Pandemic

From 2010 to early 2020, commercial real estate markets had generally been characterized by increased demand for space, falling vacancies, higher rents and strong capital flows, leading to solid property sales and leasing activity. This healthy backdrop changed abruptly in the first quarter of 2020 with the emergence of the novel coronavirus (Covid-19) and resultant sharp contraction of economic activity across much of the world. There was a significant impact on commercial real estate markets, as many property owners and occupiers put transactions on hold and withdrew existing mandates, sharply reducing sales and leasing volumes. There has since been a sharp economic and commercial real estate recovery. However, it is expected the pandemic has changed the utilization of many types of commercial real estate, which is likely to impact our business.

2. Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include our accounts and those of our consolidated subsidiaries, which are comprised of variable interest entities in which we are the primary beneficiary and voting interest entities, in which we determined we have a controlling financial interest, under the "*Consolidations*" Topic of the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) (Topic 810). The permanent and redeemable equity attributable to non-controlling interests in subsidiaries is shown separately in the accompanying consolidated balance sheets. All significant intercompany accounts and transactions have been eliminated in consolidation.

Variable Interest Entities (VIEs)

We determine whether an entity is a VIE and, if so, whether it should be consolidated by utilizing judgments and estimates that are inherently subjective. Our determination of whether an entity in which we hold a direct or indirect variable interest is a VIE is based on several factors, including whether the entity's total equity investment at risk upon inception is sufficient to finance the entity's activities without additional subordinated financial support. We make judgments regarding the sufficiency of the equity at risk based first on a qualitative analysis, and then a quantitative analysis, if necessary.

We analyze any investments in VIEs to determine if we are the primary beneficiary. In evaluating whether we are the primary beneficiary, we evaluate our direct and indirect economic interests in the entity. A reporting entity is determined to be the primary beneficiary if it holds a controlling financial interest in the VIE. Determining which reporting entity, if any, has a controlling financial interest in a VIE is primarily a qualitative approach focused on identifying which reporting entity has both: (i) the power to direct the activities of a VIE that most significantly impact such entity's economic performance; and (ii) the obligation to absorb losses or the right to receive benefits from such entity that could potentially be significant to such entity. Performance of that analysis requires the exercise of judgment.

We consider a variety of factors in identifying the entity that holds the power to direct matters that most significantly impact the VIE's economic performance including, but not limited to, the ability to direct financing, leasing, construction and other operating decisions and activities. In addition, we consider the rights of other investors to participate in those decisions, to replace the manager and to sell or liquidate the entity. We determine whether we are the primary beneficiary of a VIE at the time we become involved with a variable interest entity and reconsider that conclusion continually.

We consolidate any VIE of which we are the primary beneficiary and disclose significant VIEs of which we are not the primary beneficiary, if any, as well as disclose our maximum exposure to loss related to VIEs that are not consolidated (see Note 6).

Voting Interest Entities (VOEs)

For VOEs, we consolidate the entity if we have a controlling financial interest. We have a controlling financial interest in a VOE if: (i) for legal entities other than limited partnerships, we own a majority voting interest in the VOE or, for limited partnerships and similar entities, we own a majority of the entity's kick-out rights through voting limited partnership interests; and (ii) non-controlling shareholders or partners do not hold substantive participating rights and no other conditions exist that would indicate that we do not control the entity.

Marketable Securities and Other Investments

Debt securities are classified as held to maturity when we have the positive intent and ability to hold the securities to maturity. Marketable debt securities not classified as held to maturity are classified as available for sale. Available for sale debt securities are carried at their fair value and any difference between cost and fair value is recorded as an unrealized gain or loss, net of income taxes, and is reported as accumulated other comprehensive income (loss) in the consolidated statements of equity. Premiums and discounts are recognized in interest using the effective interest method. Realized gains and losses and declines in value resulting from credit losses on available for sale debt securities have not been significant. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available for sale are included in interest income.

Our investments in unconsolidated subsidiaries in which we have the ability to exercise significant influence over operating and financial policies, but do not control, or entities which are VIEs in which we are not the primary beneficiary are accounted for under the equity method in accordance with the "*Instruments - Equity Method and Joint Ventures"* topic of the FASB ASC (Topic 323). We eliminate transactions with such equity method subsidiaries to the extent of our ownership in such subsidiaries. Accordingly, our share of the earnings from these equity-method basis companies is included in consolidated net income. We have elected to account for certain eligible investments and related interests at fair value in accordance with the *"Financial Instruments"* topic of the FASB ASC (Topic 825).

For a portion of our investments in unconsolidated subsidiaries reported at fair value, we estimate fair value using the net asset value (NAV) per share (or its equivalent) our investees provide. These investments are considered investment companies, or are the equivalent of investment companies, as they carry all investments at fair value, with unrealized gains and losses resulting from changes in fair value reflected in earnings. Accordingly, we effectively carry our investments at an amount that is equivalent to our proportionate share of the net assets of each investment that would be allocated to us if each investment was liquidated at the net asset value as of the measurement date.

All equity investments that do not result in consolidation and are not accounted for under the equity method are measured at fair value with changes therein reflected in net income. Equity instruments that do not have readily determinable fair values and do not qualify for using the net asset value per share practical expedient in the *"Fair Value Measurements"* topic of the FASB ASC (Topic 820) are measured at cost, less any impairment.

Impairment Evaluation

Impairment losses on investments, other than available for sale debt securities and investments otherwise measured at fair value, are recognized upon evidence of other-than-temporary losses of value. When testing for impairment on investments that are not actively traded on a public market, we generally use a discounted cash flow approach to estimate the fair value of our investments and/or look to comparable activities in the marketplace. Management's judgment is required in developing the assumptions for the discounted cash flow approach. These assumptions include net asset values, internal rates of return, discount and capitalization rates, interest rates and financing terms, rental rates, timing of leasing activity, estimates of lease terms and related concessions, etc. When determining if impairment is other-than-temporary, we also look to the length of time and the extent to which fair value has been less than cost as well as the financial condition and near-term prospects of each investment. Based on our review, we did not record any significant other-than-temporary impairment losses during the years ended December 31, 2021, 2020 and 2019.

Use of Estimates

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (GAAP), which require management to make estimates and assumptions about future events, including the impact Covid-19 may have on our business. These estimates and the underlying assumptions affect the amounts of assets and liabilities reported and reported amounts of revenue and expenses. Such estimates include the value of goodwill, intangibles and other long-lived assets, real estate assets, accounts receivable, contract assets, operating lease assets, investments in unconsolidated subsidiaries and assumptions used in the calculation of income taxes, retirement and other post-employment benefits, among others. These estimates and assumptions are based on our best judgment. We evaluate our estimates and assumptions on an ongoing basis using historical experience and other factors, including consideration of the current economic environment, and adjust such estimates and assumptions when facts and circumstances dictate. As future events and their effects cannot be determined with precision, actual results could differ significantly from these estimates. Changes in estimates resulting from continuing changes in the economic environment will be reflected in the financial statements in future periods.

Cash and Cash Equivalents

Cash and cash equivalents generally consist of cash and highly liquid investments with an original maturity of three months or less. Included in the accompanying consolidated balance sheets as of December 31, 2021 and 2020 is cash and cash equivalents of $125.2 million and $102.9 million, respectively, from consolidated funds and other entities, which are not available for general corporate use. We also manage certain cash and cash equivalents as an agent for our investment and property and facilities management clients. These amounts are not included in the accompanying consolidated balance sheets (see *Fiduciary Funds* discussion below).

Restricted Cash

Included in the accompanying consolidated balance sheets as of December 31, 2021 and 2020 is restricted cash of $108.8 million and $143.1 million, respectively. The balances primarily include restricted cash set aside to cover funding obligations as required by contracts executed by us in the ordinary course of business.

Fiduciary Funds

The accompanying consolidated balance sheets do not include the net assets of escrow, agency and fiduciary funds, which are held by us on behalf of clients and which amounted to $8.6 billion and $8.1 billion at December 31, 2021 and 2020, respectively.

Concentration of Credit Risk

Financial instruments that potentially subject us to credit risk consist principally of trade receivables and interest-bearing investments. Users of real estate services account for a substantial portion of trade receivables and collateral is generally not required. The risk associated with this concentration is limited due to the large number of users and their geographic dispersion.

We place substantially all of our interest-bearing investments with several major financial institutions to limit the amount of credit exposure with any one financial institution.

Property and Equipment

Property and equipment, which includes leasehold improvements, is stated at cost, net of accumulated depreciation and impairment. Depreciation and amortization of property and equipment is computed primarily using the straight-line method over estimated useful lives ranging up to 10 years. Leasehold improvements are amortized over the term of their associated leases, excluding options to renew, since such leases generally do not carry prohibitive penalties for non-renewal. We capitalize expenditures that significantly increase the life of our assets and expense the costs of maintenance and repairs.

We review property and equipment for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If this review indicates that such assets are considered to be impaired, the impairment is recognized in the period the changes occur and represents the amount by which the carrying value exceeds the fair value of the asset.

Certain costs related to the development or purchase of internal-use software are capitalized. Internal-use software costs that are incurred in the preliminary project stage are expensed as incurred. Significant direct consulting costs and certain payroll and related costs, which are incurred during the development stage of a project are generally capitalized and amortized over a three-year period (except for enterprise software development platforms, which range fromthree to seven years) when placed into production.

Real Estate

Classification and Impairment Evaluation

We classify real estate in accordance with the criteria of the "*Property, Plant and Equipment*" Topic of the FASB ASC (Topic 360) as follows: (i) real estate held for sale, which includes completed assets or land for sale in its present condition that meet all of Topic 360's "held for sale" criteria; (ii) real estate under development (current), which includes real estate that we are in the process of developing that is expected to be completed and disposed of within one year of the balance sheet date; (iii) real estate under development (non-current), which includes real estate that we are in the process of developing that is expected to be completed and disposed of more than one year from the balance sheet date; or (iv) real estate held for investment, which consists of land on which development activities have not yet commenced and completed assets or land held for disposition that do not meet the "held for sale" criteria. Any asset reclassified from real estate held for sale to real estate under development (current or non-current) or real estate held for investment is recorded individually at the lower of its fair value at the date of the reclassification or its carrying amount before it was classified as "held for sale," adjusted (in the case of real estate held for investment) for any depreciation that would have been recognized had the asset been continuously classified as real estate held for investment.

Real estate held for sale is recorded at the lower of cost or fair value less cost to sell. If an asset's fair value less cost to sell, based on discounted future cash flows, management estimates or market comparisons, is less than its carrying amount, an allowance is recorded against the asset. Real estate under development and real estate held for investment are carried at cost less depreciation and impairment, as applicable. Buildings and improvements included in real estate held for investment are depreciated using the straight-line method over estimated useful lives, generally up to 39 years. Tenant improvements included in real estate held for investment are amortized using the straight-line method over the shorter of their estimated useful lives or terms of the respective leases. Land improvements included in real estate held for investment are depreciated over their estimated useful lives, up to 15 years.

Real estate under development and real estate held for investment are evaluated for impairment and losses are recorded when undiscounted cash flows estimated to be generated by an asset are less than the asset's carrying amount. The amount of the impairment loss, if any, is calculated as the excess of the asset's carrying value over its fair value, which is determined using a discounted cash flow analysis, management estimates or market comparisons.

A summary of our real estate assets is as follows (dollars in thousands):

	December 31,	
	2021	2020
Real estate under development, current (included in other current assets)	$ 96,237	$ 55,072
Real estate and other assets held for sale (included in other current assets)	142	3,710
Real estate under development	326,416	277,630
Real estate held for investment (included in other assets, net)	4,447	3,795
Total real estate	$ 427,242	$ 340,207

Cost Capitalization and Allocation

When acquiring, developing and constructing real estate assets, we capitalize recoverable costs. Capitalization begins when the activities related to development have begun and ceases when activities are substantially complete and the asset is available for occupancy. Recoverable costs capitalized include pursuit costs, or pre-acquisition/pre-construction costs, taxes and insurance, interest, development and construction costs and costs of incidental operations. We do not capitalize any internal costs when acquiring, developing and constructing real estate assets. We expense transaction costs for acquisitions that qualify as a business in accordance with the "*Business Combinations*" Topic of the FASB ASC (Topic 805). Pursuit costs capitalized in connection with a potential development project that we have determined not to pursue are written off in the period that determination is made.

At times, we purchase bulk land that we intend to sell or develop in phases. The land basis allocated to each phase is based on the relative estimated fair value of the phases before construction. We allocate construction costs incurred relating to more than one phase between the various phases; if the costs cannot be specifically attributed to a certain phase or the improvements benefit more than one phase, we allocate the costs between the phases based on their relative estimated sales values, where practicable, or other value methods as appropriate under the circumstances. Relative allocations of the costs are revised as the sales value estimates are revised.

When acquiring real estate with existing buildings, we allocate the purchase price between land, land improvements, building and intangibles related to in-place leases, if any, based on their relative fair values. The fair values of acquired land and buildings are determined based on an estimated discounted future cash flow model with lease-up assumptions as if the building was vacant upon acquisition. The fair value of in-place leases includes the value of lease intangibles for above or below-market rents and tenant origination costs, determined on a lease by lease basis. The capitalized values for both lease intangibles and tenant origination costs are amortized over the term of the underlying leases. Amortization related to lease intangibles is recorded as either an increase to or a reduction of rental income and amortization for tenant origination costs is recorded to amortization expense.

Disposition of Real Estate

We account for gains and losses on the sale of real estate and other nonfinancial assets or in substance nonfinancial assets to noncustomers that are not a output of our ordinary activities and are not a business in accordance with Topic 610-20, *"Other Income – Gains and Losses from the Derecognition of Nonfinancial Assets."* Where we do not have a controlling financial interest in the entity that holds the transferred assets after the transaction, we derecognize the assets or in substance nonfinancial assets and recognize a gain or loss when control of the underlying assets transfer to the counterparty.

We may also dispose of real estate through the transfer of a long-term leasehold representing a major part of the remaining economic life of the property. We account for these transfers as sales-type leases in accordance with the "*Lease*s" Topic of the FASB ASC (Topic 842) by derecognizing the carrying amount of the underlying asset, recognizing any net investment in the lease and recognizing selling profit or loss in net income.

Goodwill and Other Intangible Assets

Our acquisitions require the application of purchase accounting, which results in tangible and identifiable intangible assets and liabilities of the acquired entity being recorded at fair value. The difference between the purchase price and the fair value of net assets acquired is recorded as goodwill. Deferred consideration arrangements granted in connection with a business combination are evaluated to determine whether all or a portion is, in substance, additional purchase price or compensation for services. Additional purchase price is added to the fair value of consideration transferred in the business combination and compensation is included in operating expenses in the period it is incurred. The majority of our goodwill balance has resulted from our acquisition of CBRE Services, Inc. (CBRE Services) in 2001 (the 2001 Acquisition), our acquisition of Insignia Financial Group, Inc. (Insignia) in 2003 (the Insignia Acquisition), our acquisition of the Trammell Crow Company in 2006 (the Trammell Crow Company Acquisition), our acquisition of substantially all of the ING Group N.V. (ING) Real Estate Investment Management (REIM) operations in Europe and Asia, as well as substantially all of Clarion Real Estate Securities (CRES) in 2011 (collectively referred to as the REIM Acquisitions), our acquisition of Norland Managed Services Ltd (Norland) in 2013 (the Norland Acquisition), our acquisition of Johnson Controls, Inc. (JCI)'s Global Workplace Solutions (JCI-GWS) business in 2015, our acquisition of FacilitySource Holdings, LLC (FacilitySource) in 2018, our acquisition of Telford Homes Plc (Telford) in 2019 and our acquisition of a majority interest in Turner & Townsend in 2021. Other intangible assets that have indefinite estimated useful lives that are not being amortized include certain management contracts identified in the REIM Acquisitions, a trademark, which was separately identified as a result of the 2001 Acquisition, and a trademark identified as part of the Turner & Townsend Acquisition. The remaining other intangible assets primarily include customer relationships, mortgage servicing rights and trade names/trademarks, which are all being amortized over estimated useful lives ranging up to 20 years.

We are required to test goodwill and other intangible assets deemed to have indefinite useful lives for impairment at least annually, or more often if circumstances or events indicate a change in the impairment status, in accordance with FASB ASC Topic 350, " *Intangibles – Goodwill and Other*." ASC paragraphs 350-20-35-3 through 35-3B permit, but do not require an entity to perform a qualitative assessment with respect to any of its reporting units or indefinite-lived intangible assets to determine whether a quantitative impairment test is needed. Entities are permitted to assess based on qualitative factors whether it is more likely than not that a reporting unit's or indefinite-lived intangible asset's fair value is less than its carrying amount before applying the quantitative impairment test. If it is more likely than not that the fair value of a reporting unit or indefinite-lived intangible asset is less than its carrying amount, the entity conducts the quantitative impairment test. If not, the entity does not need to apply the quantitative test. The qualitative test is elective and an entity can go directly to the quantitative test rather than making a more-likely-than-not assessment based on an evaluation of qualitative factors. When performing a quantitative test, we primarily use a discounted cash flow approach to estimate the fair value of our reporting units and indefinite-lived intangible assets. Management's judgment is required in developing the assumptions for the discounted cash flow model. These assumptions include revenue growth rates, profit margin percentages, discount rates, etc. We record an impairment loss when the amount by which a reporting unit's or indefinite-lived intangible asset's carrying value exceeds its fair value, not to exceed the carrying amount of the goodwill or indefinite-lived intangible asset.

Business Combinations

We estimate the fair value of identifiable assets, liabilities and any non-controlling interests acquired in a business combination and recognize goodwill as the excess of the purchase price over the recorded value of the acquired assets and liabilities in accordance with ASC Topic 805. When estimating the fair value of acquired assets, we utilize various valuation models which may require significant judgment, particularly where observable market values do not exist. Inputs requiring significant judgment may include discount rates, growth rates, cost of capital, royalty rates, tax rates, market values, depreciated replacement costs, selling prices less costs to dispose, and remaining useful lives, among others. Reasonable differences in these inputs could have a significant impact on the estimated value of acquired assets, the resulting value of goodwill, subsequent depreciation and amortization expense, and the results of future asset impairment evaluations.

Leases

We are the lessee in contracts for our office space tenancies, for leased vehicles and for certain legacy units in our indirect wholly-owned subsidiary CBRE Hana, LLC (Hana). We monitor our service arrangements to evaluate whether they meet the definition of a lease.

The present value of lease payments, which are either fixed payments, in-substance fixed payments, or variable payments tied to an index or rate are recognized on the consolidated balance sheet with corresponding lease liabilities and right-of-use assets upon the commencement of the lease. These lease costs are expensed over the respective lease term in accordance with the classification of the lease (i.e., operating versus finance classification). Variable lease payments not tied to an index or rate are expensed as incurred and are not subject to capitalization.

The base terms for our lease arrangements typically do not extend beyond10 years. We commonly have renewal options in our leases, but most of these options do not create a significant economic incentive for us to extend the lease term. Therefore, payments during periods covered by these renewal options are typically not included in our lease liabilities and right-of-use assets. Specific to our vehicle leases, early termination options are common and economic penalties associated with early termination of these contracts are typically significant enough to make it reasonably certain that we will not exercise such options. Therefore, payments during periods covered by these early termination options in vehicle leases are typically included in our lease liabilities and right-of-use assets. As an accounting policy election, our short-term leases with an initial term of 12 months or less are not recognized as lease liabilities and right-of-use assets in the consolidated balance sheets. The rent expense associated with short term leases is recognized on a straight-line basis over the lease term and was not significant.

Most of our office space leases include variable payments based on our share of actual common area maintenance and operating costs of the leased property. Many of our vehicle leases include variable payments based on actual service and fuel costs. For both office space and vehicle leases, we have elected the practical expedient to not separate lease components from non-lease components. Therefore, these costs are classified as variable lease payments.

Lease payments are typically discounted at our incremental borrowing rate because the interest rate implicit in the lease cannot be readily determined in the absence of key inputs which are typically not reported by our lessors. Because we do not generally borrow on a collateralized basis, judgement was used to estimate the secured borrowing rate associated with our leases based on relevant market data and our inputs applied to accepted valuation methodologies. The incremental borrowing rate calculated for each lease also reflects the lease term, currency, and geography specific to each lease.

Deferred Financing Costs

Costs incurred in connection with financing activities are generally deferred and amortized over the terms of the related debt agreements ranging up toten years. Debt issuance costs related to a recognized debt liability are presented in the accompanying consolidated balance sheets as a direct deduction from the carrying amount of that debt liability. Amortization of these costs is charged to interest expense in the accompanying consolidated statements of operations. Accounting Standards Update (ASU) 2015-15, *"Interest—Imputation of Interest (Subtopic 835-30): Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements"*permits classifying debt issuance costs associated with a line of credit arrangement as an asset, regardless of whether there are any outstanding borrowings on the arrangement. Total deferred financing costs, net of accumulated amortization, related to our revolving line of credit have been included in other assets in the accompanying consolidated balance sheets and were $9.5 million and $13.0 million as of December 31, 2021 and 2020, respectively.

During 2021, we issued $500.0 million in aggregate principal amount of2.500% senior notes due April 1, 2031. In connection with this financing, we incurred financing, legal, advisory, and other fees of approximately $5.0 million. Additionally, we also paid off in full our $300.0 million tranche A senior term loan.

During 2020, we redeemed in full our $425.0 million aggregate outstanding principal amount of 5.25% senior notes. In connection with this early redemption, we incurred costs, including a $73.6 million premium paid and the write-off of $2.0 million of unamortized premium and debt issuance costs, both of which were included in write-off of financing costs on extinguished debt in the accompanying consolidated statements of operations.

During 2019, we entered into an additional incremental assumption agreement with respect to our credit agreement which: (i) extended the maturity of the U.S. dollar tranche A term loans, (ii) extended the termination date of the revolving credit commitments available and (iii) made certain changes to the interest rates and fees applicable to such tranche A term loans and revolving credit commitments. During the year ended December 31, 2019, we incurred approximately $ 5.8 million of financing costs, of which $2.6 million were included in write-off of financing costs on extinguished debt in the accompanying consolidated statements of operations.

See Note 11 for additional information on activities associated with our debt.

Revenue Recognition

We account for revenue with customers in accordance with FASB ASC Topic, "*Revenue from Contracts with Customers*" (Topic 606). Topic 606 also includes Subtopic 340-40, "*Other Assets and Deferred Costs – Contracts with Customers*," which requires deferral of incremental costs to obtain and fulfill a contract with a customer. Revenue is recognized when or as control of the promised services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those services.

The following is a description of principal activities – separated by reportable segments – from which we generate revenue. For more detailed information about our reportable segments, see Notes 18 and 19.

Advisory Services

Our Advisory Services segment provides a comprehensive range of services globally, including property leasing, property sales, mortgage services, property management and valuation services.

Property Leasing and Property Sales

We provide strategic advice and execution for owners, investors, and occupiers of real estate in connection with the leasing of office, industrial and retail space. We also offer clients fully integrated property sales services under the CBRE Capital Markets brand. We are compensated for our services in the form of a commission and, in some instances may earn various forms of variable incentive consideration. Our commission is paid upon the occurrence of certain contractual event(s) which may be contingent. For example, a portion of our leasing commission may be paid upon signing of the lease by the tenant, with the remaining paid upon occurrence of another future contingent event (e.g. payment of first month's rent or tenant move-in). For leases, we typically satisfy our performance obligation at a point in time when control is transferred; generally, at the time of the first contractual event where there is a present right to payment. We look to history, experience with a customer, and deal specific considerations as part of the most likely outcome estimation approach to support our judgement that the second contingency (if applicable) will be met. Therefore, we typically accelerate the recognition of the revenue associated with the second contingent event. For sales, our commission is typically paid at the closing of the sale, which represents transfer of control for services to the customer.

In addition to our commission, we may recognize other forms of variable consideration which can include, but are not limited to, commissions subject to concession or claw back and volume based discounts or rebates. We assess variable consideration on a contract by contract basis, and when appropriate, recognize revenue based on our assessment of the outcome (using the most likely outcome approach or weighted probability) and historical results, if comparable and representative. We recognize variable consideration if it is deemed probable that there will not be significant reversal in the future.

Mortgage Originations and Loan Sales

We offer clients commercial mortgage and structured financing services. Fees from services within our mortgage brokerage business that are in the scope of Topic 606 include fees earned for the brokering of commercial mortgage loans primarily through relationships established with investment banking firms, national and regional banks, credit companies, insurance companies and pension funds. We are compensated for our brokerage services via a fee paid upon successful placement of a commercial mortgage borrower with a lender who will provide financing. The fee earned is contingent upon the funding of the loan, which represents the transfer of control for services to the customer. Therefore, we typically satisfy our performance obligation at the point in time of the funding of the loan.

We also earn fees from the origination and sale of commercial mortgage loans for which the company retains the servicing rights. These fees are governed by the "*Fair Value Measurements and Disclosures*" topic (Topic 820) and "*Transfers and Servicing*" topic (Topic 860) of the FASB ASC. Upon origination of a mortgage loan held for sale, the fair value of the mortgage servicing rights (MSR) to be retained is included in the forecasted proceeds from the anticipated loan sale and results in a net gain (which is reflected in revenue). Upon sale, we record a servicing asset or liability based on the fair value of the retained MSR associated with the transferred loan. Subsequent to the initial recording, MSRs are amortized and carried at the lower of amortized cost or fair value in other intangible assets in the accompanying consolidated balance sheets. They are amortized in proportion to and over the estimated period that the servicing income is expected to be received.

Property Management Services

We provide property management services on a contractual basis for owners of and investors in office, industrial and retail properties. These services include marketing, building engineering, accounting and financial services. We are compensated for our services through a monthly management fee earned based on either a specified percentage of the monthly rental income, rental receipts generated from the property under management or a fixed fee. We are also often reimbursed for our administrative and payroll costs directly attributable to the properties under management. Property management services represent a series of distinct daily services rendered over time. Consistent with the transfer of control for distinct, daily services to the customer, revenue is recognized at the end of each period for the fees associated with the services performed. The amount of revenue recognized is presented gross for any services provided by our employees, as we control them. We generally do not control third-party services delivered to property management clients. As such, we generally report revenues net of third-party reimbursements.

Valuation Services

We provide valuation services that include market-value appraisals, litigation support, discounted cash flow analyses, feasibility studies as well as consulting services such as property condition reports, hotel advisory and environmental consulting. We are compensated for valuation services in the form of a fee, which is payable on the occurrence of certain events (e.g., a portion on the delivery of a draft report with the remaining on the delivery of the final report). For consulting services, we may be paid based on the occurrence of time or event-based milestones (such as the delivery of draft reports). We typically satisfy our performance obligation for valuation services as services are rendered over time.

Global Workplace Solutions

Our Global Workplace Solutions segment provides a broad suite of integrated, contractually-based outsourcing services globally for occupiers of real estate, including facilities management, and project management services.

Facilities Management and Project Management Services

Facilities management involves the day-to-day management of client-occupied space and includes headquarter buildings, regional offices, administrative offices, data centers and other critical facilities, manufacturing and laboratory facilities, distribution facilities and retail space. Contracts for facilities management services are often structured so we are reimbursed for client-dedicated personnel costs and subcontracted vendor costs as well as associated overhead expenses plus a monthly fee, and, in some cases, annual incentives tied to agreed-upon performance targets, with any penalties typically capped. In addition, we have contracts for facilities management services based on fixed fees or guaranteed maximum prices. Fixed fee contracts are typically structured where an agreed upon scope of work is delivered for a fixed price while guaranteed maximum price contracts are structured with an agreed upon scope of work that will be provided to the client for a not to exceed price. Facilities management services represent a series of distinct daily services rendered over time. Consistent with the transfer of control for distinct, daily services to the customer, revenue is typically recognized at the end of each period for the fees associated with the services performed.

Project management services are often provided on a portfolio wide or programmatic basis. Revenues from project management services generally include construction management, fixed management fees, variable fees, and incentive fees if certain agreed-upon performance targets are met. Revenues from project management may also include reimbursement of payroll and related costs for personnel providing the services and subcontracted vendor costs. Project management services represent a series of distinct daily services rendered over time. Consistent with the transfer of control for distinct, daily services to the customer, revenue is typically recognized at the end of each period for the fees associated with the services performed.

The amount of revenue recognized is presented gross for any services provided by our employees, as we control them. This is evidenced by our obligation for their performance and our ability to direct and redirect their work, as well as negotiate the value of such services. The amount of revenue recognized related to the majority of facilities management contracts and certain project management arrangements is presented gross (with offsetting expense recorded in cost of revenue) for reimbursements of costs of third-party services because we control those services that are delivered to the client. In the instances when we do not control third-party services delivered to the client, we report revenues net of the third-party reimbursements.

In addition to our management fee, we receive various types of variable consideration which can include, but is not limited to: key performance indicator bonuses or penalties which may be linked to subcontractor performance, gross maximum price, glidepaths, savings guarantees, shared savings, or fixed fee structures. We assess variable consideration on a contract by contract basis, and when appropriate, recognize revenue based on our assessment of the outcome (using the most likely outcome approach or weighted probability) and historical results, if comparable and representative. Using management assessment and historical results and statistics, we recognize revenue if it is deemed probable there will not be significant reversal in the future.

Real Estate Investments

Our Real Estate Investments segment is comprised of investment management services provided globally; development services in the U.S., the U.K. and Europe and a service designed to help property occupiers and owners meet the growing demand for flexible office space solutions on a global basis.

Investment Management Services

Our investment management services are provided to pension funds, insurance companies, sovereign wealth funds, foundations, endowments and other institutional investors seeking to generate returns and diversification through investment in real assets. We sponsor investment programs that span the risk/return spectrum in: North America, Europe, Asia and Australia. We are typically compensated in the form of a base management fee, disposition fees, acquisition fees and incentive fees in the form of performance fees or carried interest based on fund type (open or closed ended, respectively). For the base management fee, we typically satisfy the performance obligation as service is rendered over time pursuant to the series guidance. Consistent with the transfer of control for distinct, daily services to the customer, revenue is recognized at the end of each period for the fees associated with the services performed. For acquisition and disposition services, we typically satisfy the performance obligation at a point in time (at acquisition or upon disposition). For contracts with contingent fees, including performance fees, incentive fees and carried interest, we assess variable consideration on a contract by contract basis, and when appropriate, recognize revenue based on our assessment of the outcome (using the most likely outcome approach or weighted probability) and historical results, if comparable and representative. Revenue associated with performance fees and carried interest are typically constrained due to volatility in the real estate market, a broad range of possible outcomes, and other factors in the market that are outside of our control.

Development Services

Our development services consist of real estate development and investment activities in the U.S., the U.K. and Europe to users of and investors in commercial real estate, as well as for our own account.

We pursue opportunistic, risk-mitigated development and investment in commercial real estate across a wide spectrum of property types, including: industrial, office and retail properties; healthcare facilities of all types (medical office buildings, hospitals and ambulatory surgery centers); and residential/mixed-use projects. We pursue development and investment activity on behalf of our clients on a fee basis with no, or limited, ownership interest in a property, in partnership with our clients through co-investment – either on an individual project basis or through programs with certain strategic capital partners or for our own account with 100% ownership. Development services represent a series of distinct daily services rendered over time. Consistent with the transfer of control for distinct, daily services to the customer, revenue is recognized at the end of each period for the fees associated with the services performed. Fees are typically payable monthly over the service term or upon contractual defined events, like project milestones. In addition to development fee revenue, we receive various types of variable consideration which can include, but is not limited to, contingent lease-up bonuses, cost saving incentives, profit sharing on sales and at-risk fees. We assess variable consideration on a contract by contract basis, and when appropriate, recognize revenue based on our assessment of the outcome (using the most likely outcome approach or weighted probability) and historical results, if comparable and representative. We accelerate revenue if it is deemed probable there will not be significant reversal in the future. Sales of real estate to customers which are considered an output of ordinary activities are recognized as revenue when or as control of the assets are transferred to the customer.

Accounts Receivable and Allowance for Doubtful Accounts

We record accounts receivable for our unconditional rights to consideration arising from our performance under contracts with customers. The carrying value of such receivables, net of the allowance for doubtful accounts, represents their estimated net realizable value. We estimate our allowance for doubtful accounts for specific accounts receivable balances based on historical collection trends, the age of outstanding accounts receivables and existing economic conditions associated with the receivables. Past-due accounts receivable balances are written off when our internal collection efforts have been unsuccessful. As a practical expedient, we do not adjust the promised amount of consideration for the effects of a significant financing component when we expect, at contract inception, that the period between our transfer of a promised service to a customer and when the customer pays for that service will be one year or less. We do not typically include extended payment terms in our contracts with customers.

Remaining Performance Obligations

Remaining performance obligations represent the aggregate transaction prices for contracts where our performance obligations have not yet been satisfied. As of December 31, 2021, the aggregate amount of transaction price allocated to remaining performance obligations in our property leasing business was not significant. We apply the practical expedient related to remaining performance obligations that are part of a contract that has an original expected duration of one year or less and the practical expedient related to variable consideration from remaining performance obligations pursuant to the series guidance. All of our remaining performance obligations apply to one of these practical expedients.

Contract Assets and Contract Liabilities

Contract assets represent assets for revenue that has been recognized in advance of billing the customer and for which the right to bill is contingent upon something other than the passage of time. This is common for contingent portions of commissions in brokerage, development and construction revenue in development services and incentive fees present in various businesses. Billing requirements vary by contract but are generally structured around fixed monthly fees, reimbursement of employee and other third-party costs, and the achievement or completion of certain contingent events.

When we receive consideration, or such consideration is unconditionally due, from a customer prior to transferring services to the customer under the terms of the services contract, we record deferred revenue, which represents a contract liability. We recognize the contract liability as revenue once we have transferred control of service to the customer and all revenue recognition criteria are met.

Contract assets and contract liabilities are determined for each contract on a net basis. For contract assets, we classify the short-term portion as a separate line item within current assets and the long-term portion within other assets, long-term in the accompanying consolidated balance sheets. For contract liabilities, we classify the short-term portion as a separate line item within current liabilities and the long-term portion within other liabilities, long-term in the accompanying consolidated balance sheets.

Contract Costs

Contract costs primarily consist of upfront costs incurred to obtain or to fulfill a contract. These costs are typically found within our Global Workplace Solutions segment. Such costs relate to transition costs to fulfill contracts prior to services being rendered and are included within other intangible assets in the accompanying consolidated balance sheets. Capitalized transition costs are amortized based on the transfer of services to which the assets relate which can vary on a contract by contract basis, and are included in cost of revenue in the accompanying consolidated statement of operations. For contract costs that are recognized as assets, we periodically review for impairment.

Applying the contract cost practical expedient, we recognize the incremental costs of obtaining contracts as an expense when incurred if the amortization period of the assets that we otherwise would have recognized is one year or less.

Business Promotion and Advertising Costs

The costs of business promotion and advertising are expensed as incurred. Business promotion and advertising costs of $68.9 million, $57.2 million and $76.1 million were included in operating, administrative and other expenses for the years ended December 31, 2021, 2020 and 2019, respectively.

Foreign Currencies

The financial statements of subsidiaries located outside the U.S. are generally measured using the local currency as the functional currency. The assets and liabilities of these subsidiaries are translated at the rates of exchange at the balance sheet date, and income and expenses are translated at the average monthly rate. The resulting translation adjustments are included in the accumulated other comprehensive loss component of equity. Gains and losses resulting from foreign currency transactions are included in the results of operations.

Comprehensive Income

Comprehensive income consists of net income and other comprehensive (loss) income. In the accompanying consolidated balance sheets, accumulated other comprehensive loss primarily consists of foreign currency translation adjustments, fees associated with the termination of interest rate swaps, unrealized gains (losses) on interest rate swaps, unrealized holding (losses) gains on available for sale debt securities and pension liability adjustments. Foreign currency translation adjustments exclude any income tax effect given that earnings of non-U.S. subsidiaries are deemed to be reinvested for an indefinite period of time (see Note 15).

Warehouse Receivables

Our wholly-owned subsidiary CBRE Capital Markets, Inc. (CBRE Capital Markets) is a Federal Home Loan Mortgage Corporation (Freddie Mac) approved Multifamily Program Plus Seller/Servicer and an approved Federal National Mortgage Association (Fannie Mae) Aggregation and Negotiated Transaction Seller/Servicer. In addition, CBRE Capital Markets' wholly-owned subsidiary CBRE Multifamily Capital, Inc. (CBRE MCI) is an approved Fannie Mae Delegated Underwriting and Servicing (DUS) Seller/Servicer and CBRE Capital Markets' wholly-owned subsidiary CBRE HMF, Inc. (CBRE HMF) is a U.S. Department of Housing and Urban Development (HUD) approved Non-Supervised Federal Housing Authority (FHA) Title II Mortgagee, an approved Multifamily Accelerated Processing (MAP) lender and an approved Government National Mortgage Association (Ginnie Mae) issuer of mortgage-backed securities (MBS). Under these arrangements, before loans are originated through proceeds from warehouse lines of credit, we obtain either a contractual loan purchase commitment from either Freddie Mac or Fannie Mae or a confirmed forward trade commitment for the issuance and purchase of a Fannie Mae or Ginnie Mae MBS that will be secured by the loans. The warehouse lines of credit are generally repaid within a one-month period when Freddie Mac or Fannie Mae buys the loans or upon settlement of the Fannie Mae or Ginnie Mae MBS, while we retain the servicing rights. Loans are funded at the prevailing market rates. We elect the fair value option for all warehouse receivables. At December 31, 2021 and 2020, all of the warehouse receivables included in the accompanying consolidated balance sheets were either under commitment to be purchased by Freddie Mac or had confirmed forward trade commitments for the issuance and purchase of Fannie Mae or Ginnie Mae mortgage-backed securities that will be secured by the underlying loans.

Mortgage Servicing Rights (MSRs)

In connection with the origination and sale of mortgage loans with servicing rights retained, we record servicing assets or liabilities based on the fair value of the mortgage servicing rights on the date the loans are sold. Our MSRs are initially recorded at fair value. Subsequent to the initial recording, MSRs are amortized and carried at the lower of amortized cost or fair value in other intangible assets in the accompanying consolidated balance sheets. They are amortized in proportion to and over the estimated period that net servicing income is expected to be received based on projections and timing of estimated future net cash flows.

Our initial recording of MSRs at their fair value resulted in net gains, as the fair value of servicing contracts that result in MSR assets exceeded the fair value of servicing contracts that result in MSR liabilities. The net assets and net gains are presented in the accompanying consolidated financial statements. The amount of MSRs recognized during the years ended December 31, 2021 and 2020 was as follows (dollars in thousands):

	Year Ended December 31,	
	2021	2020
Beginning balance, mortgage servicing rights	$ 556,931	$ 483,492
Mortgage servicing rights recognized	193,835	207,827
Mortgage servicing rights sold	—	(122)
Amortization expense	(172,250)	(134,266)
Ending balance, mortgage servicing rights	$ 578,516	$ 556,931

MSRs do not actively trade in an open market with readily available observable prices; therefore, fair value is determined based on certain assumptions and judgments, including the estimation of the present value of future cash flows realized from servicing the underlying mortgage loans. Management's assumptions include the benefits of servicing (servicing fee income and interest on escrow deposits), inflation, the cost of servicing, prepayment rates, delinquencies, discount rates and the estimated life of servicing cash flows. The assumptions used are subject to change based on management's judgments and estimates of changes in future cash flows and interest rates, among other things. The key assumptions used during the years ended December 31, 2021, 2020 and 2019 in measuring fair value were as follows:

	Year Ended December 31,		
	2021	2020	2019
Discount rate	12.62 %	11.73 %	10.12 %
Conditional prepayment rate	9.78 %	9.80 %	10.34 %

The estimated fair value of our MSRs was $891.0 million and $650.6 million as of December 31, 2021 and 2020, respectively. Impairment is evaluated through a comparison of the carrying amount and fair value of the MSRs, and recognized with the establishment of a valuation allowance. We did not incur any impairment charges related to our MSRs during the years ended December 31, 2021, 2020 or 2019. No valuation allowance was created previously and we did not record a valuation allowance for MSRs in 2021 or 2020.

Included in revenue in the accompanying consolidated statements of operations are contractually specified servicing fees from loans serviced for others of $288.0 million, $212.9 million and $191.8 million for the years ended December 31, 2021, 2020 and 2019, respectively, and includes prepayment fees/late fees/ancillary income earned from loans serviced for others of $41.7 million, $11.0 million and $14.9 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Accounting for Broker Draws

As part of our recruitment efforts relative to new U.S. brokers, we offer a transitional broker draw arrangement. Our broker draw arrangements generally last until such time as a broker's pipeline of business is sufficient to allow him or her to earn sustainable commissions. This program is intended to provide the broker with a minimal amount of cash flow to allow adequate time for his or her training as well as time for him or her to develop business relationships. Similar to traditional salaries, the broker draws are paid irrespective of the actual revenues generated by the broker. Often these broker draws represent the only form of compensation received by the broker. Furthermore, it is not our general policy to pursue collection of unearned broker draws paid under this arrangement. As a result, we have concluded that broker draws are economically equivalent to salaries paid and accordingly charge them to compensation expense as incurred. The broker is also entitled to earn a commission on completed revenue transactions. This amount is calculated as the commission that would have been payable under our full commission program, less any amounts previously paid to the broker in the form of a draw.

Stock-Based Compensation

We account for all employee awards under the fair value recognition provisions of the "*Compensation – Stock Compensation*" Topic of the FASB ASC (Topic 718). Topic 718 requires the measurement of compensation cost at the grant date, based upon the estimated fair value of the award, and requires amortization of the related expense over the employee's requisite service period. We do not estimate forfeitures, but instead recognize forfeitures when they occur. See Note 14 for additional information on our stock-based compensation plans.

Income Per Share

Basic income per share attributable to CBRE Group, Inc. is computed by dividing net income attributable to CBRE Group, Inc. stockholders by the weighted average number of common shares outstanding during each period. The computation of diluted income per share attributable to CBRE Group, Inc. generally further assumes the dilutive effect of potential common shares, which include certain contingently issuable shares. Contingently issuable shares consist of non-vested stock awards.

Income Taxes

Income taxes are accounted for under the asset and liability method in accordance with the "*Accounting for Income Taxes*" Topic of the FASB ASC (Topic 740). Deferred tax assets and liabilities are determined based on temporary differences between the financial reporting and tax basis of assets and liabilities and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured by applying enacted tax rates and laws and are released in the years in which the temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are provided against deferred tax assets when it is more likely than not that some portion or all of the deferred tax asset will not be realized.

We utilize a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the available evidence indicates there is more than a 50% likelihood that the position will be sustained upon examination, including resolution of related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement.

See Note 15 for additional information on income taxes.

Self-Insurance

Our wholly-owned captive insurance company, which is subject to applicable insurance rules and regulations, insures our exposure related to workers' compensation insurance, general liability insurance and automotive insurance for our U.S. operations risk on a primary basis and we purchase excess coverage from unrelated insurance carriers. The captive insurance company also insures primary risk relating to professional indemnity claims globally. Given the nature of these types of claims, it may take several years for resolution and determination of the cost of these claims. We are required to estimate the cost of these claims in our financial statements.

The estimates that we utilize to record our potential losses on claims are inherently subjective, and actual claims could differ from amounts recorded, which could result in increased or decreased expense in future periods. As of December 31, 2021 and 2020, our reserves for claims under these insurance programs were $153.4 million and $140.5 million, respectively, of which $2.2 million and $2.8 million, respectively, represented our estimated current liabilities.

Investments Held in Trust - Special Purpose Acquisition Company

As part of the initial public offering of CBRE Acquisition Holdings, Inc., $402.5 million was deposited in an interest-bearing U.S. based trust account (Trust Account). The funds in the Trust Account were invested only in specified U.S. government treasury bills with a maturity of 180 days or less or in money market funds meeting certain conditions under Rule 2a-7 under the Investment Company Act that invest only in direct U.S. government treasury obligations (collectively "permitted investments").

These funds did not qualify as either cash or restricted cash and prior to the SPAC Merger remained in the Trust Account except for the withdrawal of interest earned on the funds that could have been released to CBRE Acquisition Holdings to pay taxes.

The Trust Account was derecognized upon the SPAC Merger.

Non-controlling Interest Subject to Possible Redemption - Special Purpose Acquisition Company

Prior to the SPAC Merger, the company accounted for the non-controlling interest in CBRE Acquisition Holdings as subject to possible redemption in accordance with the guidance in FASB ASC Topic 480 " *Distinguishing Liabilities from Equity."* CBRE Acquisition Holdings' common stock featured certain redemption rights that allowed investors to redeem common stock at $10.00 per share and was therefore considered to be outside of the company's control and subject to occurrence of uncertain future events. Accordingly, this non-controlling interest subject to possible redemption was presented at redemption value as temporary equity, outside of the stockholders' equity section in the accompanying consolidated financial statements as of December 31, 2020.

As of the closing date of the SPAC Merger, a total of 22 million shares of CBRE Acquisition Holdings' common stock were redeemed at a total consideration of $220.0 million and CBRE Acquisition Holdings ceased to be a consolidated subsidiary of the company. The related non-controlling interest has been eliminated from the company financial statements.

Revision of Prior Period Financial Statements

During 2021, we identified an error related to purchase of marketable securities in the SPAC trust account within the previously issued Consolidated Statements of Cash Flows. While the error affects the cash flows from investing and financing activities, the error had no impact on the net increase in cash and restricted cash for the previously reported period.

We assessed the materiality of the error on prior period financial statements in accordance with SEC Staff Accounting Bulletin (SAB) Number 99,*Materiality*, as codified in ASC 250-10, *Accounting Changes and Error Corrections.* We determined that this error was not material to the December 31, 2020 financial statements. Accordingly, December 31, 2020, as the comparative period in the December 31, 2021 financial statements, has been corrected in the Consolidated Statements of Cash Flows as described below (dollars in thousands):

	Year Ended December 31, 2020		
	As Previously Reported	Adjustments	As Corrected
Net cash used in investing activities	$ (341,585)	$ (402,500)	$ (744,085)
Net cash used in financing activities	$ (625,256)	$ 402,500	$ (222,756)

3. New Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In December 2019, the Financial Accounting Standards Board (FASB) issued ASU 2019-12, "*Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*." This ASU removes specific exceptions to the general principles in Topic 740 and improves and simplifies financial statement preparers' application of income tax-related guidance. This ASU is effective for fiscal years beginning after December 15, 2020, and interim periods within those years, with early adoption permitted. We adopted ASU 2019-12 in the first quarter of 2021 and the adoption did not have a material impact on our consolidated financial statements and related disclosures.

In January 2020, the FASB issued ASU 2020-01, "*Investments-Equity Securities (Topic 321), Investments-Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815)*." This ASU, among other things, clarifies that a company should consider observable transactions that require a company to either apply or discontinue the equity method of accounting under Topic 323 and clarifies that, when determining the accounting for certain forward contracts and purchased options a company should not consider, whether upon settlement or exercise, if the underlying securities would be accounted for under the equity method or fair value option. This ASU is effective for fiscal years beginning after December 15, 2020, and interim periods within those years, with early adoption permitted. We adopted ASU 2020-01 in the first quarter of 2021 and the adoption did not have a material impact on our consolidated financial statements and related disclosures.

In October 2020, the FASB issued ASU 2020-08, "*Codification Improvements to Subtopic 310-20, Receivables - Nonrefundable Fees and Other Costs*." This ASU states that an entity should reevaluate whether a callable debt security is within the scope of the Accounting Standards Codification (ASC) 310-20-35-33 for each reporting period. The ASU is not expected to have a significant effect on current practice or create a large administrative cost for most entities. The amendments stated in this ASU are intended to make ASC 310-20 easier to understand and apply. This ASU is effective for fiscal years beginning after December 15, 2020, and interim periods within those years. Early application is not permitted. We adopted ASU 2020-08 in the first quarter of 2021 and the adoption did not have a material impact on our consolidated financial statements and related disclosures.

In October 2020, the FASB issued ASU 2020-10, "*Codification Improvements*." This ASU is intended to conform, clarify, simplify, and/or provide technical corrections to a wide variety of codification topics, including moving certain presentation and disclosure guidance to the appropriate codification section. This ASU is effective for fiscal years beginning after December 15, 2020, and interim periods within those years. Early application of the amendments is permitted for and varies based on the entity. The amendments should be applied retrospectively and at the beginning of the period that includes the adoption date. We adopted ASU 2020-10 in the first quarter of 2021 and the adoption did not have a material impact on our consolidated financial statements and related disclosures.

Recent Accounting Pronouncements Pending Adoption

In March 2020 and January 2021, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2020-04, "*Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*" and ASU 2021-01, "*Reference Rate Reform: Scope*," respectively. Together, the ASUs provide temporary optional expedients and exceptions to the U.S. GAAP guidance on contract modifications and hedge accounting to ease the financial reporting burdens related to the expected market transition from the London Interbank Offered Rate (LIBOR) and other interbank offered rates to alternative reference rates. This guidance is effective for a limited time for all entities through December 31, 2022. We are evaluating the effect that this guidance will have on our consolidated financial statements and related disclosures.

In July 2021, the FASB issued ASU 2021-05, "*Leases (Topic 842): Lessors-Certain Leases with Variable Lease Payments (Topic 842).*" The ASU amends the lease classification requirements for lessors to align them with practice under Topic 840. Lessors should classify and account for a lease with variable lease payments that do not depend on a reference index or a rate as an operating lease if certain criteria are met. This guidance is effective for fiscal years beginning after December 15, 2021, and interim periods within those fiscal years. We are evaluating the effect that ASU 2021-05 will have on our consolidated financial statements and related disclosures, but do not expect it to have a material impact.

In October 2021, the FASB issued ASU 2021-08, "*Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*." This ASU requires that an acquirer entity in a business combination recognize and measure contract assets and liabilities acquired in a business combination at the acquisition date in accordance with Topic 606 as if the acquirer entity had originated the contracts. This ASU is effective for fiscal years beginning after December 15, 2022, and interim periods within those years. Early application of the amendments is permitted but should be applied to all acquisitions occurring in the annual period of adoption. The amendment should be applied prospectively to business combinations occurring on or after the effective date of the amendments. We are evaluating the effect that ASU 2021-08 will have on our consolidated financial statements and related disclosures, but do not expect it to have a material impact.

In November 2021, the FASB issued ASU 2021-10, "*Disclosures by Business Entities about Government Assistance*." This ASU requires annual disclosures that increase the transparency of transactions with a government accounted for by applying a grant or contribution accounting model by analogy, including (1) the types of transactions, (2) the accounting for those transactions, and (3) the effect of those transactions on an entity's financial statements. This ASU is effective for fiscal years beginning after December 15, 2021. Early application is permitted. The amendments should be applied either (1) prospectively to all transactions within the scope of the amendments that are reflected in financial statements at the date of initial application and new transactions that are entered into after the date of initial application or (2) retrospectively to those transactions. We are evaluating the effect that ASU 2021-10 will have on our consolidated financial statements and related disclosures, but do not expect it to have a material impact.

4. Turner & Townsend Acquisition

On November 1, 2021, we acquired a 60% ownership interest in, and entered into a strategic partnership with Turner & Townsend Holdings Limited (Turner & Townsend). Turner & Townsend is a leading professional services company specializing in program management, project management, cost and commercial management and advisory services across the real estate, infrastructure and natural resources sectors, and is reported in our Global Workplace Solutions segment. The combined partnership is expected to generate strategic growth opportunities in the project management space for both entities.

The Turner & Townsend Acquisition was treated as a business combination under ASC 805 and was accounted for using the acquisition method of accounting. We were deemed the accounting acquirer as we obtained control through an all-cash transaction and were the larger entity by revenue and by assets. Operating results for Turner & Townsend are included in the consolidated statements of operations for the year ended December 31, 2021 from the date of the acquisition.

The Turner & Townsend Acquisition was funded with cash on hand. The following summarizes the consideration transferred at closing for the Turner & Townsend Acquisition (dollars in thousands):

Cash consideration [1]	$	722,595
Deferred consideration [2]		494,349
Total consideration	$	1,216,944

[1] Represents cash paid at closing

[2] Represents the fair value of deferred consideration, to be settled in cash, with the only remaining condition on such payments being the passage of time

The deferred consideration amount above represents a total payment of $591.2 million less a discount of $96.9 million which will be accreted through the payment date. A portion of the discount is attributable to the time value associated with the contractual payment dates of 3-4 years and will be recorded as interest expense. The remaining discount is attributable to the time value associated with the deferred payment date (10th anniversary of closing) if a seller is no longer employed on the contractual payment date and will be recorded as compensation expense.

The following represents the summary of the excess purchase price over the fair value of net assets acquired and fair value of non-controlling interest (dollars in thousands):

Purchase price	$	1,216,944
Less: Estimated fair value of net assets acquired (see table below)		152,027
Plus: Estimated fair value of non-controlling interest [1]		32,416
Excess purchase price over estimated fair value of net assets acquired	$	1,097,333

[1] Represents fair value of legacy non-controlling interest of Turner & Townsend

The preliminary purchase accounting adjustments related to the Turner & Townsend Acquisition have been recorded in the accompanying consolidated financial statements. The excess purchase price over the fair value of net assets acquired and non-controlling interest has been recorded to goodwill. The goodwill arising from the Turner & Townsend Acquisition consists largely of the synergies and opportunities to deliver a premier project, program and cost management services. The goodwill recorded in connection with the Turner & Townsend Acquisition was not deductible for tax purposes.

The acquired assets and assumed liabilities of Turner & Townsend were recorded at their estimated fair values. The purchase price allocation for the business combination is preliminary, primarily for intangibles, and subject to change within the respective measurement period which will not extend beyond one year from the acquisition date. Measurement period adjustments will be recognized in the reporting period in which the adjustment amounts are determined. Any such adjustments may be material.

The following table summarizes the preliminary fair values assigned to the identified assets acquired and liabilities assumed at the acquisition date on November 1, 2021.

(Dollars in thousands)	
Assets Acquired:	
Cash and cash equivalents	$ 44,007
Trade and other receivables	239,269
Prepaid expenses	7,969
Other current assets	19,359
Property and equipment, net	57,138
Other intangible assets, net	1,104,968
Operating lease assets	44,249
Other assets, net	8,427
Total assets acquired	1,525,386
Liabilities Assumed:	
Accounts payable and accrued expenses	59,986
Compensation and employee benefits	34,557
Operating lease liabilities	11,144
Contract liabilities	44,943
Other current liabilities	126,034
Non-current operating lease liabilities	30,939
Deferred tax liability	291,634
Total liabilities assumed	599,237
Non-controlling Interest Acquired	774,122
Estimated Fair Value of Net Assets Acquired	$ 152,027

In connection with the Turner & Townsend Acquisition, below is a summary of the preliminary value allocated to the intangible assets acquired (dollars in thousands):

			December 31, 2021	
Asset Class	**Amortization Period**	**Amount Assigned at Acquisition Date**	**Accumulated Amortization and Foreign Currency Translation**	**Net Carrying Value**
Customer relationships	5-11 years	$ 753,935	$ 21,577	$ 732,358
Backlog	2-4 years	75,407	5,255	70,152
Trademark	Indefinite	275,626	3,202	272,424

The accompanying consolidated statement of operations for the year ended December 31, 2021 includes revenue, operating income and net loss of $194.0 million, $0.5 million and $0.5 million, respectively, attributable to the Turner & Townsend Acquisition. This does not include direct transaction and integration costs of $44.6 million which were incurred during the year ended December 31, 2021 in connection with the Turner & Townsend Acquisition.

The fair value of customer relationships and backlog was determined using the Multi-Period Excess Earnings Method (MPEEM), a form of the Income Approach. The MPEEM is a specific application of the Discounted Cash Flow Method. The principle behind the MPEEM is that the value of an intangible asset is equal to the present value of the incremental cash flows attributable only to the subject intangible asset. This estimation used certain unobservable key inputs such as timing of projected cash flows, growth rates, customer attrition rates, discount rates, and the assessment of useful life.

The fair value of the trademark was determined by using the Relief-from-Royalty Method, a form of the Income Approach, and relied on key unobservable inputs such as timing of the projected cash flows, growth rates, and royalty rates. The basic tenet of the Relief-from-Royalty Method is that without ownership of the subject intangible asset, the user of that intangible asset would have to make a stream of payments to the owner of the asset in return for the rights to use that asset. By acquiring the intangible asset, the user avoids these payments.

The fair value of the non-controlling interest was estimated by multiplying the implied value of a100 percent equity interest in Turner & Townsend Holdings Limited by 40 percent. A discount for lack of marketability was not applied as the equity owners from Turner & Townsend Partners LLP maintain a significant equity stake and remain actively involved in the day to day operations of the business.

Unaudited pro forma results, assuming the Turner & Townsend Acquisition had occurred as of January 1, 2020 for purposes of the pro forma disclosures for the years ended December 31, 2021 and 2020 are presented below. They include certain adjustments for increased amortization expense related to the intangible assets acquired (approximately $81.3 million and $97.5 million in 2021 and 2020, respectively) as well as increased depreciation expense related to the fixed assets acquired (approximately $5.5 million and $6.6 million in 2021 and 2020, respectively). Direct transaction and integration costs of $44.6 million as well as the tax impact of all pro forma adjustments are also included in the pro forma results.

These unaudited pro forma results have been prepared for comparative purposes only and do not purport to be indicative of what operating results would have been had the Turner & Townsend Acquisition occurred on January 1, 2020 and may not be indicative of future operating results (dollars in thousands, except share data):

	Year Ended December 31,	
	2021	**2020**
Revenue	$ 28,545,833	$ 24,715,787
Operating income	1,705,982	944,102
Net income attributable to CBRE Group, Inc.	1,873,426	705,375
Basic income per share:		
Net income per share attributable to CBRE Group, Inc.	$ 5.59	$ 2.10
Weighted average shares outstanding for basic income per share	335,232,840	335,196,296
Diluted income per share:		
Net income per share attributable to CBRE Group, Inc.	$ 5.51	$ 2.08
Weighted average shares outstanding for diluted income per share	339,717,401	338,392,210

5. Warehouse Receivables & Warehouse Lines of Credit

A rollforward of our warehouse receivables is as follows (dollars in thousands):

Beginning balance at December 31, 2020	$ 1,411,170
Origination of mortgage loans	17,015,839
Gains (premiums on loan sales)	79,925
Proceeds from sale of mortgage loans:	
Sale of mortgage loans	(17,114,681)
Cash collections of premiums on loan sales	(79,925)
Proceeds from sale of mortgage loans	(17,194,606)
Net decrease in mortgage servicing rights included in warehouse receivables	(8,611)
Ending balance at December 31, 2021	$ 1,303,717

The following table is a summary of our warehouse lines of credit in place as of December 31, 2021 and 2020 (dollars in thousands):

Lender	Current Maturity	Pricing	December 31, 2021		December 31, 2020	
			Maximum Facility Size	Carrying Value	Maximum Facility Size	Carrying Value
JP Morgan Chase Bank, N.A. (JP Morgan) [1]	10/17/2022	daily floating rate SOFR rate plus 1.60%	$ 1,335,000	$ 742,124	$ 1,585,000	$ 561,726
JP Morgan	10/17/2022	daily floating rate SOFR rate plus 2.75%	15,000	4,326	15,000	—
Fannie Mae Multifamily As Soon As Pooled Plus Agreement and Multifamily As Soon As Pooled Sale Agreement (ASAP) Program [2]	Cancelable anytime	daily one-month LIBOR plus 1.45%, with a LIBOR floor of 0.25%	650,000	133,084	450,000	132,692
TD Bank, N.A. (TD Bank) [3]	7/15/2022	daily floating rate LIBOR plus 1.30%	800,000	217,672	800,000	401,849
Bank of America, N.A. (BofA) [4]	5/25/2022	daily floating rate LIBOR plus 1.30%, with a LIBOR floor of 0.30%	350,000	178,600	350,000	175,862
BofA [5]	5/25/2022	daily floating rate LIBOR plus 1.30%, with a LIBOR floor of 0.30%	250,000	—	—	—
MUFG Union Bank, N.A. (Union Bank) [6]	6/28/2022	daily floating rate LIBOR plus 1.30%	200,000	1,645	300,000	111,835
			$ 3,600,000	$ 1,277,451	$ 3,500,000	$ 1,383,964

(1) Effective October 19, 2020, this facility was amended and the maximum facility size was temporarily increased to $ 1,585.0 million, and reverted back to $ 985.0 million on January 18, 2021. Effective October 18, 2021, this facility was renewed and amended and the maximum facility size was increased to $1,335.0 million. This facility has a revised maturity date of October 17, 2022 and a revised interest rate to a Secured Overnight Finance Rate (SOFR) term plus 1.60%, noting the Business Lending sublimit has a revised interest rate of daily adjusted term SOFR plus 2.75%.

(2) Effective January 15, 2021, the maximum facility was temporarily increased to $ 650.0 million.

(3) Effective July 1, 2020, this facility was amended and provides for a maximum aggregate principal amount of $ 400.0 million, in addition to an uncommitted $ 400.0 million temporary line of credit. Effective June 28, 2021, this facility was renewed with a revised interest rate of daily floating rate LIBOR plus 1.30% and a maturity date of July 15, 2022. As of December 31, 2021, the uncommitted $400.0 million temporary line of credit was not utilized.

(4) The total commitment amount of $ 350.0 million includes a separate sublimit borrowing in the amount of $ 100.0 million, which can be utilized for specific purposes as defined within the agreement. Effective June 30, 2021, this facility was renewed with a revised interest rate of daily floating LIBOR plus 1.30% and a maturity date of May 25, 2022. The sublimit is subject to an interest rate of daily floating LIBOR plus 1.75%, with a LIBOR floor of 0.75%. As of December 31, 2021, the sublimit borrowing has not been utilized.

(5) Effective June 30, 2021, the advised consent line was renewed for $ 250.0 million of capacity with a revised interest rate of daily floating LIBOR plus 1.30%, with a LIBOR floor of 0.30%, and a maturity date of May 25, 2022.

(6) Effective August 4, 2020, this facility was amended to decrease the accordion feature from $ 150.0 million to $100.0 million. If utilized, the additional borrowings must be in predefined multiples and are not to occur more than 3 times within 12 consecutive months. On September 22, 2020, the temporary increase of $ 100.0 million was utilized and expired on January 20, 2021. Effective June 28, 2021, this facility was renewed with a revised interest rate of daily floating rate LIBOR plus 1.30%, removing the LIBOR floor, and a maturity date of June 28, 2022

During the year ended December 31, 2021, we had a maximum of $2.5 billion of warehouse lines of credit principal outstanding.

6. Variable Interest Entities

We hold variable interests in certain VIEs primarily in our Real Estate Investments segment which are not consolidated as it was determined that we are not the primary beneficiary. Our involvement with these entities is in the form of equity co-investments and fee arrangements.

As of December 31, 2021 and 2020, our maximum exposure to loss related to the VIEs that are not consolidated was as follows (dollars in thousands):

	December 31,	
	2021	2020
Investments in unconsolidated subsidiaries	$ 109,530	$ 66,947
Other current assets	4,219	4,219
Co-investment commitments	90,328	47,957
Maximum exposure to loss	$ 204,077	$ 119,123

7. Fair Value Measurements

Topic 820 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Topic 820 also establishes a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows:

- Level 1 – Quoted prices in active markets for identical assets or liabilities.
- Level 2 – Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.
- Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

The following tables present the fair value of assets and liabilities measured at fair value on a recurring basis as of December 31, 2021 and 2020 (dollars in thousands):

	December 31, 2021			
	Fair Value Measured and Recorded Using			
	Level 1	Level 2	Level 3	Total
Assets				
Available for sale securities:				
Debt securities:				
U.S. treasury securities	$ 7,002	$ —	$ —	$ 7,002
Debt securities issued by U.S. federal agencies	—	9,276	—	9,276
Corporate debt securities	—	50,897	—	50,897
Asset-backed securities	—	3,428	—	3,428
Collateralized mortgage obligations	—	725	—	725
Total available for sale debt securities	7,002	64,326	—	71,328
Equity securities	69,880	—	—	69,880
Investments in unconsolidated subsidiaries	229,900	23,741	406,690	660,331
Warehouse receivables	—	1,303,717	—	1,303,717
Total assets at fair value	$ 306,782	$ 1,391,784	$ 406,690	$ 2,105,256
Liabilities				
Other liabilities	—	—	10,700	10,700
Total liabilities at fair value	$ —	$ —	$ 10,700	$ 10,700

	December 31, 2020			
	Fair Value Measured and Recorded Using			
	Level 1	Level 2	Level 3	Total
Assets				
Available for sale securities:				
Debt securities:				
U.S. treasury securities	$ 7,270	$ —	$ —	$ 7,270
Debt securities issued by U.S. federal agencies	—	10,216	—	10,216
Corporate debt securities	—	51,244	—	51,244
Asset-backed securities	—	3,801	—	3,801
Collateralized mortgage obligations	—	1,369	—	1,369
Total available for sale debt securities	7,270	66,630	—	73,900
Equity securities	43,334	—	—	43,334
Investments in unconsolidated subsidiaries	—	—	50,000	50,000
Warehouse receivables	—	1,411,170	—	1,411,170
Total assets at fair value	$ 50,604	$ 1,477,800	$ 50,000	$ 1,578,404

Fair value measurements for our available for sale debt securities are obtained from independent pricing services which utilize observable market data that may include quoted market prices, dealer quotes, market spreads, cash flows, the U.S. treasury yield curve, trading levels, market consensus prepayment speeds, credit information and the instrument's terms and conditions.

The equity securities are generally valued at the last reported sales price on the day of valuation or, if no sales occurred on the valuation date, at the mean of the bid and ask prices on such date.

The fair values of the warehouse receivables are primarily calculated based on already locked in purchase prices. At December 31, 2021 and 2020, all of the warehouse receivables included in the accompanying consolidated balance sheets were either under commitment to be purchased by Freddie Mac or had confirmed forward trade commitments for the issuance and purchase of Fannie Mae or Ginnie Mae mortgage backed securities that will be secured by the underlying loans (See Notes 2 and 5). These assets are classified as Level 2 in the fair value hierarchy as a substantial majority of inputs are readily observable.

As of December 31, 2021 and 2020, investments in unconsolidated subsidiaries at fair value using NAV were $152.7 million and $66.3 million, respectively. These investments fall under practical expedient rules that do not require them to be included in the fair value hierarchy and as a result have been excluded from the tables above.

The tables below present a reconciliation for assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) (dollars in thousands):

	Investment in Unconsolidated Subsidiaries	Other liabilities
Balance as of December 31, 2020	$ 50,000	$ —
Transfer in	5,174	—
Net change in fair value	36,432	10,700
Purchases/ Additions	315,084	—
Balance as of December 31, 2021	$ 406,690	$ 10,700

Net change in fair value, included in the table above, is reported in Net income as follows:

Category of Assets/Liabilities using Unobservable Inputs	Consolidated Statements of Operations
Investments in unconsolidated subsidiaries	Equity income from unconsolidated subsidiaries
Other liabilities	Other income

The table below presents information about the significant unobservable inputs used for recurring fair value measurements for certain Level 3 instruments:

	Valuation Technique	Unobservable Input	Range
Investment in unconsolidated subsidiaries	Discounted cash flow	Discount rate	14% - 26%
	Monte Carlo	Volatility	70 %
		Risk free interest rate	1.4 %
Other liabilities	Discounted cash flow	Discount rate	25.5 %

There were no significant non-recurring fair value measurements recorded during the year ended December 31, 2021.The following non-recurring fair value measurements were recorded for the year ended December 31, 2020 (dollars in thousands):

	Net Carrying Value as of December 31, 2020	Fair Value Measured and Recorded Using			Total Impairment Charges for the Year Ended December 31, 2020
		Level 1	Level 2	Level 3	
Property and equipment	$ 12,870	$ —	$ 12,870	$ —	$ 29,168
Goodwill	443,305	—	—	443,305	25,000
Other intangible assets	12,562	—	—	12,562	34,508
Total	$ 468,737	$ —	$ 12,870	$ 455,867	$ 88,676

During the year ended December 31, 2020, we recorded $50.2 million of non-cash asset impairment charges in our Global Workplace Solutions segment; a non-cash goodwill impairment charge of $25.0 million and certain non-cash asset impairment charges of $13.5 million in our Real Estate Investments segment. Primarily as a result of the recent global economic disruption and uncertainty due to Covid-19, we deemed there to be triggering events during 2020 that required testing of goodwill and certain assets for impairment. Based on these events, we recorded the aforementioned non-cash impairment charges, which were primarily driven by lower anticipated cash flows in certain businesses directly resulting from a downturn in forecasts as well as increased forecast risk due to Covid-19 and changes in our business going forward.

The following non-recurring fair value measurements were recorded for the year ended December 31, 2019 (dollars in thousands):

	Net Carrying Value as of December 31, 2019	Fair Value Measured and Recorded Using			Total Impairment Charges for the Year Ended December 31, 2019
		Level 1	Level 2	Level 3	
Other intangible assets	$ 14,753	$ —	$ —	$ 14,753	$ 89,787

During the year ended December 31, 2019, we recorded an intangible asset impairment of $89.8 million in our Real Estate Investments segment. This non-cash write-off resulted from a review of the anticipated cash flows and the decrease in assets under management in our public securities business driven in part by continued industry-wide shift in investor preference for passive investment programs.

All of the above-mentioned asset impairment charges were included within the line item "Asset impairments" in the accompanying consolidated statements of operations. The fair value measurements employed for our impairment evaluations were based on a discounted cash flow approach. Inputs used in these evaluations included risk-free rates of return, estimated risk premiums, terminal growth rates, working capital assumptions, income tax rates as well as other economic variables.

FASB ASC Topic 825, "*Financial Instruments,*" requires disclosure of fair value information about financial instruments, whether or not recognized in the accompanying consolidated balance sheets. Our financial instruments are as follows:

- *Cash and Cash Equivalents* and *Restricted Cash* – These balances include cash and cash equivalents as well as restricted cash with maturities of less than three months. The carrying amount approximates fair value due to the short-term maturities of these instruments.
- *Receivables, less Allowance for Doubtful Accounts* – Due to their short-term nature, fair value approximates carrying value.
- *Warehouse Receivables* – These balances are carried at fair value. The primary source of value is either a contractual purchase commitment from Freddie Mac or a confirmed forward trade commitment for the issuance and purchase of a Fannie Mae or Ginnie Mae MBS (see Notes 2 and 5).
- *Investments in Unconsolidated Subsidiaries* – A portion of these investments are carried at fair value as discussed above. It includes our equity investment and related interests in both public and non-public entities. Our ownership of common shares in Altus is considered level 1 and is measured at fair value using a quoted price in an active market. Private placement warrants related to Altus are considered level 2 and measured at fair value using observable inputs for similar assets in an active market. Our ownership of alignment shares of Altus and our investment in Industrious and certain other non-controlling equity investments are considered level 3 which are measured at fair value using a Monte Carlo and a discounted cash flow approach, respectively. The valuation of Altus' common shares, private placement warrants and alignment shares are dependent on its stock price which could be volatile and subject to wide fluctuations in response to various market conditions.
- *Available for Sale Debt Securities* – Primarily held by our wholly-owned captive insurance company, these investments are carried at their fair value.
- *Equity Securities* – Primarily held by our wholly-owned captive insurance company, these investments are carried at their fair value.
- *Investments Held in Trust – special purpose acquisition company* – Funds received as part of the initial public offering of CBRE Acquisition Holdings were deposited in an interest-bearing U.S. based trust account. The funds were invested in specified U.S. government treasury bills with a maturity of 180 days or less or in money market funds. The carrying amount approximates fair value due to the short-term maturities of these instruments as of December 31, 2020. As a result of the SPAC Merger, the Investments Held in Trust were derecognized. (See Note 2).

- *Other liabilities* – Represents the fair value of the unfunded commitment related to a revolving facility in our Advisory Services segment. Valuations are based on discounted cash flow techniques, for which the significant inputs are the amount and timing of expected future cash flows, market comparables and recovery assumptions.

- *Short-Term Borrowings* – The majority of this balance represents outstanding amounts under our warehouse lines of credit of our wholly-owned subsidiary, CBRE Capital Markets and our revolving credit facility. Due to the short-term nature and variable interest rates of these instruments, fair value approximates carrying value (see Notes 5 and 11).

- *Senior Term Loans* – Based upon information from third-party banks (which falls within Level 2 of the fair value hierarchy), the estimated fair value of our senior term loans was approximately $451.8 million and $772.2 million at December 31, 2021 and 2020, respectively. Their actual carrying value, net of unamortized debt issuance costs, totaled $454.5 million and $785.7 million at December 31, 2021 and 2020, respectively (see Note 11).

- *Senior Notes* – Based on dealers' quotes (which falls within Level 2 of the fair value hierarchy), the estimated fair value of our4.875% senior notes was $671.7 million and $702.5 million at December 31, 2021 and 2020, respectively. The actual carrying value of our4.875% senior notes, net of unamortized debt issuance costs and unamortized discount, totaled $595.5 million and $594.5 million at December 31, 2021 and 2020, respectively. The estimated fair value of our2.500% senior notes was $502.1 million as of December 31, 2021. The actual carrying value of our2.500% senior notes, net of unamortized debt issuance costs and discount, totaled $488.1 million at December 31, 2021. On December 28, 2020, we redeemed the $425.0 million aggregate outstanding principal amount of our 5.25% senior notes in full (See Note 11).

- *Notes Payable on Real Estate* – As of December 31, 2021 and 2020, the carrying value of our notes payable on real estate, net of unamortized debt issuance costs, was $48.2 million and $79.6 million, respectively. These notes payable were not recourse to CBRE Group, Inc., except for being recourse to the single-purpose entities that held the real estate assets and were the primary obligors on the notes payable. These borrowings have either fixed interest rates or floating interest rates at spreads added to a market index. Although it is possible that certain portions of our notes payable on real estate may have fair values that differ from their carrying values, based on the terms of such loans as compared to current market conditions, or other factors specific to the borrower entity, we do not believe that the fair value of our notes payable is significantly different than their carrying value.

8. Property and Equipment

Property and equipment consists of the following (dollars in thousands):

		December 31,	
	Useful Lives	2021	2020
Computer hardware and software	2-10 years	$ 1,101,248	$ 974,490
Leasehold improvements	1-15 years	622,771	554,252
Furniture and equipment	1-10 years	260,551	243,880
Construction in progress	N/A	120,031	117,274
Total cost		2,104,601	1,889,896
Accumulated depreciation and amortization		1,288,509	1,074,887
Property and equipment, net		$ 816,092	$ 815,009

Depreciation and amortization expense associated with property and equipment was $244.9 million, $268.3 million and $207.8 million for the years ended December 31, 2021, 2020 and 2019, respectively. During the year ended December 31, 2020, we recorded $29.2 million in asset impairment charges related to property and equipment (see Note 7). There were no asset impairment charges related to property and equipment during the year ended December 31, 2021.

Construction in progress includes capitalizable costs incurred during the development stage of computer software and leasehold improvements that have not yet been placed in service.

9. Goodwill and Other Intangible Assets

As of January 1, 2021, we underwent an internal reorganization in our Advisory Services and Global Workplace Solutions reportable segments (see Note 14 for further discussion). This changed the composition of our reporting units which resulted in the reallocation of $101.4 million of goodwill from our Advisory Services to our Global Workplace Solutions reportable segments as of January 1, 2021. Additionally, the change in composition of our reporting units was considered a triggering event for a quantitative test as of January 1, 2021. We determined that no impairment existed as the estimated fair values of our reporting units were in excess of their respective carrying values.

During the first quarter of 2020, as a result of the Covid-19 pandemic, we assessed at a reporting unit level whether any triggering events had occurred during the period that would require us to perform a quantitative impairment analysis of goodwill. As a result of this evaluation, we determined that there was a triggering event in our global investment management reporting unit (which falls within our Real Estate Investments segment) that required a quantitative test to be performed. In connection with this quantitative evaluation, we determined that this reporting unit's goodwill was impaired and recorded a $25.0 million non-cash impairment charge during the first quarter.

Our annual assessment of goodwill and other intangible assets deemed to have indefinite lives has historically been completed as of the beginning of the fourth quarter of each year. We performed the 2021, 2020 and 2019 annual assessments as of October 1. During 2020, as part of our annual assessment, we identified a change in our reporting units due to an internal reorganization in our GWS segment. When we performed our required annual goodwill impairment review as of October 1, 2021, 2020 and 2019, we determined that no impairment existed as the estimated fair value of our reporting units was in excess of their carrying value.

The following table summarizes the changes in the carrying amount of goodwill for the years ended December 31, 2021 and 2020 (dollars in thousands):

	Advisory Services	Global Workplace Solutions	Real Estate Investments	Total
Balance as of December 31, 2019				
Goodwill	$ 3,302,218	$ 899,506	$ 620,275	$ 4,821,999
Accumulated impairment losses	(761,448)	(175,473)	(131,585)	(1,068,506)
	2,540,770	724,033	488,690	3,753,493
Purchase accounting entries related to acquisitions	16,463	9,702	(7,984)	18,181
Impairment	—	—	(25,000)	(25,000)
Foreign exchange movement	30,107	28,589	16,239	74,935
Balance as of December 31, 2020				
Goodwill	3,348,788	937,797	628,530	4,915,115
Accumulated impairment losses	(761,448)	(175,473)	(156,585)	(1,093,506)
	2,587,340	762,324	471,945	3,821,609
Reallocation	(101,390)	101,390	—	—
Purchase accounting entries related to acquisitions	77,616	1,167,678	—	1,245,294
Impairment	—	—	—	—
Foreign exchange movement	(26,520)	(32,836)	(12,372)	(71,728)
Balance as of December 31, 2021				
Goodwill	3,298,494	2,174,029	616,158	6,088,681
Accumulated impairment losses	(761,448)	(175,473)	(156,585)	(1,093,506)
	$ 2,537,046	$ 1,998,556	$ 459,573	$ 4,995,175

During 2021, in addition to the Turner & Townsend Acquisition (see Note 4), we completed eight in-fill acquisitions: a U.S. firm that provides construction and project management services, a professional service advisory firm in Australia, a U.S. firm focused on investment banking and investment sales in the global gaming real estate market, a leading facilities management firm in the Netherlands, a workplace interior design and project management company in Singapore, a property management firm in France, a residential brokerage in the Netherlands, and an occupancy management company based in the U.S.

During 2020, we completed six in-fill acquisitions: leading local facilities management firms in Spain and Italy, a U.S. firm that helps companies reduce telecommunications costs, a technology focused project management firm based in Florida, a firm specializing in performing real estate valuations in South Korea, and a facilities management and technical maintenance firm in Australia.

Other intangible assets totaled $2.4 billion, net of accumulated amortization of $1.7 billion as of December 31, 2021, and $1.4 billion, net of accumulated amortization of $1.6 billion, as of December 31, 2020 and are comprised of the following (dollars in thousands):

	December 31,			
	2021		2020	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Unamortizable intangible assets:				
Management contracts	$ 63,153		$ 67,422	
Trademarks	329,224		56,800	
	392,377		124,222	
Amortizable intangible assets:				
Customer relationships	1,612,308	$ (667,668)	880,104	$ (603,866)
Mortgage servicing rights	1,005,357	(426,841)	927,525	(370,634)
Trademarks/Trade names	350,548	(126,468)	354,060	(111,595)
Management contracts	151,912	(137,906)	152,312	(145,612)
Covenant not to compete	73,750	(73,750)	73,750	(73,750)
Other	548,455	(292,647)	412,477	(251,080)
	3,742,330	(1,725,280)	2,800,228	(1,556,537)
Total intangible assets	$ 4,134,707	$ (1,725,280)	$ 2,924,450	$ (1,556,537)

Unamortizable intangible assets include management contracts identified as a result of the REIM Acquisitions relating to relationships with open-end funds, a trademark separately identified as a result of the 2001 Acquisition, a trade name separately identified in connection with the REIM Acquisitions and a trademark separately identified as part of the Turner & Townsend transaction.

Customer relationships relate to existing relationships acquired through acquisitions mainly in our Global Workplace Solutions segment, including $753.9 million identified as part of the Turner & Townsend transaction, that are being amortized over useful lives of up to 20 years.

Mortgage servicing rights represent the carrying value of servicing assets in the U.S. in our Advisory Services segment. The mortgage servicing rights are being amortized over the estimated period that net servicing income is expected to be received, which is typically up to 10 years. See Mortgage Servicing Rights discussion within Note 2 for additional information.

Definite-lived trademarks/trade names primarily comprise of a trademark identified as part of the 2019 Telford acquisition of approximately $26.7 million which is being amortized over 20 years and trademarks of approximately $280.0 million from 2015 GWS Acquisition which are being amortized over 20 years.

Management contracts consist primarily of asset management contracts relating to relationships with closed-end funds and separate accounts in the U.S., Europe and Asia that were separately identified as a result of the REIM Acquisitions. These management contracts are being amortized over useful lives of up to 13 years.

Other amortizable intangible assets mainly represent transition costs, which primarily get amortized to cost of revenue over the life of the associated contract. It also includes a backlog related intangible identified as part of Turner & Townsend transaction.

During the year ended December 31, 2020, we recorded non-cash impairment charges of $28.5 million in our Global Workplace Solutions segment related to amortizable trade name and customer relationships. In addition, we recorded non-cash impairment charges of $6.0 million in our Real Estate Investments segment (see Note 7).

During the year ended December 31, 2019, we recorded an intangible asset impairment of $89.8 million in our Real Estate Investments segment. This non-cash write-off related to intangibles acquired in the REIM Acquisitions, including unamortizable management contracts relating to relationships with open-end funds and the Clarion Partners trade name in the U.S., as well as amortizable management contracts relating to relationships with closed-end funds and separate accounts in the U.S.

Amortization expense related to intangible assets, excluding amortization of transition costs, was $276.5 million, $227.1 million and $225.7 million for the years ended December 31, 2021, 2020 and 2019, respectively. The estimated annual amortization expense for each of the years ending December 31, 2022 through December 31, 2026 and thereafter approximates $309.8 million, $284.6 million, $248.5 million, $201.3 million and $161.4 million, respectively.

10. Investments in Unconsolidated Subsidiaries

Investments in unconsolidated subsidiaries are accounted for under the equity method of accounting. Our investment ownership percentages in equity method investments vary, generally ranging up to 50.0%. The following table represents the composition of investment in unconsolidated subsidiaries (dollars in thousands):

	December 31,	
Investment type	**2021**	**2020**
Real estate investments	$ 453,813	$ 340,248
Investment in Altus:		
Class A common stock (22 million shares)	229,900	—
Alignment shares [1]	114,727	—
Private placement warrants [2]	23,741	—
Subtotal	$ 368,368	$ —
Other [3]	$ 373,907	$ 112,117
Total investment in unconsolidated subsidiaries	$ 1,196,088	$ 452,365

[1] The alignment shares, also known as Class B common shares, will automatically convert into Altus Class A common shares based on the achievement of certain total return thresholds on Altus Class A common shares as of the relevant measurement date over the seven fiscal years following the merger.

[2] These warrants entitle us to purchase one share of Altus Class A common stock at $ 11.00 per share, subject to adjustment.

[3] Consists of our investments in Industrious and other non-public entities.

Combined condensed financial information for the entities accounted for using the equity method is as follows (dollars in thousands):

	December 31,	
	2021	**2020**
Combined Condensed Balance Sheets Information:		
Current assets	$ 7,127,598	$ 6,508,718
Non-current assets	30,586,991	24,343,229
Total assets	$ 37,714,589	$ 30,851,947
Current liabilities	$ 3,128,205	$ 3,164,135
Non-current liabilities	8,875,779	6,696,352
Total liabilities	$ 12,003,984	$ 9,860,487
Non-controlling interests	$ 588,067	$ 460,904

	Year Ended December 31,		
	2021	2020	2019
Combined Condensed Statements of Operations Information:			
Revenue	$ 2,680,675	$ 2,036,818	$ 1,545,424
Operating income	1,371,014	587,689	549,111
Net income [1]	3,260,051	483,224	419,966

[1] Included in net income are realized and unrealized earnings and losses in investments in unconsolidated investment funds and realized earnings and losses from sales of real estate projects in investments in unconsolidated subsidiaries. These realized and unrealized earnings and losses are not included in revenue and operating income.

Our Real Estate Investments segment invests our own capital in certain real estate investments with clients. We provided investment management, property management, brokerage and other professional services in connection with these real estate investments and earned revenues from these unconsolidated subsidiaries of $213.5 million, $145.9 million and $97.0 million during the years ended December 31, 2021, 2020 and 2019, respectively.

During 2021 and 2020, the company contributed cash and certain assets of Hana for a40% non-controlling interest in Industrious. This equity investment is marked to fair value on a quarterly basis using a discounted cash flow approach.

During the fourth quarter of 2021, CBRE Acquisition Holdings, Inc., ceased to be a consolidated subsidiary of the company, closed its merger with Altus, with Altus being the surviving public entity. As a result, CBRE Acquisition Holdings ceased to be a consolidated subsidiary of the company. Upon the merger, we obtained a 14.3% ownership interest in Altus Class A common shares as of December 31, 2021, along with interests in Altus alignment shares and private placement warrants, and recorded a gain of $187.5 million as “Other income” in the accompanying consolidated statements of operations. The retained investment is accounted for as an equity investment for which we have elected the fair value option.

11. Long-Term Debt and Short-Term Borrowings

Total long-term debt and short-term borrowings consist of the following (dollars in thousands):

	December 31,	
	2021	2020
Long-Term Debt		
Senior term loans, with interest ranging from 0.75% to 1.15%, due quarterly through March 4, 2024	$ 455,166	$ 788,759
4.875% senior notes due in 2026, net of unamortized discount	597,911	597,470
2.500% senior notes due in 2031 net of unamortized discount	492,782	—
Other	—	1,514
Total long-term debt	1,545,859	1,387,743
Less: current maturities of long-term debt	—	1,514
Less: unamortized debt issuance costs	7,736	6,027
Total long-term debt, net of current maturities	$ 1,538,123	$ 1,380,202
Short-Term Borrowings		
Warehouse lines of credit, with interest ranging from 1.40% to 2.89%, due in 2022	$ 1,277,451	$ 1,383,964
Other	32,668	5,330
Total short-term borrowings	$ 1,310,119	$ 1,389,294

Future annual aggregate maturities of total consolidated gross debt (excluding unamortized discount, premium and debt issuance costs) at December 31, 2021 are as follows (dollars in thousands): 2022—$1,310,119; 2023—$455,166; 2024—$0; 2025—$0; 2026—$600,000 and $500,000 thereafter.

Long-Term Debt

We maintain credit facilities with third-party lenders, which we use for a variety of purposes. On March 4, 2019, CBRE Services, Inc. (CBRE Services) entered into an incremental assumption agreement with respect to its credit agreement, dated October 31, 2017 (such agreement, as amended by a December 20, 2018 incremental term loan assumption agreement and such March 4, 2019 incremental assumption agreement, collectively, the 2019 Credit Agreement), which (i) extended the maturity of the U.S. dollar tranche A term loans under such credit agreement, (ii) extended the termination date of the revolving credit commitments available under such credit agreement and (iii) made certain changes to the interest rates and fees applicable to such tranche A term loans and revolving credit commitments under such credit agreement. The proceeds from a new tranche A term loan facility under the 2019 Credit Agreement was used to repay the $ 300.0 million of tranche A term loans outstanding under the credit agreement in effect prior to the entry into the 2019 incremental assumption agreement. On July 9, 2021, CBRE Services entered into an additional incremental assumption agreement with respect to the 2019 Credit Agreement for purposes of increasing the revolving credit commitments available under the 2019 Credit Agreement by an aggregate principal amount of $350.0 million (the 2019 Credit Agreement, as amended by the July 9, 2021 incremental assumption agreement is collectively referred to in this Annual Report as the 2021 Credit Agreement). On December 10, 2021, CBRE Services and certain of the other borrowers entered into an amendment of the 2021 Credit Agreement which (i) changed the interest rate applicable to revolving borrowings denominated in Sterling from a LIBOR-based rate to a rate based on the Sterling Overnight Index Average (SONIA) and (ii) changed the interest rate applicable to revolving borrowings denominated in Euros from a LIBOR-based rate to a rate based on EURIBOR. The revised interest rates described above went into effect as of January 1, 2022.

The 2021 Credit Agreement is a senior unsecured credit facility that is guaranteed by us. On May 21, 2021, we entered into a definitive agreement whereby our subsidiary guarantors were released as guarantors from the 2021 Credit Agreement. As of December 31, 2021, the 2021 Credit Agreement provided for the following: (1) a $3.15 billion revolving credit facility, which includes the capacity to obtain letters of credit and swingline loans and terminates on March 4, 2024; (2) a $300.0 million tranche A term loan facility maturing on March 4, 2024, requiring quarterly principal payments unless our leverage ratio (as defined in the 2021 Credit Agreement) is less than or equal to 2.50x on the last day of the fiscal quarter immediately preceding any such payment date and (3) a €400.0 million term loan facility due and payable in full at maturity on December 20, 2023.

Borrowings under the euro term loan facility under the 2021 Credit Agreement bear interest at a minimum rate of 0.75% plus EURIBOR and revolving borrowings bear interest, based at our option, on either (1) the applicable fixed rate plus 0.68% to 1.075% or (2) the daily rate plus 0.0% to 0.075% in each case as determined by reference to our Credit Rating (as defined in the 2021 Credit Agreement). As of December 31, 2021, we had $ 454.5 million of euro term loan borrowings outstanding under the 2021 Credit Agreement (at an interest rate of 0.75% plus EURIBOR), net of unamortized debt issuance costs, included in the accompanying consolidated balance sheet.

Borrowings under the tranche A term loan facility under the 2021 Credit Agreement bore interest, based at our option, on either (1) the applicable fixed rate plus 0.750% to 1.25% or (2) the daily rate plus 0.0% to 0.25%, in each case as determined by reference to our Credit Rating (as defined in the 2021 Credit Agreement). On November 23, 2021, we repaid our $300.0 million tranche A term loan facility under the 2021 Credit Agreement.

On March 18, 2021, CBRE Services issued $500.0 million in aggregate principal amount of 2.500% senior notes due April 1, 2031 at a price equal to 98.451% of their face value (the 2.500% senior notes). The 2.500% senior notes are unsecured obligations of CBRE Services, senior to all of its current and future subordinated indebtedness, but effectively subordinated to all of its current and future secured indebtedness. Interest accrues at a rate of 2.500% per year and is payable semi-annually in arrears on April 1 and October 1 of each year, beginning on October 1, 2021. The 2.500% senior notes are redeemable at our option, in whole or in part, on or after January 1, 2031 at a redemption price of 100% of the principal amount on that date, plus accrued and unpaid interest, if any, to, but excluding the date of redemption. At any time prior to January 1, 2031, we may redeem all or a portion of the notes at a redemption price equal to the greater of (1) 100% of the principal amount of the notes to be redeemed and (2) the sum of the present value at the date of redemption of the remaining scheduled payments of principal and interest thereon to January 1, 2031, assuming the notes matured on January 1, 2031, discounted to the date of redemption on a semi-annual basis at an adjusted rate equal to the treasury rate plus 20 basis points, minus accrued and unpaid interest to, but excluding, the date of redemption, plus, in either case, accrued and unpaid interest, if any, to, but not including, the redemption date. The amount of the 2.500% senior notes, net of unamortized discount and unamortized debt issuance costs, included in the accompanying consolidated balance sheet was $488.1 million at December 31, 2021.

On August 13, 2015, CBRE Services issued $600.0 million in aggregate principal amount of 4.875% senior notes due March 1, 2026 at a price equal to 99.24% of their face value. The 4.875% senior notes are unsecured obligations of CBRE Services, senior to all of its current and future subordinated indebtedness, but effectively subordinated to all of its current and future secured indebtedness. The 4.875% senior notes are guaranteed on a senior basis by us. Interest accrues at a rate of 4.875% per year and is payable semi-annually in arrears on March 1 and September 1, with the first interest payment made on March 1, 2016. The 4.875% senior notes are redeemable at our option, in whole or in part, prior to December 1, 2025 at a redemption price equal to the greater of (1) 100% of the principal amount of the 4.875% senior notes to be redeemed and (2) the sum of the present values of the remaining scheduled payments of principal and interest thereon to December 1, 2025 (not including any portions of payments of interest accrued as of the date of redemption) discounted to the date of redemption on a semi-annual basis at the Adjusted Treasury Rate (as defined in the indenture governing these notes). In addition, at any time on or after December 1, 2025, the 4.875% senior notes may be redeemed by us, in whole or in part, at a redemption price equal to 100% of the principal amount, plus accrued and unpaid interest, if any, to (but excluding) the date of redemption. If a change of control triggering event (as defined in the indenture governing these notes) occurs, we are obligated to make an offer to purchase the then outstanding 4.875% senior notes at a redemption price of 101% of the principal amount, plus accrued and unpaid interest, if any, to the date of purchase. The amount of the 4.875% senior notes, net of unamortized discount and unamortized debt issuance costs, included in the accompanying consolidated balance sheets was $595.5 million and $594.5 million at December 31, 2021 and 2020, respectively.

On September 26, 2014, CBRE Services issued $300.0 million in aggregate principal amount of 5.25% senior notes due March 15, 2025. On December 12, 2014, CBRE Services issued an additional $125.0 million in aggregate principal amount of 5.25% senior notes due March 15, 2025 at a price equal to 101.5% of their face value, plus interest deemed to have accrued from September 26, 2014. The 5.25% senior notes were unsecured obligations of CBRE Services, senior to all of its current and future subordinated indebtedness, but effectively subordinated to all of its current and future secured indebtedness. The 5.25% senior notes were jointly and severally guaranteed on a senior basis by us and each domestic subsidiary of CBRE Services that guaranteed our 2019 Credit Agreement. Interest accrued at a rate of 5.25% per year and was payable semi-annually in arrears on March 15 and September 15. We redeemed these notes in full on December 28, 2020 and incurred charges of $75.6 million, including a premium of $73.6 million and the write-off of $2.0 million of unamortized premium and debt issuance costs. We funded this redemption using cash on hand.

The indenture governing our 4.875% senior notes and 2.500% senior notes contain restrictive covenants that, among other things, limit our ability to create or permit liens on assets securing indebtedness, enter into sale/leaseback transactions and enter into consolidations or mergers. In addition, these indentures require that the 4.875% senior notes and 2.500% senior notes be jointly and severally guaranteed on a senior basis by CBRE Group, Inc. and any domestic subsidiary that guarantees the 2021 Credit Agreement. In addition, our 2021 Credit Agreement also requires us to maintain a minimum coverage ratio of consolidated EBITDA (as defined in the 2021 Credit Agreement) to consolidated interest expense of 2.00x and a maximum leverage ratio of total debt less available cash to consolidated EBITDA (as defined in the 2021 Credit Agreement) of 4.25x (and in the case of the first four full fiscal quarters following consummation of a qualified acquisition (as defined in the 2021 Credit Agreement), 4.75x) as of the end of each fiscal quarter. Our coverage ratio of consolidated EBITDA to consolidated interest expense was 54.94x for the year ended December 31, 2021, and our leverage ratio of total debt less available cash to consolidated EBITDA was (0.04)x as of December 31, 2021.

Short-Term Borrowings

We had short-term borrowings of $1.3 billion and $1.4 billion as of December 31, 2021 and 2020, respectively, with related weighted average interest rates of 1.6% and 1.7%, respectively, which are included in the accompanying consolidated balance sheets.

Revolving Credit Facilities

The revolving credit facility under the 2021 Credit Agreement allows for borrowings outside of the U.S., with a $200.0 million sub-facility available to CBRE Services, one of our Canadian subsidiaries, one of our Australian subsidiaries and one of our New Zealand subsidiaries and a $320.0 million sub-facility available to CBRE Services and one of our U.K. subsidiaries. Borrowings under the revolving credit facility bear interest at varying rates, based at our option, on either (1) the applicable fixed rate plus 0.68% to 1.075% or (2) the daily rate plus 0.0% to 0.075%, in each case as determined by reference to our Credit Rating (as defined in the 2021 Credit Agreement). The 2021 Credit Agreement requires us to pay a fee based on the total amount of the revolving credit facility commitment (whether used or unused).

As of January 1, 2022, pursuant to an amendment to the 2021 Credit Agreement entered into on December 10, 2021, the applicable fixed rate for revolving borrowings denominated in Euros has been changed to EURIBOR and the applicable fixed rate for revolving borrowings denominated in Sterling has been changed to SONIA (with SONIA-based borrowings subject to a "credit spread adjustment" of an additional 0.0326% in addition to the interest rate spreads described above).

As of December 31, 2021, no amount was outstanding under the revolving credit facility other than letters of credit totaling $2.0 million. These letters of credit, which reduce the amount we may borrow under the revolving credit facility, were primarily issued in the ordinary course of business.

Turner & Townsend has a revolving credit facility with a capacity of £80.0 million and a maturity date of May 5, 2022. Existing borrowing under the revolving credit facility bears interest at three-month LIBOR plus 0.75% and ends February 10, 2022. Future borrowings bear interest at the SONIA overnight rate plus1.0266% to 2.0266%, determined by reference to gearing (as defined in the 2021 credit agreement). As of December 31, 2021, $27.0 million was outstanding under the revolving credit facility.

Warehouse Lines of Credit

CBRE Capital Markets has warehouse lines of credit with third-party lenders for the purpose of funding mortgage loans that will be resold, and a funding arrangement with Fannie Mae for the purpose of selling a percentage of certain closed multifamily loans to Fannie Mae. These warehouse lines are recourse only to CBRE Capital Markets and are secured by our related warehouse receivables. See Note 5 for additional information.

12. Leases

Supplemental balance sheet information related to our leases is as follows (dollars in thousands):

Category	Classification	December 31, 2021	December 31, 2020
Assets			
Operating	Operating lease assets	$ 1,046,377	$ 1,020,352
Financing	Other assets, net	110,809	117,805
Total leased assets		$ 1,157,186	$ 1,138,157
Liabilities			
Current:			
Operating	Operating lease liabilities	$ 232,423	$ 208,526
Financing	Other current liabilities	38,103	39,298
Non-current:			
Operating	Non-current operating lease liabilities	1,116,562	1,116,795
Financing	Other liabilities	73,257	78,881
Total lease liabilities		$ 1,460,345	$ 1,443,500

Components of lease cost are as follows (dollars in thousands):

Component	Classification	Year Ended December 31, 2021	Year Ended December 31, 2020
Operating lease cost	Operating, administrative and other	$ 196,685	$ 204,415
Financing lease cost:			
Amortization of right-to-use assets	(1)	36,376	38,568
Interest on lease liabilities	Interest expense	1,301	1,847
Variable lease cost	(2)	70,091	74,332
Sublease income	Revenue	(2,271)	(2,643)
Total lease cost		$ 302,182	$ 316,519

(1) Amortization costs of $31.9 million and $32.7 million from vehicle finance leases utilized in client outsourcing arrangements are included in the "Cost of revenue" line item in the accompanying consolidated statements of operations for the years ended December 31, 2021 and 2020, respectively. Amortization costs of $4.4 million and $5.9 million from all other finance leases are included in the "Depreciation and amortization" line item in the accompanying consolidated statements of operations for the years ended December 31, 2021 and 2020, respectively.

(2) Variable lease costs of $16.8 million and $17.1 million from leases in client outsourcing arrangements are included in the "Cost of revenue" line item in the accompanying consolidated statements of operations for the years ended December 31, 2021 and 2020, respectively. Variable lease costs of $53.3 million and $55.6 million from all other leases are included in the "Operating, administrative, and other" line item in the accompanying consolidated statements of operations for the years ended December 31, 2021 and 2020, respectively.

Weighted average remaining lease term and discount rate for our operating and finance leases are as follows:

	December 31, 2021	December 31, 2020
Weighted-average remaining lease term:		
Operating leases	8 years	8 years
Financing leases (1)	72 years	71 years
Weighted-average discount rate:		
Operating leases	2.9%	3.1%
Financing leases (1)	5.0%	5.0%

(1) Finance leases as of December 31, 2021 and 2020 included a 99 year lease on a real estate under development. If excluded, the weighted-average remaining lease term and weighted-average discount rate would be 3 years and 1.8%, respectively, as of December 31, 2021 and 3 years and 2.1%, respectively, as of December 31, 2020.

Maturities of lease liabilities by fiscal year as of December 31, 2021 are as follows (dollars in thousands):

	Operating Leases	Financing Leases
2022	$ 233,249	$ 38,058
2023	227,269	31,013
2024	202,485	19,774
2025	185,185	8,027
2026	153,623	2,335
Thereafter	513,462	222,142
Total remaining lease payments at December 31, 2021	1,515,273	321,349
Less: Interest	166,288	209,989
Present value of lease liabilities at December 31, 2021	$ 1,348,985	$ 111,360

Supplemental cash flow information and non-cash activity related to our operating and finance leases are as follows (dollars in thousands):

	Year Ended December 31,	
	2021	2020
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	$ 202,690	$ 170,317
Operating cash flows from financing leases	2,876	2,077
Financing cash flows from financing leases	41,211	40,304
Right-of-use assets obtained in exchange for new operating lease liabilities	199,275	177,384
Right-of-use assets obtained in exchange for new financing lease liabilities	39,460	61,218
Other non-cash increases (decreases) in operating lease right-of-use assets [(1)]	12,126	(17,621)
Other non-cash decreases in financing lease right-of-use assets [(1)]	(2,754)	(1,233)

(1) The non-cash activity in the right-of-use assets resulted from lease modifications and remeasurements.

13. Commitments and Contingencies

We are a party to a number of pending or threatened lawsuits arising out of, or incident to, our ordinary course of business. We believe that any losses in excess of the amounts accrued therefore as liabilities on our consolidated financial statements are unlikely to be significant, but litigation is inherently uncertain and there is the potential for a material adverse effect on our consolidated financial statements if one or more matters are resolved in a particular period in an amount materially in excess of what we anticipated.

In January 2008, CBRE MCI, a wholly-owned subsidiary of CBRE Capital Markets, entered into an agreement with Fannie Mae under Fannie Mae's DUS Program to provide financing for multifamily housing with five or more units. Under the DUS Program, CBRE MCI originates, underwrites, closes and services loans without prior approval by Fannie Mae, and typically, is subject to sharing up to one-third of any losses on loans originated under the DUS Program. CBRE MCI has funded loans with unpaid principal balances of $35.2 billion at December 31, 2021, of which $31.2 billion is subject to such loss sharing arrangements. CBRE MCI, under its agreement with Fannie Mae, must post cash reserves or other acceptable collateral under formulas established by Fannie Mae to provide for sufficient capital in the event losses occur. As of December 31, 2021 and 2020, CBRE MCI had a $100.0 million and a $95.0 million, respectively, letter of credit under this reserve arrangement and had recorded a liability of approximately $64.0 million and $57.1 million, respectively, for its loan loss guarantee obligation under such arrangement. Fannie Mae's recourse under the DUS Program is limited to the assets of CBRE MCI, which assets totaled approximately $1.1 billion (including $611.3 million of warehouse receivables, a substantial majority of which are pledged against warehouse lines of credit and are therefore not available to Fannie Mae) at December 31, 2021.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted in the U.S. in response to the Covid-19 pandemic. The CARES Act, among other things, permits borrowers with government-backed mortgages from Government Sponsored Enterprises who are experiencing a financial hardship to obtain forbearance of their loans. For Fannie Mae loans that we service, CBRE MCI is obligated to advance (for a forbearance period up to 90 consecutive days and potentially longer) scheduled principal and interest payments to Fannie Mae, regardless of whether the borrowers actually make the payments. These advances are reimbursable by Fannie Mae after 120 days. As of December 31, 2021, total advances for principal and interest were $9.3 million, all of which have already been reimbursed.

CBRE Capital Markets participates in Freddie Mac's Multifamily Small Balance Loan (SBL) Program. Under the SBL program, CBRE Capital Markets has certain repurchase and loss reimbursement obligations. We could potentially be obligated to repurchase any SBL loan originated by CBRE Capital Markets that remains in default for 120 days following the forbearance period, if the default occurred during the first 12 months after origination and such loan had not been earlier securitized. In addition, CBRE Capital Markets may be responsible for a loss not to exceed 10% of the original principal amount of any SBL loan that is not securitized and goes into default after the 12-month repurchase period. CBRE Capital Markets must post a cash reserve or other acceptable collateral to provide for sufficient capital in the event the obligations are triggered. As of both December 31, 2021 and 2020, CBRE Capital Markets had posted a $5.0 million letter of credit under this reserve arrangement.

We had outstanding letters of credit totaling $159.1 million as of December 31, 2021, excluding letters of credit for which we have outstanding liabilities already accrued on our consolidated balance sheet related to our subsidiaries' outstanding reserves for claims under certain insurance programs as well as letters of credit related to operating leases. The CBRE Capital Markets letters of credit totaling $105.0 million as of December 31, 2021 referred to in the preceding paragraphs represented the majority of the $159.1 million outstanding letters of credit as of such date. The remaining letters of credit are primarily executed by us in the ordinary course of business and expire at the end of each of the respective agreements.

We had guarantees totaling $50.9 million as of December 31, 2021, excluding guarantees related to pension liabilities, consolidated indebtedness and other obligations for which we have outstanding liabilities already accrued on our consolidated balance sheet, and excluding guarantees related to operating leases. The $50.9 million primarily represents guarantees executed by us in the ordinary course of business, including various guarantees of management and vendor contracts in our operations overseas, which expire at the end of each of the respective agreements.

In addition, as of December 31, 2021, we had issued numerous non-recourse carveout, completion and budget guarantees relating to development projects for the benefit of third parties. These guarantees are commonplace in our industry and are made by us in the ordinary course of our Real Estate Investments business. Non-recourse carveout guarantees generally require that our project-entity borrower not commit specified improper acts, with us potentially liable for all or a portion of such entity's indebtedness or other damages suffered by the lender if those acts occur. Completion and budget guarantees generally require us to complete construction of the relevant project within a specified timeframe and/or within a specified budget, with us potentially being liable for costs to complete in excess of such timeframe or budget. While there can be no assurance, we do not expect to incur any material losses under these guarantees.

An important part of the strategy for our Real Estate Investments business involves investing our capital in certain real estate investments with our clients. These co-investments generally total up to 2.0% of the equity in a particular fund. As of December 31, 2021, we had aggregate commitments of $127.1 million to fund these future co-investments. Additionally, an important part of our Real Estate Investments business strategy is to invest in unconsolidated real estate subsidiaries as a principal (in most cases co-investing with our clients). As of December 31, 2021, we had committed to fund $40.7 million of additional capital to these unconsolidated subsidiaries and $141.6 million to consolidated projects.

14. Employee Benefit Plans

Stock Incentive Plans

2012 Equity Incentive Plan and 2017 Equity Incentive Plan

Our 2012 Equity Incentive Plan (the 2012 Plan) and 2017 Equity Incentive Plan (the 2017 Plan) were adopted by our board of directors and approved by our stockholders on May 8, 2012 and May 19, 2017, respectively. Both the 2012 Plan and 2017 Plan authorized the grant of stock-based awards to our employees, directors and independent contractors. Our 2012 Plan was terminated in May 2017 in connection with the adoption of our 2017 Plan. Our 2017 Plan was terminated in May 2019 in connection with the adoption of our 2019 Equity Incentive Plan (the 2019 Plan), which is described below. At termination of the 2012 Plan, no unissued shares from the 2012 Plan were allocated to the 2017 Plan for potential future issuance. At termination of the 2017 Plan, no unissued shares from the 2017 Plan were allocated to the 2019 Plan for potential future issuance. Since our 2012 Plan and 2017 Plan have been terminated, no new awards may be granted under them. As of December 31, 2021, assuming the maximum number of shares under our performance-based awards will later be issued, 30,148 outstanding restricted stock unit (RSU) awards to acquire shares of our Class A common stock granted under the 2012 Plan remain outstanding according to their terms, and we will continue to issue shares to the extent required under the terms of such outstanding awards. Shares underlying awards that expire, terminate or lapse under the 2012 Plan will not become available for grant under the 2017 Plan or the 2019 Plan. As of December 31, 2021, 3,591,138 outstanding RSU awards to acquire shares of our Class A common stock granted under the 2017 Plan remain outstanding according to their terms, and we will continue to issue shares to the extent required under the terms of such outstanding awards (noting that any shares granted above target will get deducted from the 2019 Plan reserve as noted below). Shares underlying awards outstanding under the 2017 Plan at termination that are subsequently canceled, forfeited or terminated without issuance to the holder thereof will be available for grant under the 2019 Plan.

2019 Equity Incentive Plan

Our 2019 Plan was adopted by our board of directors on March 1, 2019 and approved by our stockholders on May 17, 2019. The 2019 Plan authorizes the grant of stock-based awards to employees, directors and independent contractors. Unless terminated earlier, the 2019 Plan will terminate on March 1, 2029. A total of 9,900,000 shares of our Class A common stock are reserved for issuance under the 2019 Plan, less 189,499 shares granted under the 2017 Plan between March 1, 2019, the date our board of directors approved the plan, and May 17, 2019, the date our stockholders approved the 2019 Plan. Additionally, as mentioned above, shares underlying awards outstanding under the 2017 Plan at termination that are subsequently canceled, forfeited or terminated without issuance to the holder thereof will be available for reissuance under the 2019 Plan. As of December 31, 2021, 748,003 shares were cancelled and 564,503 shares were withheld for payment of taxes under the 2017 Plan and added to the authorized pool for the 2019 Plan, bringing the total authorized amount under the 2019 Plan to 11,023,007 shares of our Class A common stock.

Shares underlying expired, canceled, forfeited or terminated awards under the 2019 Plan (other than awards granted in substitution of an award previously granted), plus those utilized to pay tax withholding obligations with respect to an award (other than an option or stock appreciation right) will be available for reissuance. Awards granted under the 2019 Plan are subject to a minimum vesting condition of one year. As of December 31, 2021, assuming the maximum number of shares under our performance-based awards will later be issued (which includes shares that could be issued over target related to performance awards issued and outstanding under the 2017 Plan), 3,590,079 shares remained available for future grants under this plan.

The number of shares issued or reserved pursuant to the 2012 Plan, 2017 Plan and 2019 Plan are subject to adjustment on account of a stock split of our outstanding shares, stock dividend, dividend payable in a form other than shares in an amount that has a material effect on the price of the shares, consolidation, combination or reclassification of the shares, recapitalization, spin-off, or other similar occurrences.

Non-Vested Stock Awards

We have issued non-vested stock awards, including RSUs and restricted shares, in our Class A common stock to certain of our employees, independent contractors and members of our board of directors. The following is a summary of the awards granted during the years ended December 31, 2021, 2020 and 2019.

- During the year ended December 31, 2021, we granted RSUs that are performance vesting in nature, with734,352 reflecting the maximum number of RSUs that may be issued if all of the performance targets are satisfied at their highest levels, and 969,299 RSUs that are time vesting in nature.
- During the year ended December 31, 2020, we granted RSUs that are performance vesting in nature, with910,346 reflecting the maximum number of RSUs that may be issued if all of the performance targets are satisfied at their highest levels, and 1,150,761 RSUs that are time vesting in nature.
- During the year ended December 31, 2019, we granted RSUs that are performance vesting in nature, with888,726 reflecting the maximum number of RSUs that may be issued if all of the performance targets are satisfied at their highest levels, and 1,493,788 RSUs that are time vesting in nature.

Our annual performance-vesting awards generally vest in full three years from the grant date, based on our achievement against various adjusted income per share performance targets. Our time-vesting awards generally vest 25% per year over four years from the grant date.

We made a special grant of RSUs under our 2017 Plan (Special RSU grant) to certain of our employees, with3,288,618 reflecting the maximum number of RSUs that may be issued if all of the performance targets are satisfied at their highest levels, and 939,605 RSUs that are time vesting in nature. During 2019, we made grants under this Special RSU grant program to certain of our employees, with 73,297 reflecting the maximum number of RSUs that may be issued if all of the performance targets are satisfied at their highest levels, and 20,942 RSUs that are time vesting in nature. No such grants were made during 2020. During 2021, we granted additional RSUs to certain of our employees, with 146,080 reflecting the maximum number of RSUs that may be issued if all of the performance targets are satisfied at their highest levels. There were no time vesting RSUs associated with the 2021 grants. As a condition to this Special RSU grant, each participant has agreed to execute a Restrictive Covenants Agreement. Each Special RSU grant (except the ones granted during 2021, which are all performance based) consisted of:

(i) Time Vesting RSUs with respect to33.3% of the total number of target RSUs subject to the grant.

(ii) Total Shareholder Return (TSR) Performance RSUs with respect to33.3% of the total number of target RSUs subject to the grant. The actual number of TSR Performance RSUs that will vest is determined by measuring our cumulative TSR against the cumulative TSR of each of the other companies comprising the S&P 500 on the Grant Date (the Comparison Group) over a six year measurement period commencing on the Grant Date and ending on December 1, 2023. For purposes of measuring TSR, the initial value of our common stock was the average closing price of such common stock for the 60 trading days immediately preceding the Grant Date and the final value of our common stock will be the average closing price of such common stock for the 60 trading days immediately preceding December 1, 2023.

(iii) EPS Performance RSUs with respect to 33.3% of the total number of target RSUs subject to the grant. The actual number of EPS Performance RSUs that will vest is determined by measuring our cumulative adjusted earnings per share growth against the cumulative EPS growth, as reported under GAAP (GAAP EPS), of each of the other members of the Comparison Group over a six year measurement period commencing on January 1, 2018 and ending on December 31, 2023.

The Time Vesting and TSR Performance RSUs subject to the Special RSU grants vest on December 1, 2023, while the EPS Performance RSUs subject to the Special RSU grants vest on December 31, 2023.

We estimated the fair value of the TSR Performance RSUs referred to above on the dates of the grants using a Monte Carlo simulation with the following assumptions:

	Year Ended December 31 [1],	
	2021 [2]	2019
Volatility of common stock	42.71% - 45.80%	25.96 %
Expected dividend yield	0.00 %	0.00 %
Risk-free interest rate	0.25% - 0.28%	2.12 %

[1] There were no grants during 2020.

[2] 2021 grants were made during different dates therefore a range of inputs is presented.

In November 2021, we made a special grant of RSUs under our 2019 Plan (Segment RSU Grant) to certain of our employees in Advisory Services and GWS segments, with 1,297,345 reflecting the maximum number of RSUs that may be issued if all of the performance targets are satisfied at their highest levels, and 370,670 RSUs that are time vesting in nature. As a condition to this Segment RSU Grant, each participant has agreed to execute a Restrictive Covenants Agreement. Each Segment RSU Grant consisted of:

(i) Time Vesting RSUs with respect to 33.3% of the total number of target RSUs subject to the grant, which cliff vests on November 10, 2026.

(ii) Segment Performance RSUs with respect to 33.3% of the total number of target RSUs subject to the grant. The actual number of Segment Performance RSUs that will vest is determined by measuring growth in certain segment specific metrics such as client operating profit, segment operating profit and major markets over a five year measurement period commencing on January 1, 2022 and ending on December 31, 2026.

(iii) EPS Performance RSUs with respect to 33.3% of the total number of target RSUs subject to the grant. The actual number of EPS Performance RSUs that will vest is determined by measuring our cumulative adjusted earnings per share growth against the cumulative EPS growth, as reported under GAAP, to a comparative group comprised of each of the other companies comprising the S&P 500 on the grant date over a five year measurement period commencing on January 1, 2022 and ending on December 31, 2026.

A summary of the status of our non-vested stock awards is presented in the table below:

	Shares/Units	Weighted Average Market Value Per Share
Balance at December 31, 2018	7,182,360	$ 41.04
Granted	2,000,977	50.07
Performance award achievement adjustments	166,007	37.36
Vested	(1,323,351)	37.43
Forfeited	(316,294)	42.09
Balance at December 31, 2019	7,709,699	43.89
Granted	1,605,934	56.45
Performance award achievement adjustments	560,563	39.89
Vested	(2,780,377)	39.81
Forfeited	(412,407)	48.27
Balance at December 31, 2020	6,683,412	47.99
Granted	2,531,959	92.16
Performance award achievement adjustments	(189,930)	49.76
Vested	(1,883,652)	46.34
Forfeited	(292,998)	55.80
Balance at December 31, 2021	6,848,791	64.10

Total compensation expense related to non-vested stock awards was $184.9 million, $60.4 million and $127.7 million for the years ended December 31, 2021, 2020 and 2019, respectively. At December 31, 2021, total unrecognized estimated compensation cost related to non-vested stock awards was approximately $ 269.4 million, which is expected to be recognized over a weighted average period of approximately 3.2 years.

Bonuses

We have bonus programs covering select employees, including senior management. Awards are based on the position and performance of the employee and the achievement of pre-established financial, operating and strategic objectives. The amounts charged to expense for bonuses were $871.7 million, $557.6 million and $554.6 million for the years ended December 31, 2021, 2020 and 2019, respectively.

401(k) Plan

Our CBRE 401(k) Plan (401(k) Plan) is a defined contribution savings plan that allows participant deferrals under Section 401(k) of the Internal Revenue Code (IRC). Most of our U.S. employees, other than qualified real estate agents having the status of independent contractors under section 3508 of the IRC of 1986, as amended, and non-plan electing union employees, are eligible to participate in the plan. The 401(k) Plan provides for participant contributions as well as a company match. A participant is allowed to contribute to the 401(k) Plan from 1% to 75% of his or her compensation, subject to limits imposed by applicable law. Effective January 1, 2007, all participants hired post January 1, 2007 vest in company match contributions 20% per year for each plan year they are employed. All participants hired before January 1, 2007 are immediately vested in company match contributions. Effective October 1, 2021, all active participants vest in company match contributions at 33% per year for each plan year they are employed. For 2021, 2020 and 2019, we contributed a 67% match on the first 6% of annual compensation for participants with an annual base salary of less than $100,000 and we contributed a 50% match on the first 6% of annual compensation for participants with an annual base salary of $100,000 or more, or who are commissioned employees (up to $150,000 of compensation). Effective January 1, 2022, we will contribute 67% on the first 6% of eligible compensation contributed to the plan (up to $150,000 of eligible pay) for all employees regardless of base compensation or commissioned status. In connection with the 401(k) Plan, we charged to expense $72.4 million, $83.5 million and $59.9 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Participants are entitled to invest up to 25% of their 401(k) account balance in shares of our common stock. As of December 31, 2021, approximately 1.1 million shares of our common stock were held as investments by participants in our 401(k) Plan.

Pension Plans

We have 2 major non-U.S. contributory defined benefit pension plans, both based in the U.K. Our subsidiaries maintain these plans to provide retirement benefits to existing and former employees participating in these plans. With respect to these plans, our historical policy has been to contribute annually to the plans, an amount to fund pension liabilities as actuarially determined and as required by applicable laws and regulations. Our contributions to these plans are invested by the plan trustee and, if these investments do not perform well in the future, we may be required to provide additional contributions to cover any pension underfunding. Effective July 1, 2007, we reached agreements with the active members of these plans to freeze future pension plan benefits. In return, the active members became eligible to enroll in a defined contribution plan. For these plans, as of December 31, 2021 and 2020, the fair values of pension plan assets were $411.1 million and $378.9 million, and the fair values of projected benefit obligations were $437.5 million and $470.1 million, respectively. As a result, these plans were underfunded by approximately $26.4 million and $91.2 million at December 31, 2021 and 2020.

As of December 31, 2021, inclusive of individually immaterial plans not shown in the above table, for plans where total projected benefit obligations exceed plan assets, projected benefit obligations and the fair value of plan assets were $524.3 million and $438.2 million as of December 31, 2021, respectively, and $558.4 million and $403.5 million as of December 31, 2020, respectively.

For plans where the accumulated benefit obligation exceeds plan assets, such obligations are the same as the projected benefit obligations.

Items not yet recognized as a component of net periodic pension cost (benefit) for the major plans were $119.9 million and $165.9 million as of December 31, 2021 and 2020, respectively, and were included in accumulated other comprehensive loss in the accompanying consolidated balance sheets. During 2021, there were gains on plan obligations of $22.1 million as a result of changes in actuarial assumptions. During 2020, there were losses on plan obligations of $27.7 million primarily as a result of changes in assumptions resulting in a loss of $37.1 million which was partially offset by $9.5 million in net gains due to plan experience.

Net periodic pension benefit was $8.9 million for the year ended December 31, 2021, and not material for the years ended December 31, 2020 and 2019.

The following table provides amounts recognized related to our defined benefit pension plans within the following captions on our consolidated balance sheets (dollars in thousands):

	December 31,	
	2021	2020
Other assets, net	$ 73,990	$ 58,410
Other current liabilities	19,788	19,432
Other liabilities	69,478	135,440

The following table presents estimated future benefit payments over the next ten years, as of December 31, 2021. We will fund these obligations from the assets held by these plans. If the assets these plans hold are not sufficient to fund these payments, the company will fund the remaining obligations (dollars in thousands):

	2022	2023	2024	2025	2026	2027-2031
Estimated future benefit payments for defined benefit plans	$ 39,377	$ 39,103	$ 40,432	$ 42,190	$ 43,004	$ 231,643

15. Income Taxes

The components of income before provision for income taxes consisted of the following (dollars in thousands):

	Year Ended December 31,		
	2021	2020	2019
Domestic	$ 1,683,710	$ 470,181	$ 839,899
Foreign	725,711	499,788	521,446
Total	$ 2,409,421	$ 969,969	$ 1,361,345

Our tax provision (benefit) consisted of the following (dollars in thousands):

	Year Ended December 31,		
	2021	2020	2019
Current provision:			
Federal	$ 274,987	$ 18,951	$ (51,980)
State	115,196	33,291	52,403
Foreign	238,273	88,994	163,833
Total current provision	628,456	141,236	164,256
Deferred provision:			
Federal	34,607	61,034	(74,432)
State	(4,395)	3,872	(5,760)
Foreign	(91,162)	7,959	(14,169)
Total deferred provision	(60,950)	72,865	(94,361)
Total provision for income taxes	$ 567,506	$ 214,101	$ 69,895

The following is a reconciliation stated as a percentage of pre-tax income of the U.S. statutory federal income tax rate to our effective tax rate:

	Year Ended December 31,		
	2021	2020	2019
Federal statutory tax rate	21 %	21 %	21 %
Foreign rate differential	—	—	4
State taxes, net of federal benefit	4	3	3
Non-deductible expenses	—	1	1
Reserves for uncertain tax positions	1	—	1
Credits and exemptions	(1)	(2)	(4)
Outside basis differences recognized as a result of a legal entity restructuring	—	—	(20)
Other	(1)	(1)	(1)
Effective tax rate	24 %	22 %	5 %

In the fourth quarter of 2019, we recognized a net tax benefit of approximately $277.2 million attributable to outside basis differences recognized as a result of a legal entity restructuring. The recognition of the outside tax basis differences generated a capital loss that offset capital gains generated during 2019. A portion of the capital loss was carried back to tax years 2016, 2017 and 2018 to offset capital gains in those years. The remaining capital loss was carried forward to tax years 2020 and forward to be utilized to offset capital gains in these years. Based on our strong history of capital gains in the prior years and the nature of our business we expect to generate sufficient capital gains in the remaining three year carry forward period and therefore concluded that it is more likely than not that we will realize the full tax benefit from the capital loss carried forward. Accordingly, we have not provided any valuation allowance against the deferred tax asset for the capital loss carried forward.

Cumulative tax effects of temporary differences are shown below (dollars in thousands):

	December 31,	
	2021	2020
Assets:		
Tax losses and tax credits	$ 307,507	$ 334,303
Operating lease liabilities	269,960	358,066
Bonus and deferred compensation	381,408	295,690
Bad debt and other reserves	65,188	73,061
Pension obligation	5,007	18,026
All other	65,710	24,623
Deferred tax assets, before valuation allowance	$ 1,094,781	$ 1,103,769
Less: Valuation allowance	(273,256)	(291,096)
Deferred tax assets	$ 821,525	$ 812,673
Liabilities:		
Tax effect on revenue items related to Topic 606 adoption	$ —	$ (16,784)
Property and equipment	(92,166)	(88,595)
Unconsolidated affiliates and partnerships	(128,170)	(59,544)
Capitalized costs and intangibles	(583,219)	(313,099)
Operating lease assets	(240,261)	(366,671)
All other	(25,935)	(936)
Deferred tax liabilities	$ (1,069,751)	$ (845,629)
Net deferred tax liabilities	$ (248,226)	$ (32,956)

As of December 31, 2021, we had a U.S. federal capital loss carryforward, offset by reserves for uncertain tax position, which will expire after 2024. As of December 31, 2021, there were deferred tax assets before valuation allowances of approximately $299.1 million related to foreign net operating losses (NOLs). The majority of the foreign NOLs carryforward indefinitely. In certain foreign jurisdictions NOLs expire each year beginning in 2021. The utilization of NOLs may be subject to certain limitations under U.S. federal, state and foreign laws. We have recorded a valuation allowance for deferred tax assets where we believe that it is more likely than not that the NOLs will not be utilized.

We determined that as of December 31, 2021, $273.3 million of deferred tax assets do not satisfy the realization criteria set forth in Topic 740. Accordingly, a valuation allowance has been recorded for this amount. If released, the entire amount would result in a benefit to continuing operations. During the year ended December 31, 2021, our valuation allowance decreased by approximately $17.8 million. The decrease was attributed to a reversal of the beginning of year valuation allowance of $12.3 million as certain foreign subsidiaries expect to utilize deferred tax assets before expiration as a result of current and forecasted earnings within the applicable jurisdiction, a reduction of $19.5 million due to foreign currency translation and tax rate changes, and an increase in valuation allowance of $14.0 million due to current year activities. We believe it is more likely than not that future operations will generate sufficient taxable income to realize the benefit of our deferred tax assets recorded as of December 31, 2021, net of valuation allowance.

At December 31, 2021, we have undistributed earnings of certain foreign subsidiaries of approximately $4.4 billion for which we have indefinitely reinvested and not recognized deferred taxes. Estimating the amount of the unrecognized deferred tax is not practicable due to the complexity and variety of assumptions necessary to estimate the tax. In 2021, following the acquisition of Turner & Townsend, we recorded $20.4 million of deferred tax liability related to book over tax basis difference in Turner & Townsend. The deferred tax liability was offset by an increase to goodwill in purchase accounting and therefore did not impact 2021 income tax expense.

The total amount of gross unrecognized tax benefits was approximately $191.9 million and $168.5 million as of December 31, 2021 and 2020, respectively. The total amount of unrecognized tax benefits that would affect our effective tax rate, if recognized, is $108.5 million as of December 31, 2021.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (dollars in thousands):

	Year Ended December 31,	
	2021	2020
Beginning balance, unrecognized tax benefits	$ (168,516)	$ (141,164)
Gross increases - tax positions in prior period	(4,478)	(31,070)
Gross decreases - tax positions in prior period	2,675	1,530
Gross increases - current-period tax positions	(25,619)	(9,688)
Decreases relating to settlements	390	—
Reductions as a result of lapse of statute of limitations	3,610	11,791
Foreign exchange movement	—	85
Ending balance, unrecognized tax benefits	$ (191,938)	$ (168,516)

Our continuing practice is to recognize accrued interest and/or penalties related to income tax matters within income tax expense. During the years ended December 31, 2021, 2020 and 2019, we accrued an additional $0.6 million, $0.4 million and $0.3 million, respectively, in interest and penalties associated with uncertain tax positions. As of December 31, 2021 and 2020, we have recognized a liability for interest and penalties of $3.8 million and $1.6 million, respectively. We believe the amount of gross unrecognized tax benefits that will be settled during the next twelve months due to filing amended returns and settling ongoing exams cannot be reasonably estimated but will not be significant.

We conduct business globally and, as a result, one or more of our subsidiaries files income tax returns in the U.S. federal jurisdiction and in multiple state, local and foreign tax jurisdictions. Our U.S. federal income tax returns for years 2016 through 2019 are currently under audit by the Internal Revenue Service. We are also under audit by various states and foreign tax jurisdictions including Australia, France, Hungary, Mexico, and Spain. With limited exception, our significant foreign tax jurisdictions are no longer subject to audit by the various tax authorities for tax years prior to 2012.

16. Stockholders' Equity

Our board of directors is authorized, subject to any limitations imposed by law, without the approval of our stockholders, to issue a total of 25,000,000 shares of preferred stock, in one or more series, with each such series having rights and preferences including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, as our board of directors may determine. As of December 31, 2021 and 2020, no shares of preferred stock have been issued.

Our board of directors is authorized to issue up to 525,000,000 shares of Class A common stock, $0.01 par value per share (common stock), of which 332,875,959 shares and 335,561,345 shares were issued and outstanding as of December 31, 2021 and 2020, respectively.

Stock Repurchase Program

In 2016, our board of directors authorized the company to repurchase up to an aggregate of $250.0 million of our common stock over three years. During the year ended December 31, 2019, we spent $45.1 million to repurchase 1,144,449 shares of our common stock at an average price of $39.38 per share using cash on hand. This repurchase program terminated upon the effectiveness of the new program that took effect in March 2019.

In February 2019, our board of directors authorized a program for the repurchase of up to $300.0 million of our common stock over three years, effective March 11, 2019. In both August and November 2019, our board of directors authorized an additional $100.0 million under our program, bringing the total authorized repurchase amount under the program to a total of $500.0 million. During the year ended December 31, 2021, we repurchased 3,122,054 shares of our common stock with an average price of $92.03 per share using cash on hand for $287.3 million. During the year ended December 31, 2020, we spent $50.0 million to repurchase 1,050,084 shares of our common stock at an average price of $47.62 per share using cash on hand.

On November 19, 2021, our board of directors authorized a new program for repurchase of up to $2.0 billion of our common stock over five years. During the year ended December 31, 2021, we spent $85.6 million to repurchase 832,315 shares of our common stock with an average price of $102.82 per share.

Our repurchase programs do not obligate us to acquire any specific number of shares. Under these programs, shares may be repurchased in privately negotiated and/or open market transactions, including under plans complying with Rule 10b5-1 under the Securities Exchange Act of 1934. Our stock repurchases have been funded with cash on hand and we intend to continue funding future repurchases with existing cash. We may utilize our stock repurchase programs to continue offsetting the impact of our stock-based compensation program and on a more opportunistic basis if we believe our stock presents a compelling investment compared to other discretionary uses. The timing of any future repurchases and the actual amounts repurchased will depend on a variety of factors, including the market price of our common stock, general market and economic conditions and other factors. As of December 31, 2021, we had approximately $1.98 billion of capacity remaining under our repurchase programs.

17. Income Per Share Information

The calculations of basic and diluted income per share attributable to CBRE Group, Inc. stockholders are as follows (dollars in thousands, except share and per share data):

	Year Ended December 31,		
	2021	2020	2019
Basic Income Per Share			
Net income attributable to CBRE Group, Inc. stockholders	$ 1,836,574	$ 751,989	$ 1,282,357
Weighted average shares outstanding for basic income per share	335,232,840	335,196,296	335,795,654
Basic income per share attributable to CBRE Group, Inc. stockholders	$ 5.48	$ 2.24	$ 3.82
Diluted Income Per Share			
Net income attributable to CBRE Group, Inc. stockholders	$ 1,836,574	$ 751,989	$ 1,282,357
Weighted average shares outstanding for basic income per share	335,232,840	335,196,296	335,795,654
Dilutive effect of contingently issuable shares	4,484,561	3,195,914	4,727,217
Weighted average shares outstanding for diluted income per share	339,717,401	338,392,210	340,522,871
Diluted income per share attributable to CBRE Group, Inc. stockholders	$ 5.41	$ 2.22	$ 3.77

For the years ended December 31, 2021, 2020 and 2019,186,241, 567,589 and 374,555, respectively, of contingently issuable shares were excluded from the computation of diluted income per share because their inclusion would have had an anti-dilutive effect.

18. Revenue from Contracts with Customers

We account for revenue with customers in accordance with Topic 606. Revenue is recognized when or as control of the promised services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to receive in exchange for those services.

Disaggregated Revenue

The following tables represent a disaggregation of revenue from contracts with customers by type of service and/or segment (dollars in thousands):

	Year Ended December 31, 2021				
	Advisory Services	Global Workplace Solutions	Real Estate Investments	Corporate, other and eliminations	Consolidated
Topic 606 Revenue:					
Facilities management	$ —	$ 14,166,987	$ —	$ —	$ 14,166,987
Advisory leasing	3,306,548	—	—	1,623	3,308,171
Advisory sales	2,789,573	—	—	—	2,789,573
Property management	1,739,011	—	—	(21,979)	1,717,032
Project management	—	2,931,930	—	—	2,931,930
Valuation	733,523	—	—	—	733,523
Commercial mortgage origination [1]	313,704	—	—	—	313,704
Loan servicing [2]	43,218	—	—	—	43,218
Investment management	—	—	556,154	—	556,154
Development services	—	—	390,074	—	390,074
Topic 606 Revenue	8,925,577	17,098,917	946,228	(20,356)	26,950,366
Out of Scope of Topic 606 Revenue:					
Commercial mortgage origination	387,664	—	—	—	387,664
Loan servicing	262,518	—	—	—	262,518
Development services [3]	—	—	145,488	—	145,488
Total Out of Scope of Topic 606 Revenue	650,182	—	145,488	—	795,670
Total Revenue	$ 9,575,759	$ 17,098,917	$ 1,091,716	$ (20,356)	$ 27,746,036

	Year Ended December 31, 2020				
	Advisory Services [4]	Global Workplace Solutions [4]	Real Estate Investments	Corporate, other and eliminations [4]	Consolidated
Topic 606 Revenue:					
Facilities management	$ —	$ 13,484,692	$ —	$ —	$ 13,484,692
Advisory leasing	2,460,392	—	—	(2,274)	2,458,118
Advisory sales	1,663,959	—	—	—	1,663,959
Property management	1,658,593	—	—	(25,656)	1,632,937
Project management	—	2,323,341	—	—	2,323,341
Valuation	614,157	—	—	—	614,157
Commercial mortgage origination [1]	130,897	—	—	—	130,897
Loan servicing [2]	45,692	—	—	—	45,692
Investment management	—	—	474,939	—	474,939
Development services	—	—	341,387	—	341,387
Topic 606 Revenue	6,573,690	15,808,033	816,326	(27,930)	23,170,119
Out of Scope of Topic 606 Revenue:					
Commercial mortgage origination	446,968	—	—	—	446,968
Loan servicing	193,904	—	—	—	193,904
Development services [3]	—	—	15,204	—	15,204
Total Out of Scope of Topic 606 Revenue	640,872	—	15,204	—	656,076
Total Revenue	$ 7,214,562	$ 15,808,033	$ 831,530	$ (27,930)	$ 23,826,195

	Year Ended December 31, 2019				
	Advisory Services [4]	Global Workplace Solutions [4]	Real Estate Investments	Corporate, other and eliminations [4]	Consolidated
Topic 606 Revenue:					
Facilities management	$ —	$ 12,283,868	$ —	$ —	$ 12,283,868
Advisory leasing	3,375,937	—	—	(1,170)	3,374,767
Advisory sales	2,164,676	—	—	—	2,164,676
Property management	1,700,382	—	—	(21,817)	1,678,565
Project management	—	2,317,951	—	—	2,317,951
Valuation	630,943	—	—	—	630,943
Commercial mortgage origination [1]	154,227	—	—	—	154,227
Loan servicing [2]	30,943	—	—	—	30,943
Investment management	—	—	424,882	—	424,882
Development services	—	—	213,264	—	213,264
Topic 606 Revenue	8,057,108	14,601,819	638,146	(22,987)	23,274,086
Out of Scope of Topic 606 Revenue:					
Commercial mortgage origination	421,736	—	—	—	421,736
Loan servicing	175,793	—	—	—	175,793
Development services [3]	—	—	22,476	—	22,476
Total Out of Scope of Topic 606 Revenue	597,529	—	22,476	—	620,005
Total Revenue	$ 8,654,637	$ 14,601,819	$ 660,622	$ (22,987)	$ 23,894,091

[1] We earn fees for arranging financing for borrowers with third-party lender contacts. Such fees are in scope of Topic 606.

[2] Loan servicing fees earned from servicing contracts for which we do not hold mortgage servicing rights are in scope of Topic 606.

[3] Out of scope revenue for development services represents selling profit from transfers of sales-type leases in the scope of Topic 842.

[4] Prior period segment results have been recast to conform to the changes as discussed in Note 19.

Contract Assets and Liabilities

We had contract assets totaling $474.4 million ($338.7 million of which was current) and $471.8 million ($318.2 million of which was current) as of December 31, 2021 and 2020, respectively. During the year ended December 31, 2021, our contract assets decreased by $2.5 million, primarily due to a decrease in contract assets in our advisory business.

We had contract liabilities totaling $288.9 million ($280.7 million of which was current) and $164.1 million ($162.0 million of which was current) as of December 31, 2021 and 2020, respectively. During the year ended December 31, 2021, we recognized revenue of $152.0 million that was included in the contract liability balance at December 31, 2020.

Contract Costs

Within our Global Workplace Solutions segment, we incur transition costs to fulfill contracts prior to services being rendered. We capitalized $84.9 million, $64.2 million and $69.3 million, respectively, of transition costs during the years ended December 31, 2021, 2020 and 2019. We recorded amortization of transition costs of $40.3 million, $46.9 million and $32.3 million, respectively, during the years ended December 31, 2021, 2020 and 2019.

19. Segments

We organize our operations around, and publicly report our financial results on,three global business segments: (1) Advisory Services; (2) Global Workplace Solutions and (3) Real Estate Investments. Effective January 1, 2021, we realigned our organizational structure and performance measure to how our chief operating decision maker (CODM) views the company. This includes a “Corporate, other and elimination” component and a segment measurement of profit and loss referred to as segment operating profit. In addition, transaction services was fully moved under the Advisory Services segment and project management was fully moved under the Global Workplace Solutions segment. Previously transaction services and project management were split between the Global Workplace Solutions segment and the Advisory Services segment.

Our Corporate segment primarily consists of corporate headquarters costs for executive officers and certain other central functions. We track our strategic non-core non-controlling equity investments in “other” which is considered an operating segment and reported together with Corporate as it does not meet the aggregation criteria for presentation as a separate reportable segment. These activities are not allocated to the other business segments. Corporate and other also includes eliminations related to inter-segment revenue.

Segment operating profit (SOP) is the measure reported to the CODM for purposes of making decisions about allocating resources to each segment and assessing performance of each segment. Segment operating profit represents earnings, inclusive of amount attributable to non-controlling interest, before net interest expense, write-off of financing costs on extinguished debt, income taxes, depreciation and amortization and asset impairments, as well as adjustments related to the following: certain carried interest incentive compensation expense (reversal) to align with the timing of associated revenue, fair value adjustments to real estate assets acquired in the Telford acquisition (purchase accounting) that were sold in the period, costs incurred related to legal entity restructuring, costs associated with workforce optimization, costs associated with our reorganization, transformation initiatives and integration and other costs related to acquisitions. This metric excludes the impact of corporate overhead as these costs are now reported under Corporate and other. We changed the definition of SOP to include net income (loss) attributable to non-controlling interest to provide a more meaningful view of the segment’s performance and related margins and to conform to the CODM’s view of the business segments.

Prior period segment results for all of our reportable segments have been recast to conform to the above changes.

Summarized financial information by segment is as follows (dollars in thousands):

	Year Ended December 31,		
	2021	2020	2019
Revenue			
Advisory Services	$ 9,575,759	$ 7,214,562	$ 8,654,637
Global Workplace Solutions	17,098,917	15,808,033	14,601,819
Real Estate Investments	1,091,716	831,530	660,622
Corporate, other and eliminations	(20,356)	(27,930)	(22,987)
Total revenue	$ 27,746,036	$ 23,826,195	$ 23,894,091
Depreciation and Amortization			
Advisory Services	$ 311,397	$ 311,445	$ 275,270
Global Workspace Solutions	158,757	134,383	130,427
Real Estate Investments	27,111	27,367	13,483
Corporate, other and eliminations	28,606	28,533	20,044
Total depreciation and amortization	$ 525,871	$ 501,728	$ 439,224
Equity Income (Loss) from Unconsolidated Subsidiaries			
Advisory Services	$ 24,778	$ 4,526	$ 3,110
Global Workspace Solutions	1,720	90	(927)
Real Estate Investments	555,341	123,548	155,454
Corporate, other and eliminations	36,858	(2,003)	3,288
Total equity income from unconsolidated subsidiaries	$ 618,697	$ 126,161	$ 160,925
Segment Operating Profit			
Advisory Services	$ 2,063,227	$ 1,347,826	$ 1,690,959
Global Workplace Solutions	708,039	575,299	475,767
Real Estate Investments	520,001	257,700	209,666
Total reportable segment operating profit	$ 3,291,267	$ 2,180,825	$ 2,376,392

Reconciliation of total reportable segment operating profit to net income is as follows (dollars in thousands):

	Year Ended December 31,		
	2021	2020	2019
Net income attributable to CBRE Group, Inc.	$ 1,836,574	$ 751,989	$ 1,282,357
Net income attributable to non-controlling interests	5,341	3,879	9,093
Net income	1,841,915	755,868	1,291,450
Adjustments to increase (decrease) net income:			
Depreciation and amortization	525,871	501,728	439,224
Asset impairments	—	88,676	89,787
Interest expense, net of interest income	50,352	67,753	85,754
Write-off of financing costs on extinguished debt	—	75,592	2,608
Provision for income taxes	567,506	214,101	69,895
Costs associated with transformation initiatives [1]	—	155,148	—
Carried interest incentive compensation expense (reversal) to align with the timing of associated revenue	49,941	(22,912)	13,101
Impact of fair value adjustments to real estate assets acquired in the Telford acquisition (purchase accounting) that were sold in period	(5,725)	11,598	9,301
Costs incurred related to legal entity restructuring	—	9,362	6,899
Integration and other costs related to acquisitions	44,552	1,756	15,292
Costs associated with workforce optimization efforts [2]	—	37,594	—
Costs associated with our reorganization, including cost-savings initiatives [3]	—	—	49,565
Corporate and other loss, including eliminations	216,855	284,561	303,516
Total reportable segment operating profit	$ 3,291,267	$ 2,180,825	$ 2,376,392

[1] During 2020, management began the implementation of certain transformation initiatives to enable the company to reduce costs, streamline operations and support future growth. The majority of expenses incurred were cash in nature and primarily related to employee separation benefits, lease termination costs and professional fees. See Note 21 for further discussion.

[2] Primarily represents costs incurred related to workforce optimization initiated and executed in the second quarter of 2020 as part of management's cost containment efforts in response to the Covid-19 pandemic. The charges are cash expenditures primarily for severance costs incurred related to this effort. Of the total costs, $7.4 million was included within the "Cost of revenue" line item and $30.2 million was included in the "Operating, administrative, and other" line item in the accompanying consolidated statements of operations for the year ended December 31, 2020.

[3] Primarily represents severance costs related to headcount reductions in connection with our reorganization announced in the third quarter of 2018 that became effective January 1, 2019.

Our CODM is not provided with total asset information by segment and accordingly, does not measure or allocate total assets on a segment basis. As a result, we have not disclosed any asset information by segment.

Geographic Information

Revenue in the table below is allocated based upon the country in which services are performed (dollars in thousands):

	Year Ended December 31,		
	2021	2020	2019
Revenue			
United States	$ 15,700,279	$ 13,472,013	$ 13,852,018
United Kingdom	3,617,504	3,083,810	2,972,704
All other countries	8,428,253	7,270,372	7,069,369
Total revenue	$ 27,746,036	$ 23,826,195	$ 23,894,091

20. Related Party Transactions

The accompanying consolidated balance sheets include loans to related parties, primarily employees other than our executive officers, of $475.2 million and $424.2 million as of December 31, 2021 and 2020, respectively. The majority of these loans represent sign-on and retention bonuses issued or assumed in connection with acquisitions and prepaid commissions as well as prepaid retention and recruitment awards issued to employees. These loans are at varying principal amounts, bear interest at rates up to 3.07% per annum and mature on various dates through 2030.

21. Transformation Initiatives

During the third quarter of 2020, management embarked on the implementation of certain transformation initiatives to enable the company to reduce costs, streamline operations and support future growth.

As part of these initiatives, we incurred the following costs, primarily in cash, for the year ended December 31, 2020 (dollars in thousands):

	Advisory Services	Global Workplace Solutions	Real Estate Investments	Consolidated
Employee separation benefits	$ 57,550	$ 31,083	$ 2,444	$ 91,077
Lease termination costs	43,225	4,586	—	47,811
Professional fees and other	13,212	2,510	538	16,260
Subtotal	113,987	38,179	2,982	155,148
Depreciation expense	14,184	166	6,342	20,692
Total	$ 128,171	$ 38,345	$ 9,324	$ 175,840

Of the total charges incurred, net of depreciation expense, $42.1 million was included within the “Cost of revenue” line item and $113.0 million was included in the “Operating, administrative, and other” line item in the accompanying consolidated statement of operations for the year ended December 31, 2020.

We did not incur any significant costs related to these initiatives during the year ended December 31, 2021.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Securities Exchange Act of 1934, as amended (the Exchange Act). The company's management, with participation of the CEO and CFO, under the oversight of our Board of Directors, evaluated the effectiveness of the company's internal control over financial reporting as of December 31, 2021, using the framework in Internal Control - Integrated Framework (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). A company's internal control over financial reporting includes those policies and procedures that:

(1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company;

(2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and

(3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness towards future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

Our evaluation of internal control over financial reporting did not include the internal control over financial reporting of the acquired controlling interest in Turner & Townsend Holdings Limited, which was acquired in 2021. The amount of total assets and revenue included in our consolidated financial statements as of and for the year ended December 31, 2021 that is attributable to the acquired controlling interest in Turner & Townsend Holdings Limited was approximately $417 million and $194 million, respectively.

Based on the evaluation, management concluded that the company's internal control over financial reporting was not effective as of December 31, 2021 due to the material weaknesses described below.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

Our independent registered public accounting firm, KPMG LLP, who audited the consolidated financial statements included in this Annual Report on Form 10-K, issued an adverse opinion on the effectiveness of the company's internal control over financial reporting. KPMG LLP's report is included herein on page 56.

Material Weaknesses Identified Relating to Global Workplace Solutions Segment – Europe, Middle East & Africa Region (GWS EMEA)

GWS EMEA resources were not sufficiently trained to operate controls related to financial reporting risks, resulting in process level controls that did not operate effectively in the revenue & receivables and journal entries processes. These control deficiencies create a reasonable possibility that a material misstatement to the consolidated financial statements will not be prevented or detected on a timely basis, and therefore we conclude that the deficiencies represent material weaknesses in internal control over financial reporting and our internal control over financial reporting is not effective as of December 31, 2021.

The Company's Plan to Remediate the Material Weaknesses

The company, with the oversight from the Audit Committee of the Board of Directors, is committed to remediating the GWS EMEA material weaknesses in a timely manner. We are using both internal and external resources to assist in the remediation plan by continuing to train all relevant personnel involved in the revenue & receivables and journal entries processes.

Our remediation efforts related to the material weaknesses are ongoing. These material weaknesses will not be considered remediated until the applicable controls have been fully designed, documented, implemented, and operate for a sufficient period of time for management to conclude, through testing, that these controls are operating effectively. While we intend to complete the remediation of the material weaknesses in 2022, there can be no assurances that we will be able to successfully complete the remediation within the contemplated timeline.

Disclosure Controls and Procedures

Our Chief Executive Officer and Chief Financial Officer ("certifying officers") have conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d- 15(e) under the Exchange Act as of December 31, 2021. Our certifying officers concluded that as a result of the material weaknesses in internal control over financial reporting as described above, our disclosure controls and procedures were not effective as of December 31, 2021.

Rule 13a-15 of the Exchange Act requires that we conduct an evaluation of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Annual Report, and we have a disclosure policy in furtherance of the same. This evaluation is designed to ensure that all corporate disclosure is complete and accurate in all material respects. The evaluation is further designed to ensure that all information required to be disclosed in our SEC reports is accumulated and communicated to management to allow timely decisions regarding required disclosures and recorded, processed, summarized and reported within the time periods and in the manner specified in the SEC's rules and forms. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Our Chief Executive Officer and Chief Financial Officer supervise and participate in this evaluation, and they are assisted by members of our Disclosure Committee. Our Disclosure Committee consists of our General Counsel, our Deputy CFO and Chief Accounting Officer, our Chief Transformation Officer, our Chief Communication Officer, our Senior Officers of significant business lines and other select employees.

In light of the material weaknesses described above, management performed additional analysis and other procedures to ensure that our consolidated financial statements were prepared in accordance with U.S. generally accepted accounting principles (GAAP). Accordingly, management believes that the consolidated financial statements included in this Annual Report on Form 10-K fairly present, in all material respects, our financial position, results of operations and cash flows as of and for the periods presented, in accordance with GAAP.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the fiscal quarter ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Remediation of Previously Reported Material Weaknesses Relating to GWS EMEA

As previously reported, management identified that the company had material weaknesses in its internal control over financial reporting as of December 31, 2019, related to its GWS EMEA business, which continued through December 31, 2020. Based on the company's evaluation under the COSO framework and excluding the material weaknesses described above, management ensured that the root causes contributing to the previously reported material weaknesses were remediated, such that the controls were designed, implemented, and operating effectively.

Item 9B. Other Information.

Effective as of February 23, 2022, the compensation committee of our board of directors amended each outstanding restricted stock unit award pertaining to our common stock to provide that the restricted stock units subject to such award will be credited with dividend equivalents as and when dividends are paid on shares of our common stock, with such dividend equivalents deemed to be invested in additional restricted stock units subject to the award as of the corresponding dividend payment date and vesting upon the vesting of the underlying restricted stock units to which they are attributable. Such dividend equivalents will also be provided with respect to all restricted stock units granted after February 23, 2022.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information under the headings “Elect Directors,” “Corporate Governance,” “Executive Management” and “Stock Ownership” in the definitive proxy statement for our 2022 Annual Meeting of Stockholders is incorporated herein by reference.

We are filing the certifications by the Chief Executive Officer and Chief Financial Officer required under Section 302 of the Sarbanes-Oxley Act as exhibits to this Annual Report.

Item 11. Executive Compensation.

The information contained under the headings “Corporate Governance,” “Compensation Discussion and Analysis” and “Executive Compensation” in the definitive proxy statement for our 2022 Annual Meeting of Stockholders is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information contained under the heading “Stock Ownership” in the definitive proxy statement for our 2022 Annual Meeting of Stockholders is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information contained under the headings “Elect Directors,” “Corporate Governance” and “Related-Party Transactions” in the definitive proxy statement for our 2022 Annual Meeting of Stockholders is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

The information contained under the heading “Audit and Other Fees” in the definitive proxy statement for our 2022 Annual Meeting of Stockholders is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

1. *Financial Statements*

   See Index to Consolidated Financial Statements and Financial Statement Schedules located on page 52 of this report.

2. *Financial Statement Schedules*

   See Schedule II located on page 120 of this report.

3. *Exhibits*

   See Exhibit Index located on page 121 of this report.

Item 16. Form 10-K Summary.

Not applicable.

CBRE GROUP, INC.
SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS
(Dollars in thousands)

	Allowance for Doubtful Accounts
Balance, December 31, 2018	$ 60,348
Additions: Charges to expense	20,373
Deductions: Write-offs, payments and other	7,996
Balance, December 31, 2019	72,725
Additions: Charges to expense	47,240
Deductions: Write-offs, payments and other	24,432
Balance, December 31, 2020	95,533
Additions: Charges to expense	17,818
Deductions: Write-offs, payments and other	15,763
Balance, December 31, 2021	$ 97,588

EXHIBIT INDEX

Exhibit No.	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	SEC File No.	Exhibit	Filing Date	
2.1	Share Sale Agreement, dated November 12, 2013, by and among William Investments Limited, the individual vendors named therein, CBRE Holdings Limited, CBRE UK Acquisition Company Limited and CBRE Group, Inc.	8-K	001-32205	1.01	11/13/2013	
2.2	Stock and Asset Purchase Agreement, dated as of March 31, 2015, by and between Johnson Controls, Inc. and CBRE, Inc.	8-K	001-32205	2.1	04/03/2015	
2.3	Acquisition Agreement, dated as of July 26, 2021, among Turner & Townsend Partners LLP, CBRE Titan Acquisition Co. Limited, CBRE Group, Inc.	8-K	001-32205	2.1	07/29/2021	
2.4	Amended and Restated Variation Agreement, dated as of November 9, 2021, between Turner & Townsend Partners LLP, CBRE Titan Acquisition Co. Limited, CBRE Group, Inc. and Turner & Townsend Holdings Limited					X
3.1	Amended and Restated Certificate of Incorporation of CBRE Group, Inc.	8-K	001-32205	3.1	05/23/2018	
3.2	Amended and Restated By-Laws of CBRE Group, Inc.	8-K	001-32205	3.1	03/27/2020	
4.1	Form of Class A common stock certificate of CBRE Group, Inc.	10-Q	001-32205	4.1	08/09/2017	
4.2(a)	Indenture, dated as of March 14, 2013, among CBRE Group, Inc., CBRE Services, Inc., certain subsidiaries of CBRE Services, Inc. and Wells Fargo Bank, National Association, as trustee	10-Q	001-32205	4.4(a)	05/10/2013	
4.2(b)	Fourth Supplemental Indenture, dated as of August 13, 2015, between CBRE Services, Inc., CBRE Group, Inc., certain subsidiaries of CBRE Services, Inc. and Wells Fargo Bank, National Association, as trustee, for the issuance of 4.875% Senior Notes due 2026, including the Form of 4.875% Senior Notes due 2026	8-K	001-32205	4.2	08/13/2015	
4.2(c)	Fifth Supplemental Indenture, dated as of September 25, 2015, between CBRE GWS LLC, CBRE Services, Inc. and Wells Fargo Bank, National Association, as trustee, relating to the 5.00% Senior Notes due 2023, the 5.25% Senior Notes due 2025 and the 4.875% Senior Notes due 2026	8-K	001-32205	4.1	09/25/2015	
4.2(d)	Sixth Supplemental Indenture, dated as of January 28, 2020, among CBRE Holdings, LLC, CBRE Services, Inc. and Wells Fargo Bank, National Association, as trustee, relating to the 5.25% Senior Notes due 2025 and the 4.875% Senior Notes due 2026	10-K	001-32205	4.2(g)	03/02/2020	
4.2(e)	Seventh Supplemental Indenture, dated as of March 18, 2021, among CBRE Group, Inc., CBRE Services, Inc., certain subsidiaries of CBRE Services, Inc. named therein and Wells Fargo Bank, National Association, as trustee, for the issuance of 2.500% Senior Notes due 2031, including the Form of 2.500% Senior Notes due 2031	8-K	001-32205	4.2	03/18/2021	
4.3	Description of Securities	10-K	001-32205	4.3	03/02/2020	

Exhibit No.	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	SEC File No.	Exhibit	Filing Date	
10.1	Credit Agreement, dated as of October 31, 2017, among CBRE Group, Inc., CBRE Services, Inc., certain subsidiaries of CBRE Services, Inc., the lenders party thereto and Credit Suisse AG, Cayman Islands Branch, as administrative agent	8-K	001-32205	10.1	11/01/2017	
10.2	Borrowing Subsidiary Agreement, dated as of December 20, 2018, among CBRE Group, Inc., CBRE Services, Inc., CBRE Global Acquisition Company and Credit Suisse AG, Cayman Islands Branch, as administrative agent	10-K	001-32205	10.2	03/01/2019	
10.3	Incremental Term Loan Assumption Agreement, dated as of December 20, 2018, among CBRE Group, Inc., CBRE Services, Inc., certain subsidiaries of CBRE Services, Inc., the lenders party thereto and Credit Suisse AG, Cayman Islands Branch, as administrative agent	8-K	001-32205	10.1	12/21/2018	
10.4	Incremental Term Loan Assumption Agreement, dated as of March 4, 2019 among CBRE Group, Inc., CBRE Services, Inc., certain subsidiaries of CBRE Services, Inc., the lenders party thereto and Credit Suisse AG, Cayman Islands Branch, as administrative agent	8-K	001-32205	10.1	03/05/2019	
10.5	Incremental Assumption Agreement, dated as of July 9, 2021, among CBRE Group, Inc., CBRE Services, Inc. CBRE Limited, the lenders party thereto and Credit Suisse AG, Cayman Islands Branch, as administrative agent	8-K	001-32205	10.1	07/13/2021	
10.6	Amendment, dated as of December 10, 2021, among CBRE Group, Inc., CBRE Services Inc., certain subsidiaries of CBRE Services, Inc., the lenders party thereto and Credit Suisse AG, Cayman Islands Branch, as administrative agent					X
10.7	Guarantee Agreement, dated as of October 31, 2017, among CBRE Group, Inc., CBRE Services, Inc., the subsidiary guarantors party thereto and Credit Suisse AG, Cayman Islands Branch, as administrative agent	8-K	001-32205	10.2	11/01/2017	
10.8	Supplement No. 1, dated December 20, 2018, to the Guarantee Agreement, among CBRE Group, Inc., CBRE Services, Inc., the subsidiary guarantors party thereto and Credit Suisse AG, Cayman Islands Branch, as administrative agent	10-K	001-32205	10.5	03/01/2019	
10.9	CBRE Group, Inc. Executive Bonus Plan +	8-K	001-32205	10.1	03/08/2021	
10.10	Form of Indemnification Agreement for Directors and Officers +	8-K	001-32205	10.1	12/08/2009	
10.11	Form of Indemnification Agreement for Directors and Officers +	10-Q	001-32205	10.3	05/10/2016	
10.12	CBRE Group, Inc. 2012 Equity Incentive Plan +	S-8	333-181235	99.1	05/08/2012	
10.13	Form of Grant Notice and Restricted Stock Unit Agreement for the CBRE Group, Inc. 2012 Equity Incentive Plan (Performance Vest) +	8-K	001-32205	10.1	08/20/2013	
10.14	Form of Grant Notice and Restricted Stock Unit Agreement for the CBRE Group, Inc. 2012 Equity Incentive Plan (Time Vest) +	8-K	001-32205	10.2	08/20/2013	
10.15	CBRE Group, Inc. 2017 Equity Incentive Plan +	S-8	333-218113	99.1	05/19/2017	
10.16	Form of Grant Notice and Restricted Stock Unit Agreement for the CBRE Group, Inc. 2017 Equity Incentive Plan (Time Vest) +	8-K	001-32205	10.2	03/05/2019	
10.17	Form of Grant Notice and Restricted Stock Unit Agreement for the CBRE Group, Inc. 2017 Equity Incentive Plan (Performance Vest) +	8-K	001-32205	10.3	03/05/2019	

Exhibit No.	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	SEC File No.	Exhibit	Filing Date	
10.18	Form of Grant Notice and Restricted Stock Unit Agreement for the CBRE Group, Inc. 2017 Equity Incentive Plan (Non-Employee Director) +	S-8	333-218113	99.4	05/19/2017	
10.19	Form of Grant Notice and Restricted Stock Unit Agreement for the CBRE Group, Inc. 2017 Equity Incentive Plan (Time Vesting RSU) +	10-K	001-32205	10.27	03/01/2018	
10.20	Form of Grant Notice and Restricted Stock Unit Agreement for the CBRE Group, Inc. 2017 Equity Incentive Plan (TSR Performance RSU) +	10-K	001-32205	10.28	03/01/2018	
10.21	Form of Grant Notice and Restricted Stock Unit Agreement for the CBRE Group, Inc. 2017 Equity Incentive Plan (EPS Performance RSU) +	10-K	001-32205	10.29	03/01/2018	
10.22	CBRE Group, Inc. 2019 Equity Incentive Plan +	S-8 POS	333-231572	99.1	05/29/2019	
10.23	Form of Grant Notice and Restricted Stock Unit Agreement for the CBRE Group, Inc. 2019 Equity Incentive Plan (Time Vest) +					X
10.24	Form of Grant Notice and Restricted Stock Unit Agreement for the CBRE Group, Inc. 2019 Equity Incentive Plan (Performance Vest) +					X
10.25	Form of Grant Notice and Restricted Stock Unit Agreement for the CBRE Group, Inc. 2019 Equity Incentive Plan (Non-Employee Director) +					X
10.26	CBRE Deferred Compensation Plan, effective January 1, 2019 +	10-K	001-32205	10.22	03/01/2019	
10.27	CBRE Adoption Agreement +	10-K	001-32205	10.23	03/01/2019	
10.28	CBRE Group, Inc. Amended and Restated Change in Control and Severance Plan for Senior Management, including form of Designation Letter +	10-Q	001-32205	10.1	10/29/2020	
10.29	Form of Restricted Covenants Agreement +	10-K	001-32205	10.33	03/01/2018	
10.30	Letter Agreement dated as of April 4, 2019 by and between CBRE, Inc. and Leah C. Stearns +	10-Q	001-32205	10.2	05/10/2019	
10.31	Employment and Transition Agreement, dated as of July 27, 2021, by and between CBRE, Inc. and Leah C. Stearns +	10-Q	001-32205	10.2	07/30/2021	
10.32	Letter Agreement, dated as of July 28, 2021, by and between CBRE, Inc. and Emma Giamartino +	10-Q	001-32205	10.3	07/30/2021	
10.33	Form of Restrictive Covenants Agreement +	10-Q	001-32205	10.4	07/30/2021	
10.34	Letter Agreement, dated as of February 23, 2022, by and between CBRE, Inc. and Chandra Dhandapani +					X
21	Subsidiaries of CBRE Group, Inc.					X
22.1	Subsidiary Issuers and Guarantors of CBRE Group, Inc.'s Registered Debt					X
23.1	Consent of Independent Registered Public Accounting Firm					X
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to §302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to §302 of the Sarbanes-Oxley Act of 2002					X

Exhibit No.	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	SEC File No.	Exhibit	Filing Date	
32	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002					X
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					X

+ Denotes a management contract or compensatory arrangement

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CBRE GROUP, INC.
Registrant

Date: February 28, 2022

/s/ ROBERT E. SULENTIC
Robert E. Sulentic
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ MADELEINE G. BARBER **Madeleine G. Barber**	Deputy CFO & Chief Accounting Officer (Principal Accounting Officer)	February 28, 2022
/s/ BRANDON B. BOZE **Brandon B. Boze**	Chair of the Board	February 28, 2022
/s/ BETH F. COBERT **Beth F. Cobert**	Director	February 28, 2022
/s/ EMMA E. GIAMARTINO **Emma E. Giamartino**	Global Group President, CFO & CIO (Principal Financial Officer)	February 28, 2022
/s/ REGINALD H. GILYARD **Reginald H. Gilyard**	Director	February 28, 2022
/s/ SHIRA D. GOODMAN **Shira D. Goodman**	Director	February 28, 2022
/s/ CHRISTOPHER T. JENNY **Christopher T. Jenny**	Director	February 28, 2022
/s/ GERARDO I. LOPEZ **Gerardo I. Lopez**	Director	February 28, 2022
/s/ OSCAR MUNOZ **Oscar Munoz**	Director	February 28, 2022
/s/ ROBERT E. SULENTIC **Robert E. Sulentic**	Director and President and Chief Executive Officer (Principal Executive Officer)	February 28, 2022
/s/ LAURA D. TYSON **Laura D. Tyson**	Director	February 28, 2022
/s/ SANJIV YAJNIK **Sanjiv Yajnik**	Director	February 28, 2022

DATED 9 November 2021

AMENDED AND RESTATED VARIATION AGREEMENT

relating to

PROJECT TITAN

THIS AGREEMENT is made on 9 November **2021**

BETWEEN:-

(1) **Turner & Townsend Partners LLP** (registered number OC401797) whose registered office is at Low Hall Calverley Lane, Horsforth, Leeds, United Kingdom, LS18 4GH (the "**Seller**");

(2) **CBRE Titan Acquisition Co. Limited** (registered number 1352061) whose registered office is at St. Martin's Court, 10 Paternoster Row, London, England EC4M 7HP (the "**Buyer**");

(3) **CBRE Group, Inc.** (NYSE:CBRE) whose registered office is at 2100 McKinney Avenue, Suite 1250, Dallas, Texas 75201, United States of America (the "**Buyer's Guarantor**");

(4) **Turner & Townsend 2021 Limited** (registered number 13569657) whose registered office is at Low Hall Calverley Lane, Horsforth, Leeds, United Kingdom, LS18 4GH ("**T&T 2021**"); and

(5) **Turner & Townsend Holdings Limited** (registered number 09782970) whose registered office is at Low Hall Calverley Lane, Horsforth, Leeds, United Kingdom, LS18 4GH (the "**Company**"),

(together, the "**Parties**").

BACKGROUND:-

(A) On 26 July 2021 (1) the Seller, (2) the Buyer and (3) the Buyer's Guarantor (together, the " **SPA Parties**") entered into an agreement for the sale of (i) certain of the issued share capital of the Company and (ii) the entire issued share capital of a newly incorporated subsidiary of the Seller (being T&T 2021) to the Buyer (the "**Share Purchase Agreement**").

(B) Completion (as defined in the Share Purchase Agreement) took place on 1 November 2021 (the " **Completion Date**").

(C) On the Completion Date, the Parties entered into that certain Variation Agreement (the " **Original Agreement**"), and the Parties now wish to amend and restate the Original Agreement in its entirety pursuant to this Agreement.

IT IS AGREED as follows:

1. **INTERPRETATION**

1.1 In this Agreement:-

1.1.1 words and phrases defined in the Share Purchase Agreement shall bear the same meanings unless otherwise defined; and

1.1.2 clause headings shall not affect interpretation.

2. **VARIATIONS**

2.1 In consideration of the acknowledgments the respective SPA Parties are giving to each other pursuant to Clause 3 of this Agreement (the sufficiency of such consideration being hereby acknowledged by each of the SPA Parties), the SPA Parties agree that, with effect as of the Completion Date, the Share Purchase Agreement shall be varied as follows:-

2.1.1 the definition of "***Aggregate Daily Rate***" in clause 1.1 of the Share Purchase Agreement shall be deleted and replaced with:-

"Aggregate Daily Rate"	*the sum equal to £257,907 multiplied by the number of days from (and excluding) the Locked Box Date to (and excluding) the Completion Date*

2.1.2 the definition of "***Outstanding Debt***" in clause 1.1 of the Share Purchase Agreement shall be deleted and replaced with:-

"Outstanding Debt"	*all loan notes or other indebtedness (including in respect of unpaid profit share owed to retirees) payable by the Company or any other Group Company to (i) the Seller, (ii) any former shareholder of the Company or other Group Company, or (iii) any current or former member in the Seller, in any case that are outstanding as of immediately prior to Completion but excluding the Shareholder Loan*

2.1.3 a new definition of "***Shareholder Loan***" shall be inserted in clause 1.1 of the Share Purchase Agreement:-

"Shareholder Loan"	*the outstanding loan balance owed by the Company to the Seller in the sum of £8,430,000, pursuant to the terms of a loan agreement dated on or around the Completion Date*

2.1.4 the definition of "***Transaction Documents***" in clause 1.1 of the Share Purchase Agreement shall be deleted and replaced with:-

"Transaction Documents"	*this Agreement, the Disclosure Letter, the Tax Deed, the Pre-Completion Restructuring Tax Deed, the Shareholders' Agreement and any other document referred to in any such agreement or required to be entered into pursuant to any such agreement, in each case as any such agreement may be varied from time to time by agreement between the parties thereto*

2.1.5 clause 7 of the Share Purchase Agreement shall be amended by deleting the clause heading and replacing it with " ***POSITION PENDING COMPLETION AND SHAREHOLDER LOAN***";

2.1.6 clause 7 of the Share Purchase Agreement shall be further amended by the addition of new clauses 7.8 and 7.9 as follows:-

"***Shareholder Loan***

7.8 The Parties acknowledge and agree that the Shareholder Loan shall not be repaid on or before Completion and will remain owing and outstanding for repayment by the Company to the Seller following Completion.

*7.9 Following Completion, the Parties undertake to procure that the monies currently held on deposit in the United States in favour of Turner & Townsend Inc. (the "**Deposited Monies**") are distributed (or loaned, as applicable) up to the Company to facilitate repayment of the Shareholder Loan in full and complete discharge and termination of the related loan agreement as soon as reasonably practicable following the Deposited Monies ceasing to be held on deposit in 2022 and in any event within five Business Days of such cessation of deposit (such post-Completion repayment being outlined in Step 18 of the "Project Titan – Cash Extraction" steps paper prepared by KPMG LLP and agreed between the Seller and the Buyer prior to Completion). Save as may otherwise be agreed in writing between the Seller and the Buyer, the Seller agrees that it shall not make a written demand for repayment of the Shareholder Loan until the Deposited Monies have ceased to be held on deposit."*

2.1.7 paragraph 1.1.9 of Schedule 5 (*Completion Arrangements*) of the Share Purchase Agreement shall be deleted and replaced with:-

"*1.1.9 a certificate, executed by a member of the Executive Leadership Team, confirming the payment in full and complete discharge, immediately prior to Completion, of all Outstanding Debt (such payment being the "**Outstanding Debt Payoff**");*"

2.1.8 paragraph 1.3 of Schedule 6 (*Permitted Leakage*) of the Share Purchase Agreement shall be deleted and replaced with:-

"*1.3 the Shareholder Loan; and*";

2.1.9 the wording of Schedule 10 (*Certain Actions*) of the Share Purchase Agreement shall be deleted and replaced with the wording in paragraph 1 of Schedule 1 to this Agreement.

2.2 The provisions of paragraphs 2 through 5 (inclusive) of Schedule 1 to this Agreement shall apply.

3. **ACKNOWLEDGEMENTS**

3.1 In consideration of the acknowledgements being given and received by each of the Parties pursuant to this Clause (the sufficiency of such consideration being hereby acknowledged by each of the Parties), the Parties acknowledge and agree that:-

1.1.1 except as specifically and expressly varied by this Agreement, the Share Purchase Agreement shall remain as originally executed and in full force and effect;

1.1.2 there are no Non-Consenting Non-US Subsidiaries for the purposes of clause 4.7 of the Share Purchase Agreement and paragraph 2.1 of Schedule 9 of the Share Purchase Agreement;

1.1.3 no Seller LLP Partner has ceased to be a member of the Seller since the date of the Share Purchase Agreement;

1.1.4 the following matters have arisen which would, but for this Agreement, constitute Leakage for the purposes of clause 6 of the Share Purchase Agreement:-

(i) [OMITTED] as to an amount of withholding tax payable in connection with the steps taken by the Group in order to facilitate the payment of the Pre-Completion Dividend (the "**WHT**");

(ii) [OMITTED] (inclusive of payroll taxes) as to an aggregate sum of bonuses to be paid to certain employees of the Group in connection with the transaction contemplated by the Share Purchase Agreement, such bonuses to be paid following Completion through the Group's first or second ordinary course payroll processes which occur thereafter;

(iii) [OMITTED] plus VAT as to an amount of fees payable by the Company to KPMG in respect of certain advice provided to the Company in connection with the transaction contemplated by the Share Purchase Agreement,

and shall not be deemed to constitute Leakage for the purposes of, and the Seller shall have no liability in respect of the same under, clause 6 of the Share Purchase Agreement (the Seller hereby confirming that the sum equal to the WHT has been deducted by the Company from the Pre-Completion Dividend).

1.1.5 the provisions of Schedule 2 to this Agreement shall apply; and

1.1.6 the details of the Payment Agent Account are as set forth in Schedule 3 to this Agreement.

4. **OTHER PROVISIONS**

4.1 The SPA Parties acknowledge and agree that:-

1.1.1 Clause 13 (Confidentiality);

1.1.2 Clause 14 (Announcements);

1.1.3 Clause 15.1 (Costs);

1.1.4 Clause 16 (Notices);

1.1.5 Clause 17 (Assignment);

1.1.6 Clause 18 (Counterparts);

1.1.7 Clause 21 (Contracts (Rights of Third Parties) Act 1999);

1.1.8 Clause 22 (Entire Agreement);

1.1.9 Clause 23 (General); and

1.1.10 Clause 24 (Law and Jurisdiction),

of the Share Purchase Agreement shall apply in respect of this Agreement to the extent that it relates to the Share Purchase Agreement and any reference to 'this Agreement' in such clauses of the Share Purchase Agreement shall be deemed to refer to the Share Purchase Agreement as varied by, and together with, the terms of this Agreement to the extent that they relate to the Share Purchase Agreement.

4.2 This Agreement amends and restates the Original Agreement in its entirety and supersedes the Original Agreement in all respects, effective as of the Completion Date.

EXECUTED by the Parties on the date which first appears in this Agreement.

Signed for and on behalf of
TURNER & TOWNSEND PARTNERS LLP
acting by

Martin Stephen Jeremy Lathom-Sharp
Name:

/s/ Martin Stephen Jeremy Lathom-Sharp
Member

Signed for and on behalf of
CBRE TITAN ACQUISITION CO. LIMITED
acting by

Christopher Oster
Name:

/s/ Christopher Oster
Director

Signed for and on behalf of
CBRE GROUP INC.
acting by

Emma Giamartino
Name:

/s/ Emma Giamartino
Authorised signatory

Signed for and on behalf of
TURNER & TOWNSEND 2021 LIMITED
acting by

Martin Stephen Jeremy Lathom-Sharp
Name:

/s/ Martin Stephen Jeremy Lathom-Sharp
Director

Signed for and on behalf of
TURNER & TOWNSEND HOLDINGS LIMITED
acting by

Martin Stephen Jeremy Lathom-Sharp
Name:

/s/ Martin Stephen Jeremy Lathom-Sharp
Director

SCHEDULE 1

VARIATIONS TO THE SHARE PURCHASE AGREEMENT AND TO THE SHAREHOLDERS' AGREEMENT

Variations to the Share Purchase Agreement

1. The wording set out in Schedule 10 (*Certain Actions*) of the Share Purchase Agreement shall be deleted and replaced with:-

[OMITTED]

Variations to the Shareholders' Agreement

2. [OMITTED]

3. [OMITTED]

4. [OMITTED]

5. [OMITTED]

SCHEDULE 2

ADDITIONAL ACKNOWLEDGMENTS

1. [OMITTED]

SCHEDULE 3

PAYMENT AGENT ACCOUNT

1. The details of the Payment Agent Account are as follows:-

[OMITTED]

AMENDMENT dated as of December 10, 2021 (this "***Amendment***"), to the Credit Agreement dated as of October 31, 2017 (as amended, restated, supplemented or otherwise modified prior to the date hereof, including by that certain Incremental Term Loan Assumption Agreement dated as of December 20, 2018, that certain Incremental Assumption Agreement dated as of March 4, 2019, and that certain Incremental Assumption Agreement dated as of July 9, 2021, the "***Existing Credit Agreement***"), among CBRE SERVICES, INC., a Delaware corporation (the "***U.S. Borrower***"), CBRE LIMITED, a limited company organized under the laws of England and Wales (with company no: 3536032) (the "***U.K. Borrower***"), CBRE LIMITED, a corporation organized under the laws of the province of New Brunswick, CBRE PTY LIMITED, a company organized under the laws of Australia and registered in New South Wales, CBRE LIMITED, a company organized under the laws of New Zealand, CBRE GLOBAL ACQUISITION COMPANY, *a société à responsabilité* organized under the laws of the Grand Duchy of Luxembourg, having its registered office at 12D, Impasse Drosbach L-1882 Luxembourg, Grand Duchy of Luxembourg and registered with the Luxembourg Trade and Companies Register (*Registre de Commerce et des Sociétés, Luxembourg*) under number B 150.692 (the "***Luxembourg Borrower***" and, together with the U.S. Borrower and the U.K. Borrower, the "***Borrowers***"), CBRE GROUP, INC., a Delaware corporation ("***Holdings***"), the Lenders from time to time party thereto and CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH, as administrative agent (in such capacity, the "***Administrative Agent***") for the Lenders.

A. Holdings and the Borrowers have requested that the Existing Credit Agreement be amended to implement successor interest rates for Loans denominated in Pounds and Euro from time to time.

B. The Existing Credit Agreement provides that the Administrative Agent and the Borrowers may amend the Existing Credit Agreement to implement a successor index rate so long as the Lenders shall have received at least five Business Days' written notice thereof and the Administrative Agent shall not have received, within five Business Days of such notice, a written notice from the Required Lenders stating that the Required Lenders object to such successor rate.

C. Holdings, the Borrowers and the Administrative Agent have agreed to amend the Existing Credit Agreement as provided for herein (the Existing Credit Agreement, as so amended, being referred to herein as the "***Amended Credit Agreement***"), effective as of the Effective Date (as defined below).

Accordingly, in consideration of the mutual agreements contained herein and for other good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the parties hereto hereby agree as follows:

SECTION 1. ***Terms Generally***. The rules of construction set forth in Section 1.02 of the Existing Credit Agreement shall apply *mutatis mutandis* to this Amendment. This Amendment shall be a "Loan Document" for all purposes of the

Amended Credit Agreement and the other Loan Documents. Capitalized terms used but not defined herein have the meanings assigned thereto in the Existing Credit Agreement.

SECTION 2. ***Amendments to the Existing Credit Agreement***. Effective as of the Effective Date, the Existing Credit Agreement is hereby amended by inserting the language indicated in single or double underlined text (indicated textually in the same manner as the following examples: single-underlined text or double-underlined text) in Exhibit A hereto and by deleting the language indicated by strikethrough text (indicated textually in the same manner as the following example: ~~stricken text~~) in Exhibit A hereto.

SECTION 3. ***Representations and Warranties***. To induce the Administrative Agent to enter into this Amendment, Holdings and each Borrower represents and warrants to the Administrative Agent and the Lenders that:

(a) This Amendment has been duly authorized, executed and delivered by Holdings and each Borrower and constitutes a legal, valid and binding obligation of Holdings and each Borrower enforceable against such Person in accordance with its terms, subject to the effects of bankruptcy, insolvency, fraudulent conveyance, moratorium and other similar laws relating to or affecting creditors' rights generally and to general equitable principles (whether considered in a proceeding in equity or at law) and an implied covenant of good faith and fair dealing.

(b) On and as of the date hereof, each of the representations and warranties made by Holdings and each Borrower in Article III of the Existing Credit Agreement is true and correct in all material respects with the same effect as though made on and as of the date hereof, except to the extent such representations and warranties expressly relate to an earlier date in which case such representations and warranties were true and correct in all material respects as of such earlier date.

(c) On and as of the date hereof, no Event of Default or Default has occurred and is continuing.

SECTION 4. ***Effectiveness***. This Amendment shall become effective on and as of January 1, 2022 (the "***Effective Date***"), but only if, at or prior to 5:00 p.m., New York City time, on December 17, 2021 (the "***Negative Consent Date***"), the Administrative Agent shall not have received written notice of objection from the Lenders comprising the Required Lenders.

The Administrative Agent shall notify the Borrowers, the Lenders and each Issuing Bank promptly following the Negative Consent Date as to whether the Amendment will become effective in accordance with its terms, and such notice shall be conclusive and binding.

SECTION 5. ***Effect of this Amendment***. Except as expressly set forth herein, this Amendment shall not by implication or otherwise limit, impair, constitute a waiver of, or otherwise affect the rights and remedies of each of the Administrative Agent, the Issuing Banks or the Lenders under the Existing Credit Agreement or any other Loan Document, and shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Existing Credit Agreement or any other Loan Document, all of which are ratified and affirmed in all respects and shall continue in full force and effect. Nothing herein shall be deemed to entitle Holdings or any Borrower to a consent to, or a waiver, amendment, modification or other change of, any of the terms, conditions, obligations, covenants or agreements contained in the Existing Credit Agreement or any other Loan Document in similar or

different circumstances. This Amendment shall apply and be effective only with respect to the provisions of the Existing Credit Agreement specifically referred to herein. After the Effective Date, any reference to the Credit Agreement shall mean the Amended Credit Agreement.

SECTION 6. ***No Novation***. This Amendment shall not extinguish the Obligations for the payment of money outstanding under the Existing Credit Agreement or discharge or release any guarantee thereof. Nothing herein contained shall be construed as a substitution or novation, or a payment and reborrowing, or a termination, of the Obligations outstanding under the Existing Credit Agreement or instruments guaranteeing the same, which shall remain in full force and effect, except as expressly modified hereby or by instruments executed concurrently herewith. Nothing expressed or implied in this Amendment or any other document contemplated hereby shall be construed as a release or other discharge of a Borrower under the Existing Credit Agreement or of a Borrower or any other Loan Party under any other Loan Document from any of its obligations and liabilities thereunder, and such obligations are in all respects continuing with only the terms being modified as provided in this Amendment. The Existing Credit Agreement and each of the other Loan Documents shall remain in full force and effect until, and except as, modified hereby.

SECTION 7. ***Notices***. All notices hereunder shall be given in accordance with the provisions of Section 9.01 of the Existing Credit Agreement.

SECTION 8. ***Counterparts***. This Amendment may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original but all of which when taken together shall constitute a single contract. Any signature to this Amendment may be delivered by facsimile, electronic mail (including .pdf) or any electronic signature complying with the U.S. federal ESIGN Act of 2000 or the New York Electronic Signature and Records Act or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes to the fullest extent permitted by applicable law.

SECTION 9. ***Applicable Law***. THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK. The provisions of Sections 9.11 (*WAIVER OF JURY TRIAL*) and 9.15 (*Jurisdiction; Consent to Service of* Process) of the Existing Credit Agreement shall apply to this Amendment to the same extent as if fully set forth herein.

SECTION 10. ***Headings***. The Section headings used herein are for convenience of reference only, are not part of this Amendment and are not to affect the construction of, or to be taken into consideration in interpreting, this Amendment.

[Remainder of this page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their respective authorized officers as of the date and year first above written.

CBRE SERVICES, INC.

by
/s/ Chris Oster
Name: Chris Oster
Title: VP Global Tax

CBRE GROUP, INC.

by
/s/ Chris Oster
Name: Chris Oster
Title: VP Global Tax

CBRE LIMITED, a limited company organized under the laws of England and Wales

by
/s/ B. Odunaike
Name: B. Odunaike
Title: Director

by
/s/ A. Hetherington
Name: A. Hetherington
Title: Director

CBRE GLOBAL ACQUISITION COMPANY

by
/s/ Chris Oster
Name: Chris Oster
Title: Manager

[Signature Page to Amendment]

CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH, as Administrative Agent

by
/s/ William O'Daly
Name: William O'Daly
Title: Authorized Signatory

by
/s/ Nawshaer Safi
Name: Nawshaer Safi
Title: Authorized Signatory

EXHIBIT A

DDTL CUSIP: 12508LAB1
DRCF CUSIP: 12508LAC9
MCRCF CUSIP: 12508LAD7
UKRCF CUSIP: 12508LAE5

CREDIT AGREEMENT

dated as of October 31, 2017,

among

CBRE SERVICES, INC.,

CBRE GROUP, INC.,

CERTAIN SUBSIDIARIES OF
CBRE SERVICES, INC.,

THE LENDERS NAMED HEREIN

and

CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH,
as Administrative Agent

WELLS FARGO SECURITIES, LLC,

MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED,

JPMORGAN CHASE BANK, N.A.,

THE BANK OF NOVA SCOTIA,

HSBC BANK USA, N.A.,

THE BANK OF TOKYO-MITSUBISHI UFJ, LTD.

and

THE ROYAL BANK OF SCOTLAND PLC,

as Joint Lead Arrangers and Joint Bookrunners

WELLS FARGO SECURITIES, LLC,
BANK OF AMERICA, N.A.
and
JPMORGAN CHASE BANK, N.A.,
as Co-Syndication Agents

THE BANK OF NOVA SCOTIA,

HSBC BANK USA, N.A.,

THE BANK OF TOKYO-MITSUBISHI UFJ, LTD.

and

THE ROYAL BANK OF SCOTLAND PLC,

as Co-Documentation Agents

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CREDIT AGREEMENT dated as of October 31, 2017 (this "***Agreement***"), among CBRE SERVICES, INC., a Delaware corporation (the "***U.S. Borrower***"), CBRE LIMITED, a limited company organized under the laws of England and Wales (with company no: 3536032) (the "***U.K. Borrower***"), CBRE LIMITED, a corporation organized under the laws of the province of New Brunswick (the "***Canadian Borrower****),* CBRE PTY LIMITED, a company organized under the laws of Australia and registered in New South Wales (the "***Australian Borrower***"), CBRE LIMITED, a company organized under the laws of New Zealand (the "***New Zealand Borrower***"), CBRE GROUP, INC., a Delaware corporation ("***Holdings***"), the Lenders (as defined in Article I), and CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH, as administrative agent (in such capacity, together with its successor in such capacity, the "***Administrative Agent***") for the Lenders.

The Borrowers have requested the Lenders to extend credit in the form of (a) Tranche A Loans (such term and each other capitalized term used but not defined in this preliminary statement having the meaning given it in Article I) to the U.S. Borrower on up to two occasions on and after the Closing Date and on or prior the Delayed Draw Termination Date in an aggregate principal amount of up to $750,000,000 and (b) Revolving Loans in the form of (i) Domestic Revolving Loans to the U.S. Borrower at any time and from time to time prior to the Revolving Credit Maturity Date, in an aggregate principal amount at any time outstanding not in excess of $2,300,000,000, (ii) Multicurrency Revolving Loans to the U.S. Borrower, the Canadian Borrower, the Australian Borrower and the New Zealand Borrower at any time and from time to time prior to the Revolving Credit Maturity Date, in an aggregate principal amount at any time outstanding not in excess of $200,000,000 and (iii) U.K. Revolving Loans to the U.S. Borrower and the U.K. Borrower at any time and from time to time prior to the Revolving Credit Maturity Date, in an aggregate principal amount at any time outstanding not in excess of $300,000,000. The Borrowers may request any N.Z. Swingline Lender to extend credit in the form of N.Z. Swingline Loans to the New Zealand Borrower, in an aggregate principal amount at any time outstanding not in excess of $50,000,000 under the Multicurrency Revolving Credit Commitments. The Borrowers have requested the Issuing Banks to issue Letters of Credit, in an aggregate face amount at any time outstanding not in excess of $200,000,000 under the Revolving Credit Commitments, to support payment obligations of the Borrowers and their Subsidiaries. The proceeds of the Tranche A Loans will be used by the U.S. Borrower to finance a portion of the Existing Tranche A Loan Refinancing, the Existing Tranche B Loan Prepayment, to pay fees and expenses in connection therewith and for other general corporate purposes of the U.S. Borrower and its Subsidiaries. The proceeds of the Revolving Loans and N.Z. Swingline Loans, and the Letters of Credit, are to be used from time to time for working capital and other general corporate purposes of the Borrowers and their Subsidiaries.

The Lenders are willing to extend such credit to the Borrowers, and the Issuing Banks are willing to issue Letters of Credit for the account of the Borrowers, in each case on the terms and subject to the conditions set forth herein.

Accordingly, the parties hereto agree as follows:

ARTICLE I

Definitions

SECTION 1.01. ***Defined Terms***. As used in this Agreement, the following terms shall have the meanings specified below:

"***ABR***", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Alternate Base Rate.

"***Acceptance Fee***" shall mean a fee payable in Canadian Dollars by the Canadian Borrower to the Administrative Agent for the account of a Canadian Lender with respect to the acceptance of a B/A or the making of a B/A Equivalent Loan on the date of such acceptance or loan, calculated on the face amount of the B/A or the B/A Equivalent Loan at the rate per annum applicable on such date as set forth in the row labeled "Fixed Rate Spread" in the definition of the term "Applicable Percentage" on the basis of the number of days in the applicable Contract Period (including the date of acceptance and excluding the date of maturity) and a year of 365 days (it being agreed that the rate per annum applicable to any B/A Equivalent Loan is equivalent to the rate per annum otherwise applicable to the Bankers' Acceptance which has been replaced by the making of such B/A Equivalent Loan pursuant to Section 2.24).

"***Accepting Lenders***" shall have the meaning assigned to such term in Section 9.20(a).

"***Acquired EBITDA***" shall mean, with respect to any Acquired Entity or Business, the amount for such period of Consolidated EBITDA of such Pro Forma Entity (determined as if references to Holdings and its consolidated subsidiaries in the definition of the term "Consolidated EBITDA" were references to such Pro Forma Entity and its subsidiaries), all as determined on a consolidated basis for such Pro Forma Entity in accordance with GAAP.

"***Acquired Entity or Business***" shall have the meaning provided in the definition of the term "Consolidated EBITDA."

"Acquisition" shall mean the acquisition by the U.S. Borrower or any Subsidiary of all or any substantial part of the assets of a person or a line of business of a person or at least a majority of the Equity Interests of a person.

"***Adjusted LIBO Rate***" shall mean, with respect to any Eurocurrency Borrowing **denominated in dollars** for any Interest Period, an interest rate per annum equal to the product of (a) the LIBO Rate in effect for such Interest Period and (b) Statutory Reserves.

"***Administrative Agent Fees***" shall have the meaning assigned to such term in Section 2.05(b).

"***Administrative Questionnaire***" shall mean an Administrative Questionnaire substantially in the form of Exhibit A, or such other form as may be supplied from time to time by the Administrative Agent.

"***Advance Agent***" shall mean Credit Suisse AG, acting through such Affiliates or branches as it may designate, as competitive advance facility agent.

"***Affected Class***" shall have the meaning assigned to such term in Section 9.20(a).

"***Affiliate***" shall mean, when used with respect to a specified person, another person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the person specified. Notwithstanding the foregoing, in relation to The Royal Bank of Scotland plc, the term "Affiliate" shall not include (i) the UK government or any member or instrumentality thereof, including Her Majesty's Treasury and UK Financial Investments Limited (or any directors, officers, employees or entities thereof) or (ii) any persons or entities controlled by or under common control with the UK government or any member or instrumentality thereof (including Her Majesty's Treasury and UK Financial Investments Limited) and which are not part of The Royal Bank of Scotland Group plc and its subsidiaries or subsidiary undertakings.

"***Aggregate Competitive Loan Exposure***" shall mean the aggregate amount of the Lenders' Competitive Loan Exposures.

"***Aggregate Domestic Revolving Credit Exposure***" shall mean the aggregate amount of the Lenders' Domestic Revolving Credit Exposures.

"***Aggregate Multicurrency Revolving Credit Exposure***" shall mean the aggregate amount of the Lenders' Multicurrency Revolving Credit Exposures.

"***Aggregate U.K. Revolving Credit Exposure***" shall mean the aggregate amount of the Lenders' U.K. Revolving Credit Exposures.

"***Agreement Currency***" shall have the meaning assigned to such term in Section 9.17(b).

"***Alternate Base Rate***" shall mean, for any day, a rate per annum equal to the greatest of (a) the Prime Rate in effect on such day (or, in the case of a Dollar Loan to the Canadian Borrower, the U.S. Base Rate), (b) the Federal Funds Effective Rate in effect on such day plus ½ of 1% and (c) the sum of (i) the Adjusted LIBO Rate in effect on such day for a one-month Interest Period (or if such day is not a Business Day, the immediately preceding Business Day) and (ii) 1.00%; *provided* that, for the avoidance of doubt, the Adjusted LIBO Rate for any day shall be based on the rate determined on such day at approximately 11 a.m. (London time) by reference to the ICE Benchmark Administration Interest Settlement Rates for deposits in dollars (as set forth by any service selected by the Administrative Agent that has been nominated by the ICE Benchmark Administration Limited (or any person which takes over the administration of that rate) as an authorized information vendor for the purpose of displaying such rates) for a period equal to one month. If the Administrative Agent shall have determined (which determination shall be conclusive absent manifest error) that it is unable to ascertain the Federal Funds Effective Rate or the Adjusted LIBO Rate for any reason, including the inability or failure of the Administrative Agent to obtain sufficient quotations in accordance with the terms of the definition of Federal Funds Effective Rate, the Alternate Base Rate shall be determined without regard to clause (b) or (c), as applicable, of the preceding sentence until the circumstances giving rise to such inability no longer exist. Any change in the Alternate Base Rate due to a change in the Prime Rate, the U.S. Base Rate, the Federal Funds Effective Rate or the Adjusted LIBO Rate shall be effective on the effective date of such change in the Prime Rate, the U.S. Base Rate, the Federal Funds Effective Rate or the Adjusted LIBO Rate, respectively.

"***Alternative Currency***" shall mean (a) with respect to U.K. Revolving Loans and U.K. Letters of Credit, Pounds and Euro, (b) with respect to Multicurrency Loans and Multicurrency Letters of Credit, Australian Dollars, Canadian Dollars and New Zealand Dollars and (c) with respect to Incremental Revolving Loans and Incremental Term Loans, Pounds, Euro or any other currency reasonably acceptable to the Administrative Agent and the Incremental Revolving Credit Lenders or Incremental Term Lenders.

"***Alternative Currency Equivalent***" shall mean, on any date of determination, with respect to any amount denominated in dollars in relation to any specified Alternative Currency, the equivalent in such specified Alternative Currency of such amount in dollars, determined by the Administrative Agent pursuant to Section 1.04 using the applicable Exchange Rate then in effect.

"***ANZ Sublimit***" shall mean $100,000,000.

"***Applicable Percentage***" shall mean, for any day, subject to Section 2.07,

(a) with respect to the Revolving Credit Commitments, Revolving Loans and the Tranche A Loans, at any time,

(i) the applicable percentage set forth in the grid below under the caption "Facility Fee Revolving Credit Commitments", "Ticking Fee", "Fixed Rate Spread Tranche A Loans", "Daily Rate Spread Tranche A Loans", "Fixed Rate **/SONIA** Spread Revolving Loans" or "~~Daily~~**Alternate Base Rate/Canadian**

Prime Rate/Foreign Base Rate Spread Revolving Loans", as the case may be, based upon the Credit Rating as of the relevant date of determination.

For purposes of the foregoing, (x) if the Credit Ratings established or deemed to have been established by Moody's, Fitch and S&P shall fall within different Categories, the Applicable Percentage shall be based on the Category in which the highest rating falls unless the two highest ratings differ by two or more Categories, in which case the Applicable Percentage shall be based on the Category one level below the Category in which the highest rating falls and (y) if the Credit Ratings established or deemed to have been established by S&P, Fitch or Moody's shall be changed (other than as a result of a change in the rating system of S&P, Fitch or Moody's), such change shall be effective on the earlier of the date on which such change is publicly announced and the date on which Holdings or any of its Subsidiaries receives written notice of such change. Each change in the Applicable Percentage shall apply during the period commencing on the effective date of such change and ending on the date immediately preceding the effective date of the next such change.

If the rating system of S&P, Fitch or Moody's shall change, or if any rating agency shall cease to be in the business of providing issuer or long-term debt ratings, as the case may be, the U.S. Borrower and the Administrative Agent shall negotiate in good faith to amend this definition to reflect such changed rating system or the unavailability of ratings from such rating agency and, pending the effectiveness of any such amendment, the Applicable Percentage shall be determined by reference to the rating of the other rating agencies (or, if the circumstances referred to in this sentence shall affect two or more such rating agencies, the ratings most recently in effect prior to such changes or cessations).

Category	**Credit Rating**			**Ticking Fee**	**Fixed Rate Spread Tranche A Loans**	**Daily Rate Spread Tranche A Loans**	**Fixed Rate/SONIA Spread Revolving Loans**	~~**Daily Alternate Base Rate/Canadian Prime Rate/Foreign Base Rate Spread Revolving Loans**~~	**Facility Fee Revolving Credit Commitments**
	S&P	**Fitch**	**Moody's**						
Category 1	≥ A	A	A2	N/A	0.750%	0.0%	0.680%	0.0%	0.070%
Category 2	A-	A-	A3	N/A	0.875%	0.0%	0.785%	0.0%	0.090%
Category 3	BBB+	BBB+	Baa1	N/A	1.000%	0.0%	0.900%	0.0%	0.100%
Category 4	BBB	BBB	Baa2	N/A	1.150%	0.150%	1.000%	0.0%	0.150%
Category 5	≤BBB-	≤BBB-	≤ Baa3	N/A	1.250%	0.250%	1.075%	0.075%	0.175%

(b) with respect to any Incremental Term Loan or Incremental Revolving Loan, the "Applicable Percentage" set forth in the Incremental Assumption Agreement relating thereto, and

(c) with respect to any Other Term Loan or Other Revolving Loan, the "Applicable Percentage" set forth in the Loan Modification Agreement relating thereto.

"***Approved Credit Support***" shall mean a reimbursement, indemnity or similar obligation issued by a person (the " ***Support Provider***") pursuant to which the Support Provider agrees to reimburse, indemnify or hold harmless the U.S. Borrower or any Subsidiary for any Indebtedness, liability, or other obligation of the U.S. Borrower or such Subsidiary, but only to the extent (a) the Support Provider satisfies the criteria set forth in clause (a), (b), (c) or (d) of the definition of the term "Approved Take Out Party" or (b) the obligations of the Support Provider are secured by an irrevocable third-party letter of credit from a financial institution with a senior unsecured non-credit-enhanced long-term debt rating of A- or higher from S&P and A3 or higher from Moody's.

"***Approved Take Out Commitment***" shall mean a Take Out Commitment (a) no less than 90% of which is issued by an Approved Take Out Party (with any remaining percentage being provided by TCC or any of its Affiliates, in an aggregate amount for all such Take Out Commitments provided by TCC and its Affiliates not to exceed $10,000,000) and (b) in which the funding obligation of the issuer of such Take Out Commitment is not subject to any material condition other than (i) completion of construction in accordance with all requirements of applicable law and agreed plans and specifications and by a date certain, (ii) issuance of a certificate of occupancy and (iii) in the event the underlying transaction involves a Qualifying Lease, the commencement of payment of rent thereunder by the tenant thereunder. Any Approved Take Out Commitment shall cease to be an Approved Take Out Commitment (x) if the issuer of such Take Out Commitment (other than TCC or any of its Affiliates) at any time no longer meets the definition of "Approved Take Out Party" (*provided* that the failure of one (but not more than one) such provider of a Take Out Commitment to satisfy the definition of "Approved Take Out Party" shall not result in the disqualification of such Take Out Commitment pursuant to this clause (x) so long as, at the time such Take Out Commitment was initially issued, such provider satisfied the definition of Approved Take Out Party and only failed to meet such definition due to its inability to meet the requirements outlined in (a) or (b) in the definition of "Approved Take Out Party" after the issuance of such Take Out Commitment), (y) to the extent the issuer of such Approved Take Out Commitment fails or refuses to fund under such Approved Take Out Commitment or notifies Holdings or any Subsidiary of its intention to not fund under such Approved Take Out Commitment or (z) at such time as Holdings or any Borrower acquires actual knowledge that the Approved Take Out Commitment will not fund.

"***Approved Take Out Party***" shall mean a person that issues a Take Out Commitment and that satisfies any of the following criteria: (a) the senior unsecured non-credit-enhanced long-term debt of such person is rated BBB or higher by S&P or Baa2 or higher by Moody's, (b) such person is an endowment or pension fund (or such Take Out Commitment is guaranteed by an endowment or pension fund) in compliance with ERISA and having net liquid assets and a consolidated net worth (including equity commitments) determined in accordance with GAAP (as reflected in its most recent annual audited financial statements issued within 12 months of the date of determination) of not less than $500,000,000, (c) such person is set forth on Schedule 1.01(c) or (d) such person is otherwise approved by the Administrative Agent after receipt of all information necessary to make such determination.

"***Assignment and Acceptance***" shall mean an assignment and acceptance entered into by a Lender and an assignee, and accepted by the Administrative Agent, substantially in the form of Exhibit B or such other form as shall be approved by the Administrative Agent.

"***Auction***" shall mean an auction pursuant to which a Borrower offers to purchase Term Loans pursuant to the Auction Procedures.

"***Auction Procedures***" shall mean the procedures set forth in Exhibit D.

"***Australian Dollars***" *or* "***A$***" shall mean the lawful currency of Australia.

"***Available Cash***" shall mean, on any date, the amount of cash and cash equivalents held by Holdings and the Subsidiaries on such date as determined in accordance with GAAP, less the amount thereof that is reflected as "Cash Surrender Value for Insurance Policy for Deferred Compensation Plan", "Prepaid Pension Costs" or "restricted" on the most recent balance sheet of Holdings delivered pursuant to this Agreement.

"***B/A Borrowing***" shall mean a Borrowing comprised of one or more Bankers' Acceptances or, as applicable, B/A Equivalent Loans. For greater certainty, all provisions of this Agreement that are applicable to Bankers' Acceptances are also applicable, *mutatis mutandis*, to B/A Equivalent Loans.

"***B/A Equivalent Loan***" shall have the meaning assigned to such term in Section 2.24(h).

"***Bail-In Action***" shall mean the exercise of any Write-Down and Conversion Powers by the applicable EEA Resolution Authority in respect of any liability of such EEA Financial Institution.

"***Bail-In Legislation***" shall mean~~,~~ with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule.

"***Bank Bill Rate***" shall mean, in relation to an Interest Period for any Loan denominated in Australian Dollars or New Zealand Dollars, the rate determined by the Administrative Agent (or, in the case of any N.Z. Swingline Loan, the N.Z. Swingline Lender) to be the average bid rate displayed at or about 10:30 a.m. (Local Time) on the first day of such Interest Period on the Reuters screen BBSY page (for Australian Dollars) or BKBM page (for New Zealand Dollars), for a term equivalent to such Interest Period. If (a) for any reason there is no rate displayed for a period equivalent to such Interest Period or (b) the basis on which such rate is displayed is changed and in the reasonable opinion of the Administrative Agent (or, in the case of any N.Z. Swingline Loan, the N.Z. Swingline Lender) such rate ceases to reflect the cost to a majority in interest of the Multicurrency Revolving Credit Lenders of funding to the same, then the Bank Bill Rate shall be the rate determined by the Administrative Agent (or, in the case of any N.Z. Swingline Loan, the N.Z. Swingline Lender) to be the average of the buying rates quoted to the Administrative Agent (or, in the case of any N.Z. Swingline Loan, the N.Z. Swingline Lender) by three reference banks selected by it at or about that time on that date for bills of exchange that are accepted by an Australian bank or a New Zealand bank, as the case may be, and that have a term equivalent to the Interest Period. If there are no such buying rates the rate shall be the rate reasonably determined by the Administrative Agent (or, in the case of any N.Z. Swingline Loan, the N.Z. Swingline Lender) to be its cost of funds. Rates will be expressed as a yield percent per annum to maturity and rounded up or down, if necessary, to the nearest two decimal places. When used in reference to any Loan or Borrowing, the term "Bank Bill Rate" refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Bank Bill Rate.

"***Bankers' Acceptance***" and "***B/A***" shall mean a non-interest bearing instrument denominated in Canadian dollars, drawn by the Canadian Borrower, and accepted by a Multicurrency Lender in accordance with this Agreement, and shall include a depository note within the meaning of the Depository Bills and Notes Act (Canada) and a bill of exchange within the meaning of the Bills of Exchange Act (Canada).

"***Board***" shall mean the Board of Governors of the Federal Reserve System of the United States of America.

"***Borrower Materials***" shall have the meaning assigned to such term in Section 9.01.

"***Borrower Repurchase Assignment and Acceptance***" shall mean an assignment and acceptance entered into by a Lender and a Borrower, and accepted by the Administrative Agent, substantially in the form of Exhibit C or such other form as shall be approved by the Administrative Agent.

"***Borrowers***" shall mean, collectively, the U.S. Borrower, the Australian Borrower, the Canadian Borrower, the New Zealand Borrower and the U.K. Borrower and any other wholly owned Subsidiary of the U.S. Borrower that becomes a party hereto as a Borrower pursuant to Section 9.18.

"***Borrowing***" shall mean (a) Loans of the same Class and Type and in the same currency made, converted or continued on the same date and, in the case of a Fixed Rate Loan, as to which a single Interest Period or Contract Period, as the case may be, is in effect, (b) a Competitive Loan or group of Competitive Loans of the same Type made on the same date and as to which a single Interest Period is in effect or (c) a N.Z. Swingline Loan.

"***Borrowing Minimum***" shall mean $5,000,000, £2,000,000, €2,000,000, A$1,000,000, NZ$1,000,000 or C$1,000,000, as the case may be.

"***Borrowing Multiple***" shall mean $1,000,000, £500,000, €500,000, A$250,000, NZ$250,000 or C$250,000, as the case may be.

"***Borrowing Request***" shall mean a request by a Borrower in accordance with the terms of Section 2.03 and substantially in the form of Exhibit E or such other form as shall be approved by the Administrative Agent.

"***Borrowing Subsidiary Agreement***" shall mean a Borrowing Subsidiary Agreement substantially in the form of Exhibit F-1.

"***Borrowing Subsidiary Termination***" shall mean a Borrowing Subsidiary Termination substantially in the form of Exhibit F-2.

"***Business Day***" shall mean any day other than a Saturday, Sunday or day on which banks in New York City are authorized or required by law to close; *provided*, *however*, that **(a)** when used in connection with a Eurocurrency Loan, the term "Business Day" shall also exclude (~~a~~**i**) any day on which banks are not open for dealings in dollar deposits in the London interbank market (if such Eurocurrency Loan is denominated in dollars) and (~~b~~**ii**) any day that is not a TARGET Day (if such Eurocurrency Loan is denominated in Euro), **(b) when used in connection with a SONIA Loan, the term "Business Day" shall also exclude any day on which banks are closed for general business in London** and~~,~~ **(c)** when used in connection with any Calculation Date or determining any date on which any amount is to be paid or made available in an Alternative Currency other than Euro, the term "Business Day" shall also exclude any day on which commercial banks and foreign exchange markets are not open for business in the principal financial center in the country of such Alternative Currency.

"***Calculation Date***" shall mean (a) the date on which any Multicurrency Loan or U.K. Loan is made, (b) the date of issuance, extension or renewal of any Multicurrency Letter of Credit or U.K. Letter of Credit, (c) the date of conversion or continuation of any Multicurrency Borrowing or U.K. Borrowing pursuant to Section 2.10 or (d) such additional dates as the Administrative Agent shall specify.

"***Canadian Dollars***" *or* "***C$***" shall mean the lawful currency of Canada.

"***Canadian Prime Rate***" shall mean, on any day, the annual rate of interest equal to the greater of: (a) the annual rate of interest determined from time to time by the Administrative Agent as its prime rate in effect at its principal office in Toronto, Ontario on such day for interest rates on Canadian Dollar-Denominated commercial loans made in Canada; and (b) the annual rate

of interest equal to the sum of (i) the CDOR Rate in effect on such day and (ii) 1%. When used in reference to any Loan or Borrowing, "Canadian Prime Rate" refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Canadian Prime Rate.

"***Canadian Sublimit***" shall mean $75,000,000.

"***Capital Lease Obligations***" of any person shall mean, as applied to such person, an obligation that is required to be accounted for as a financing or capital lease (and, for the avoidance of doubt, not a straight-line or operating lease) on both the balance sheet and income statement for financial reporting purposes in accordance with GAAP. At the time any determination thereof is to be made, the amount of the liability in respect of a financing or capital lease would be the amount required to be reflected as a liability on such balance sheet (excluding the footnotes thereto) in accordance with GAAP.

"***CBRE Clarion***" shall mean CBRE Clarion Securities LLC, a Delaware limited liability company and an indirect majority owned subsidiary of CBRE Clarion CRA Holdings, Inc.

"***CBRE Clarion Units***" shall mean the Class A Units and Class B Units of CBRE Clarion.

"***CBRE CM***" shall mean, collectively, (a) CBRE Capital Markets, Inc., a Texas corporation and (b) CBRE Capital Markets of Texas, L.P., a limited partnership under the laws of the State of Texas.

"***CBRE CM Lending Program Securities***" shall mean mortgage-backed securities or bonds issued by CBRE CM or any other Mortgage Banking Subsidiary supported by FHA Loans and Guaranteed by the Government National Mortgage Association or any other quasi-federal governmental agency or enterprise or government-sponsored entity, the proceeds of which securities or bonds are applied by CBRE CM or any other Mortgage Banking Subsidiary to refinance Indebtedness under a CBRE CM Mortgage Warehousing Facility.

"***CBRE CM Loan Arbitrage Facility***" shall mean a credit facility provided to CBRE CM by any depository bank in which a CBRE CM entity makes deposits, so long as (a) such CBRE CM entity applies all proceeds of loans made under such credit facility to purchase certain highly-rated debt instruments considered to be permitted short-term investments under such credit facility and (b) all such permitted short-term investments purchased by such CBRE CM entity with the proceeds of loans thereunder (and proceeds thereof and distributions thereon) are pledged to the depository bank providing such credit facility, and such bank has a first priority perfected security interest therein, to secure loans made under such credit facility.

"***CBRE CM Loan Securitization Funds***" shall mean one or more special purpose investment funds formed by CBRE CM solely for the purpose of originating, securitizing and selling investment tranches of commercial real estate loans.

"***CBRE CM Mortgage Warehousing Facility***" shall mean (a) a credit facility (whether in the form of a loan agreement or a repurchase agreement) provided by any bank or other financial institution extended to CBRE CM or any other Mortgage Banking Subsidiary in connection with any Mortgage Banking Activities, pursuant to which such lender makes loans to CBRE CM or any other Mortgage Banking Subsidiary, the proceeds of which loans are applied by CBRE CM (or any other Mortgage Banking Subsidiary) to fund commercial mortgage loans originated and owned by CBRE CM (or any other Mortgage Banking Subsidiary) subject to a commitment (subject to customary exceptions) to purchase such mortgage loans or mortgage-backed securities in respect thereof by (i) the Federal Home Loan Mortgage Corporation, the Federal National Mortgage Association or any other quasi-federal governmental agency or enterprise or government-sponsored entity or its seller servicer or (ii) any other commercial conduit lender, in each case so long as (x) loans made by such lender to CBRE CM (or any other Mortgage Banking

Subsidiary) thereunder are secured by a pledge of commercial mortgage loans made by CBRE CM (or any other Mortgage Banking Subsidiary) with the proceeds of such loans, and such lender has a perfected first priority security interest therein, to secure loans made under such credit facility and (y) in the case of loans to be sold to a commercial conduit lender, the related Indebtedness of the Mortgage Banking Subsidiary does not exceed a term of 180 days or a loan to value of 90% and (b) any other credit facility provided by any bank or other financial institution extended to CBRE CM or any other Mortgage Banking Subsidiary pursuant to which such lender makes loans to CBRE CM or any other Mortgage Banking Subsidiary, the proceeds of which loans are applied by CBRE CM (or any other Mortgage Banking Subsidiary) to fund FHA Loans, so long as such loans to CBRE CM (or any other Mortgage Banking Subsidiary) are repaid by CBRE CM (or any other Mortgage Banking Subsidiary) to such lender with the proceeds of the sale or issuance of CBRE CM Lending Program Securities.

"***CBRE CM Permitted Indebtedness***" shall mean Indebtedness of CBRE CM under the CBRE CM Loan Arbitrage Facility, a CBRE CM Mortgage Warehousing Facility, the CBRE CM Working Capital Facility, the CBRE CM Repo Arrangement and CBRE CM Lending Program Securities, and Indebtedness of any Mortgage Banking Subsidiary under a CBRE CM Mortgage Warehousing Facility that is, in all cases, non-recourse to the U.S. Borrower or any of the other Subsidiaries.

"***CBRE CM Repo Arrangement***" shall mean an arrangement whereby mortgage loans originated by CBRE CM are funded by a third party lender or financial institution (a "***CBRE CM Repo Party***") pursuant to an agreement whereby the CBRE CM Repo Party funds and purchases from CBRE CM such mortgage loans upon origination and sells such loans to CBRE CM prior to CBRE CM's sale of such loans to the Federal Home Loan Mortgage Corporation or another counterparty.

"***CBRE CM Working Capital Facility***" shall mean a credit facility provided by a financial institution to CBRE CM, so long as (a) the proceeds of loans thereunder are applied only to provide working capital to CBRE CM, (b) loans under such credit facility are unsecured and (c) the aggregate principal amount of loans outstanding under such credit facility at no time exceeds $1,000,000.

"***CBRE Loan Arbitrage Facility***" shall mean a credit facility provided to the U.S. Borrower or CBRE, Inc. by any depository bank in which the U.S. Borrower or CBRE, Inc., as the case may be, makes deposits, so long as (a) the U.S. Borrower or CBRE, Inc., as the case may be, applies all proceeds of loans made under such credit facility to purchase certain highly-rated debt instruments considered to be permitted short-term investments under such credit facility and (b) all such permitted short-term investments purchased by the U.S. Borrower or CBRE, Inc., as the case may be, with the proceeds of loans thereunder (and proceeds thereof and distributions thereon) are pledged to the depository bank providing such credit facility, and such bank has a first priority perfected security interest therein, to secure loans made under such credit facility.

"***CDOR Rate***" shall mean, for each day in any period, the annual rate of interest that is the rate based on an average rate applicable to Canadian Dollar bankers' acceptances for a term equal to the term of the relevant Contract Period (or for a term of 30 days for purposes of determining the Canadian Prime Rate) appearing on the Reuters Screen CDOR Page at approximately 10:00 a.m. (Toronto time), on such date, or if such date is not a Business Day, on the immediately preceding Business Day; *provided* that if such rate does not appear on the Reuters Screen CDOR Page on such date as contemplated, then the CDOR Rate on such date shall be the rate that would be applicable to Canadian Dollar bankers' acceptances quoted by the Administrative Agent as of 10:00 a.m. (Toronto time) on such date or, if such date is not a Business Day, on the immediately preceding Business Day.

"***Change in Control***" shall mean any of the following events: (a) any "person" or "group" (within the meaning of Section 13(d) or 14(d) of the Securities Exchange Act of 1934 as in effect on the date hereof) other than the Permitted Investors becomes, directly or indirectly, the

beneficial owner of Equity Interests in Holdings representing more than 40% of the aggregate ordinary voting power represented by the issued and outstanding Equity Interests of Holdings; (b) Holdings shall cease to directly or indirectly own 100% of the issued and outstanding Equity Interests of the U.S. Borrower or (c) the occurrence of a "Change of Control" (however designated) under and as defined in the definitive documentation governing any Material Indebtedness.

"***Change in Law***" shall mean (a) the adoption of any law, rule or regulation after the Closing Date, (b) any change in any law, rule or regulation or in the interpretation or application thereof by any Governmental Authority after the Closing Date or (c) compliance by any Lender or any Issuing Bank (or, for purposes of Section 2.14, by any lending office of such Lender or by such Lender's or such Issuing Bank's holding company, if any) with any request, guideline or directive (whether or not having the force of law) of any Governmental Authority made or issued after the Closing Date.

"***Class***", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are Domestic Revolving Loans, Multicurrency Revolving Loans, U.K. Revolving Loans, Competitive Loans, N.Z. Swingline Loans, Other Revolving Loans, Tranche A Loans, Specified Incremental Term Loans or Other Term Loans and, when used in reference to any Commitment, refers to whether such Commitment is a Domestic Revolving Credit Commitment, Multicurrency Revolving Credit Commitment, U.K. Revolving Credit Commitment, N.Z. Swingline Commitment, Specified Incremental Term Loan Commitment or Other Revolving Credit Commitment.

"***Closing Date***" shall mean October 31, 2017.

"***Code***" shall mean the Internal Revenue Code of 1986, as amended from time to time.

"***Co-investment Vehicle***" shall mean an entity (other than a Subsidiary) formed for the purpose of investing principally in real estate related assets.

"***Commitment***" shall mean, with respect to any Lender, such Lender's Domestic Revolving Credit Commitment, Multicurrency Revolving Credit Commitment, U.K. Revolving Credit Commitment, N.Z. Swingline Commitment, Incremental Revolving Credit Commitment, Incremental Term Loan Commitment, Other Revolving Credit Commitment or Other Term Loan Commitment.

"***Common Stock***" shall mean the Class A Common Stock of Holdings.

"***Communications***" shall have the meaning assigned to such term in Section 9.01.

"***Competitive Bid***" shall mean an offer by a Lender to make a Competitive Loan pursuant to Section 2.27 in the form of Exhibit J-3, or another form approved by the Advance Agent.

"***Competitive Bid Accept/Reject Letter***" shall mean a notification made by the U.S. Borrower pursuant to Section 2.27(d) in the form of Exhibit J-4, or another form approved by the Advance Agent.

"***Competitive Bid Rate***" shall mean, as to any Competitive Bid, the Competitive Loan Margin or the fixed rate of interest per annum, as applicable, offered by the Lender making such Competitive Bid.

"***Competitive Bid Request***" shall mean a request made pursuant to Section 2.27 in the form of Exhibit J-1, or another form approved by the Advance Agent.

"***Competitive Borrowing***" shall mean a Borrowing consisting of a Competitive Loan or concurrent Competitive Loans from the Lender or Lenders whose Competitive Bids for such Borrowing have been accepted under the bidding procedure described in Section 2.27.

"***Competitive Loan***" shall mean a Loan made pursuant to Section 2.27. Each Competitive Loan shall be a Eurocurrency Competitive Loan or a Flat Rate Competitive Loan.

"***Competitive Loan Exposure***" shall mean, with respect to any Lender at any time, the aggregate principal amount of the outstanding Competitive Loans of such Lender.

"***Competitive Loan Margin***" shall mean, with respect to any Competitive Loan bearing interest at a rate based on the Adjusted LIBO Rate, the marginal rate of interest, if any, to be added to or subtracted from the Adjusted LIBO Rate in order to determine the interest rate applicable to such Loan, as specified by the Lender making such Loan in its related Competitive Bid.

"***Consolidated EBITDA***" shall mean,

for any period, Consolidated Net Income for such period plus (a) without duplication and to the extent deducted (or not included) in determining such Consolidated Net Income, the sum of

(i) consolidated interest expense (including deferred financing costs, letter of credit fees, and unrealized net losses on Hedging Obligations), (ii) consolidated income and other similar tax expense for such period, (iii) all amounts attributable to depreciation and amortization for such period, (iv) any non-recurring fees, expenses or charges in connection with the consummation and implementation of the Transactions, any Auction or any Loan Modification Offer, (v) any non-recurring fees, expenses or charges related to any equity issuance, any acquisition or any other investment or incurrence of Indebtedness, (vi) any expenses, accruals or reserves, and related costs and charges, that are directly attributable to identified restructurings, cost savings or technology initiatives, acquisitions and other investments and that, in any such case, are factually supportable and certified by a Financial Officer of the U.S. Borrower, (vii) all other non-cash losses, expenses and charges of Holdings and its consolidated subsidiaries (excluding (x) the write-down of current assets and (y) any such non-cash charge to the extent that it represents an accrual of or reserve for cash expenditures in any future period), (viii) all compensation expense to the extent the proceeds of which are substantially concurrently used by the employees receiving such compensation to purchase Common Stock from Holdings pursuant to an employee stock purchase plan of Holdings and its Subsidiaries, (ix) upfront fees or charges or loss arising from any Receivables Securitization for such period, (x) the aggregate amount of Consolidated Net Income for such period attributable to non-controlling interests of third parties in any non wholly-owned Subsidiary, excluding cash distributions in respect thereof to the extent already included in Consolidated Net Income, (xi) any net pension or other post-employment benefit costs representing amortization of unrecognized prior service costs, actuarial losses, including amortization of such amounts arising in prior periods, amortization of the unrecognized net obligation (and loss or cost) existing at the date of initial application of Financial Accounting Standards Board's Accounting Standards Codification No. 715, any non-cash deemed finance charges in respect of any pension liabilities, the curtailment or modification of pension and post-retirement employee benefit plans (including settlement of pension liabilities), (xii) pro forma adjustments related to any Specified Restructuring, including pro forma "run rate" cost savings, operating expense reductions and other synergies, in each case projected by the Borrower in good faith to result from actions that have been taken, actions with respect to which substantial steps have been taken or actions that are

expected to be taken (in each case, in the good faith determination of a Financial Officer of the U.S. Borrower), in any such case, within any applicable Post-Transaction Period; provided that the aggregate amount of any such pro forma increase added to Consolidated EBITDA pursuant to this clause (xii) for any Test Period and that would not be required or permitted to be included in a pro forma income statement in accordance with Regulation S-X of the Securities Act of 1933, as amended, shall not exceed $100,000,000 for such Test Period, (xiii) pro forma adjustments related to any Specified Transaction, including pro forma "run rate" cost savings, operating expense reductions and other synergies, in each case projected by the Borrower in good faith to result from actions that have been taken, actions with respect to which substantial steps have been taken or actions that are expected to be taken (in each case, in the good faith determination of a Financial Officer of the U.S. Borrower), in any such case, within any applicable Post-Transaction Period; provided that the aggregate amount of any such pro forma increase added to Consolidated EBITDA pursuant to this clause (xiii) for any Test Period and that would not be required or permitted to be included in a pro forma income statement in accordance with Regulation S-X of the Securities Act of 1933, as amended, shall not exceed an amount equal to 20.0% of Consolidated EBITDA for such Test Period (calculated without giving effect to such add-backs); *provided further* that, for the purpose of clauses (xii) and (xiii), (I) any such adjustments shall be included in Consolidated EBITDA for each Test Period ending on or prior to the last day of the first Test Period ending after the expiration of the applicable Post-Transaction Period and shall be calculated on a pro forma basis as though such adjustments had been realized on the first day of the relevant Test Period and shall be calculated net of the amount of actual benefits realized from such actions and (II) no such adjustments shall be added pursuant to clauses (xii) and (xiii) to the extent duplicative of any items otherwise added to or included in calculating Consolidated EBITDA (whether items included in the definition of Consolidated Net Income or otherwise) (it being understood that for purposes of the foregoing, "run rate" shall mean the full recurring benefit that is associated with any such action), and (xiv) all non-cash charges of Holdings and its consolidated subsidiaries resulting from the amortization of the value or any mark-to-market valuation of the CBRE Clarion Units, and all cash payments made in connection with the purchase or other acquisition of CBRE Clarion Units, required or permitted by, and on the terms and conditions of, the Management Subscription Agreements, and any other amounts for such period comparable to or in the nature of interest under any Receivables Securitization, and losses on dispositions of Receivables and related assets in connection with any Receivables Securitization for such period;

and minus (b) without duplication and to the extent added (or included) in determining such Consolidated Net Income,

(i) all cash payments made during such period on account of reserves and other noncash charges added to Consolidated Net Income pursuant to clause (a)(vii) above in a previous period, (ii) all non-cash gains of Holdings and its consolidated subsidiaries resulting from any mark-to-market valuation of the CBRE Clarion Units, (iii) unrealized net gains on Hedging Obligations and (iv) to the extent included in determining such Consolidated Net Income, any extraordinary gains for such period,

in each case as determined on a consolidated basis for Holdings and its Subsidiaries in accordance with GAAP; *provided* that

(I) there shall be included in determining Consolidated EBITDA for any period, without duplication, the Acquired EBITDA of any Person, property, business or asset acquired by Holdings or any Subsidiary during such period to the extent not

subsequently sold, transferred or otherwise disposed of during such period (but not including the Acquired EBITDA of any related Person, property, business or assets to the extent not so acquired) (each such Person, property, business or asset acquired pursuant to a transaction consummated prior to the Closing Date, and not subsequently so disposed of, an "***Acquired Entity or Business***") based on the Acquired EBITDA of such Pro Forma Entity for such period (including the portion thereof occurring prior to such acquisition or conversion) determined on a historical pro forma basis; and

(II) there shall be excluded in determining Consolidated EBITDA for any period the Disposed EBITDA of any Person, property, business or asset sold, transferred or otherwise disposed of, closed or classified as discontinued operations by Holdings or any Subsidiary to the extent not subsequently reacquired, reclassified or continued, in each case, during such period (each such Person, property, business or asset so sold, transferred or otherwise disposed of, closed or classified, a "***Sold Entity or Business***") based on the Disposed EBITDA of such Sold Entity or Business for such period (including the portion thereof occurring prior to such sale, transfer, disposition, closure, classification or conversion) determined on a historical pro forma basis.

"***Consolidated Interest Expense***" shall mean, for any period, (a) the sum of (i) the interest expense (including imputed interest expense in respect of Capital Lease Obligations) of Holdings and its consolidated subsidiaries for such period, determined on a consolidated basis in accordance with GAAP, plus (ii) any interest accrued during such period in respect of Indebtedness of Holdings or any of its consolidated subsidiaries that is required to be capitalized rather than included in consolidated interest expense for such period in accordance with GAAP, minus (b) to the extent otherwise included in Consolidated Interest Expense, (i) deferred financing costs, (ii) interest expense associated with any Non-Recourse Indebtedness, (iii) interest capitalized in accordance with GAAP in connection with the construction of real estate investments so long as the applicable consolidated subsidiary has obtained construction loan financing pursuant to which construction loan advances are made in the amount of such interest expense, (iv) interest expense associated with Exempt Construction Loans to the extent such interest expense is either fully supported by net operating income from the underlying real estate investment or is covered by advances under such Exempt Construction Loans, (v) interest expense associated with CBRE CM Permitted Indebtedness or Indebtedness under the CBRE Loan Arbitrage Facility, (vi) any expense resulting from the discounting of any Indebtedness in connection with the application of recapitalization accounting or purchase accounting, (vii) any expensing of bridge, arrangement, structuring, commitment or other financing fees or closing payments, (viii) any lease, rental or other expense in connection with lease obligations other than Capital Lease Obligations, (ix) Receivables fees, commissions, discounts, yield and other fees and charges (including any interest expense) related to any Receivables Securitization, (x) any accretion or accrual of, or accrued interest on discounted liabilities not constituting Indebtedness during such period and any prepayment, redemption, repurchase, defeasance, acquisition or similar premium, penalty or inducement or other loss in connection with the early refinancing or modification of Indebtedness paid or payable during such period, (xi) any one-time cash costs associated with breakage in respect of Hedging Agreements for interest rates and any payments with respect to make-whole and/or redemption premiums or other breakage costs in respect of any Indebtedness and (xii) any other non-cash interest expense, including capitalized interest, whether paid or accrued. For purposes of the foregoing, interest expense shall be determined after giving effect to any net payments made or received by Holdings or any of its consolidated subsidiaries with respect to interest rate Hedging Agreements.

"***Consolidated Net Income***" shall mean, for any period, the net income or loss of Holdings and its consolidated subsidiaries for such period determined on a consolidated basis in accordance with GAAP; *provided* that there shall be excluded (a) any reduction for charges made in accordance with Financial Accounting Standard No. 142 - Goodwill and Other Intangible Assets, (b) any income or gains associated with or resulting from the purchase of Purchased Loans and (c) any gains or losses attributable to sales of assets out of the ordinary course of business; *provided further*, that Consolidated Net Income for any period shall be increased (i) by

cash received during such period by Holdings or any of its consolidated subsidiaries in respect of commissions receivable (net of related commissions payable to brokers) on transactions that were completed by any acquired business prior to the acquisition of such business and which purchase accounting rules under GAAP would require to be recognized as an intangible asset purchased, (ii) increased, to the extent otherwise deducted in determining Consolidated Net Income for such period, by the amortization of intangibles relating to purchase accounting in connection with any Acquisition and (iii) increased (or decreased, as the case may be), in connection with the sale of real estate during such period, to eliminate the effect of purchase price allocations to such real estate resulting from the consummation of any Acquisition.

"***Contract Period***" shall mean the term of a B/A Loan selected by the Canadian Borrower in accordance with Section 2.24, commencing on the date of such B/A Loan and expiring on a Business Day which shall be either 30 days, 60 days, 90 days or 180 days thereafter, *provided* that (a) subject to clause (b) below, each such period shall be subject to such extensions or reductions as may be reasonably determined by the Administrative Agent to ensure that each Contract Period shall expire on a Business Day and (b) no Contract Period shall extend beyond the Revolving Credit Maturity Date.

"***Control***" shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a person, whether through the ownership of voting securities, by contract or otherwise, and the terms "***Controlling***" and "***Controlled***" shall have meanings correlative thereto.

"***Credit Event***" shall have the meaning assigned to such term in Section 4.01.

"***Credit Facilities***" shall mean the revolving credit, swingline, letter of credit and term loan facilities provided for by this Agreement.

"***Credit Rating***" shall mean the issuer ratings assigned to the U.S. Borrower by S&P or Fitch or the long-term debt ratings assigned to the U.S. Borrower's long-term senior, unsecured debt by Moody's (or if an issuer rating by Moody's is available, such issuer rating), as the case may be.

"***D&I Business***" shall mean the real estate development and investment activities conducted by TCC and its subsidiaries.

"***D&I Subsidiary***" shall mean any subsidiary of TCC engaged principally in the D&I Business.

"***Daily Rate***", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Alternate Base Rate, the Canadian Prime Rate**, the Daily Simple SONIA** or the Foreign Base Rate.

"*Daily Simple SONIA*" shall mean, for any day (a "*SONIA Rate Day*") with respect to any Loan denominated in Pounds, a rate per annum equal to the greater of (a) (i) SONIA for the day (such day, the "*SONIA Reference Day*") that is five Business Days prior to (x) if such SONIA Rate Day is a Business Day, such SONIA Rate Day or (y) if such SONIA Rate Day is not a Business Day, the Business Day immediately preceding such SONIA Rate Day, plus (ii) 0.0326% and (b) 0.00%. If by 5:00 pm (London time) on the second Business Day immediately following any SONIA Reference Day, SONIA in respect of such SONIA Reference Day has not been published on the SONIA Administrator's Website, then SONIA for such SONIA Reference Day will be SONIA as published in respect of the first preceding Business Day for which such SONIA was published on the SONIA Administrator's Website; provided that SONIA as determined pursuant to this sentence shall be utilized for purposes of calculation of Daily Simple SONIA for no more than three consecutive SONIA Business Days; provided further that, in the event such rate does not exist at such time, a

comparable successor rate that, at such time, is broadly accepted by the U.S. syndicated loan market for loans denominated in Pounds in lieu of such rate or, if no such broadly accepted comparable successor rate exists at such time, a successor index rate as may be agreed to by the Administrative Agent and the Borrower so long as the Lenders shall have received at least five Business Days prior written notice thereof and the Administrative Agent shall not have received, within five Business Days of such notice to the Lenders, a written notice from the Lenders holding a majority in aggregate principal amount of the Loans stating that such Lenders object to such rate).Any change in Daily Simple SONIA due to a change in SONIA shall be effective from and including the effective date of such change in SONIA without notice to any Borrower.

"***Default***" shall mean any event or condition which upon notice, lapse of time or both would constitute an Event of Default.

"***Defaulting Lender***" shall mean any Revolving Credit Lender, as determined by the Administrative Agent, that has (a) failed to fund any portion of its Revolving Loans or participations in N.Z. Swingline Loans or Letters of Credit within two Business Days of the date required to be funded by it hereunder (unless (i) such Revolving Credit Lender and at least one other unaffiliated Revolving Credit Lender shall have notified the Administrative Agent and the U.S. Borrower in writing of their good faith determination that a condition to their obligation to fund Revolving Loans or participations in N.Z. Swingline Loans or Letters of Credit shall not have been satisfied and (ii) Revolving Credit Lenders representing a majority in interest of the Commitments of the applicable Class shall not have advised the Administrative Agent in writing of their determination that such condition has been satisfied), (b) notified Holdings, any Borrower, the Administrative Agent, any Issuing Bank or any Lender in writing that it does not intend to comply with any of its funding obligations under this Agreement or has made a public statement to the effect that it does not intend to comply with its funding obligations under this Agreement or under other agreements in which it commits to extend credit, (c) failed, within two Business Days after request by the Administrative Agent, to confirm that it will comply with the terms of this Agreement relating to its obligations to fund prospective Revolving Loans and participations in then outstanding N.Z. Swingline Loans or Letters of Credit, (d) otherwise failed to pay over to the Administrative Agent or any other Lender any amount required to be paid by it hereunder within two Business Days of the date when due, unless the subject of a good faith dispute; (e) become the subject of a bankruptcy or insolvency proceeding, or has had a receiver, conservator, trustee or custodian appointed for it, or has consented to, approved of or acquiesced in any such proceeding or appointment or has a parent company that has become the subject of a bankruptcy or insolvency proceeding, or has had a receiver, conservator, trustee or custodian appointed for it, or has consented to, approved of or acquiesced in any such proceeding or appointment or (f) has, or has a direct or indirect parent company that has, become the subject of a Bail-In Action; *provided* that (i) if a Lender would be a "Defaulting Lender" solely by reason of events relating to a parent company of such Lender as described in clause (e) above, the Administrative Agent may, in its discretion, determine that such Lender is not a "Defaulting Lender" if and for so long as the Administrative Agent is satisfied that such Lender will continue to perform its funding obligations hereunder, (ii) the Administrative Agent may, by notice to Holdings and the Lenders, declare that a Defaulting Lender is no longer a "Defaulting Lender" if the Administrative Agent determines, in its discretion, that the circumstances that resulted in such Lender becoming a "Defaulting Lender" no longer apply and (iii) a Revolving Credit Lender shall not be a "Defaulting Lender" solely by virtue of the ownership or acquisition of any equity interest in such Revolving Credit Lender or any direct or indirect parent company thereof by a Governmental Authority so long as such ownership interest does not result in enforcement of judgments or writs of attachment on its assets or permit such Revolving Credit Lender (or such Governmental Authority) to reject, repudiate, disavow or disaffirm any contracts or agreements made with such Revolving Credit Lender.

"***Deferred Compensation Plan***" shall mean the Deferred Compensation Plan for employees of the U.S. Borrower and the Subsidiaries and any successor plan thereto, the 401(k)

Restoration Plan of Insignia and any successor plan thereto and the Trammell Crow Company Deferred Compensation Plan and any successor thereto.

"***Delayed Draw Termination Date***" shall mean July 31, 2018.

"***Discount Proceeds***" shall mean for any B/A (or, as applicable, any B/A Equivalent Loan), an amount (rounded to the nearest whole cent, and with one-half of one cent being rounded up) calculated on the applicable Borrowing date by multiplying:

(a) the face amount of the B/A (or, as applicable, any B/A Equivalent Loan); by

(b) the quotient of one divided by the sum of one plus the product of:

(i) the Discount Rate (expressed as a decimal) applicable to such B/A (or, as applicable, any B/A Equivalent Loan), and

(ii) a fraction, the numerator of which is the number of days in the Contract Period of the B/A (or, as applicable, any B/A Equivalent Loan) and the denominator of which is 365,

with such quotient being rounded up or down to the fifth decimal place and .000005 being rounded up.

"***Discount Rate***" shall mean: (a) with respect to any Lender that is a Schedule I Bank, as applicable to a B/A being purchased by such Lender on any day, the CDOR Rate; and (b) with respect to any Lender that is not a Schedule I Bank, as applicable to a B/A being purchased by such Lender on any day, the greater of (i) the CDOR Rate plus 10 basis points (0.10%) and (ii) the percentage discount rate (expressed to two decimal places and rounded upward, if not in an increment of $1/100^{th}$ of 1%, to the nearest 0.01%) quoted by the Administrative Agent as the percentage discount rate at which the Administrative Agent would, in accordance with its normal market practice, at or about 10:00 a.m. (Toronto time) on such date, be prepared to purchase bankers' acceptances accepted by the Administrative Agent having a face amount and term comparable to the face amount and term of such B/A.

"***Disposed EBITDA***" shall mean, with respect to any Sold Entity or Business for any period, the amount for such period of Consolidated EBITDA of such Sold Entity or Business (determined as if references to Holdings and its consolidated subsidiaries in the definition of the term "Consolidated EBITDA" (and in the component financial definitions used therein) were references to such Sold Entity or Business and its Subsidiaries), all as determined on a consolidated basis for such Sold Entity or Business.

"***Disqualified Stock***" shall mean any Equity Interest that, by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable), or upon the happening of any event, (a) matures (excluding any maturity as the result of an optional redemption by the issuer thereof) or is redeemable (other than solely for Qualified Stock), pursuant to a sinking fund obligation or otherwise, other than solely as a result of a change of control, asset sale event or casualty, eminent domain or condemnation event so long as any rights of the holders thereof upon the occurrence of a change of control, asset sale event or casualty, eminent domain or condemnation event shall be subject to the prior repayment in full of the Loans and all other Obligations (other than contingent indemnification obligations and other contingent obligations not then due and payable) or (b) requires the payment of any cash dividend, in each case, at any time on or prior to the 91st day following the latest final maturity date for any of the Loans; *provided*, *however*, that (i) Equity Interests that are issued pursuant to any plan for the benefit of officers, directors, employees or consultants of the issuer thereof or by any such plan to such officers, directors, employees or consultants, shall not constitute Disqualified Stock solely because they may be required to be repurchased by the issuer thereof in order to satisfy applicable statutory or regulatory obligations or as a result of such officer's, director's, employee's or

consultant's termination, death or disability and (ii) Equity Interests that were not Disqualified Stock when issued shall not become Disqualified Stock solely as a result of the subsequent extension of the final maturity date of any of the Loans pursuant to Section 9.20 or otherwise.

"***Dollar Equivalent***" shall mean, on any date of determination, with respect to any amount denominated in any currency other than dollars, the equivalent in dollars of such amount, determined by the Administrative Agent pursuant to Section 1.04 using the applicable Exchange Rate with respect to such currency at the time in effect.

"***Dollar Loan***" shall mean a Loan denominated in dollars.

"***dollars***" or "***$***" shall mean lawful money of the United States of America.

"***Domestic L/C Disbursement***" shall mean a payment or disbursement made by any Issuing Bank pursuant to a Domestic Letter of Credit.

"***Domestic L/C Exposure***" shall mean, at any time, the sum of (a) the aggregate undrawn and unexpired amount of all outstanding Domestic Letters of Credit at such time and (b) the aggregate principal amount of all Domestic L/C Disbursements that have not yet been reimbursed at such time. The Domestic L/C Exposure of any Domestic Revolving Credit Lender at any time shall equal its Pro Rata Percentage of the aggregate Domestic L/C Exposure at such time.

"***Domestic Letter of Credit***" shall mean any letter of credit issued (or deemed issued) pursuant to Section 2.23 and designated (or deemed designated) as such.

"***Domestic Revolving Credit Borrowing***" shall mean a Borrowing comprised of Domestic Revolving Loans.

"***Domestic Revolving Credit Commitment***" shall mean, with respect to each Lender, the commitment of such Lender to make Domestic Revolving Loans hereunder as set forth on Schedule 2.01, or in the Assignment and Acceptance pursuant to which such Lender assumed its Domestic Revolving Credit Commitment, as applicable, as the same may be (a) reduced from time to time pursuant to Section 2.09, (b) increased from time to time pursuant to Section 2.25 and (c) reduced or increased from time to time pursuant to assignments by or to such Lender pursuant to Section 9.04.

"***Domestic Revolving Credit Exposure***" shall mean, with respect to any Lender at any time, the aggregate principal amount at such time of all outstanding Domestic Revolving Loans of such Lender, *plus* the aggregate principal amount at such time of all Domestic L/C Exposure of such Lender.

"***Domestic Revolving Credit Lender***" shall mean a Lender with a Domestic Revolving Credit Commitment or outstanding Domestic Revolving Credit Exposure.

"***Domestic Revolving Loans***" shall mean the revolving loans made by the Domestic Revolving Credit Lenders to the U.S. Borrower pursuant to Section 2.01(a)(ii).

"***Domestic Subsidiaries***" shall mean all Subsidiaries incorporated or organized under the laws of the United States of America, any State thereof or the District of Columbia.

"***EEA Financial Institution***" shall mean (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clause (a) or (b) of this definition and is subject to consolidated supervision with its parent.

"***EEA Member Country***" shall mean any member state of the European Union, Iceland, Liechtenstein and Norway.

"***EEA Resolution Authority***" shall mean any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

"***Environmental Laws***" shall mean all former, current and future Federal, state, local and foreign laws (including common law), treaties, regulations, rules, ordinances, codes, decrees, judgments, directives, orders (including consent orders), and binding agreements in each case, relating to protection of the environment, natural resources, human health and safety (to the extent relating to exposure to Hazardous Materials) or the presence, Release of, or exposure to, Hazardous Materials, or the generation, manufacture, processing, distribution, use, treatment, storage, transport, recycling or handling of, or the arrangement for such activities with respect to, Hazardous Materials.

"***Equity Interests***" shall mean shares of capital stock, partnership interests, membership interests in a limited liability company, beneficial interests in a trust or other equity interests in any person.

"***ERISA***" shall mean the Employee Retirement Income Security Act of 1974, as the same may be amended from time to time.

"***ERISA Affiliate***" shall mean any trade or business (whether or not incorporated) that, together with the U.S. Borrower, is treated as a single employer under Section 414(b) or (c) of the Code, or solely for purposes of Section 302 of ERISA and Section 412 of the Code, is treated as a single employer under Section 414 of the Code.

"***ERISA Event***" shall mean (a) any "reportable event", as defined in Section 4043 of ERISA or the regulations issued thereunder, with respect to a Plan (other than an event for which the 30-day notice period is waived); (b) a failure by any Plan to satisfy the minimum funding standard (as defined in Section 412 of the Code or Section 302 of ERISA) applicable to such Plan, in each instance, whether or not waived; (c) the filing pursuant to Section 412(c) of the Code or Section 302(c) of ERISA of an application for a waiver of the minimum funding standard with respect to any Plan; (d) a determination that any Plan is or, is expected to be, in "at risk" status (as defined in Section 430(i)(4) of the Code or Section 303(i)(4) of ERISA); (e) the incurrence by the U.S. Borrower or any of its ERISA Affiliates of any liability under Title IV of ERISA with respect to the termination of any Plan (other than a standard termination pursuant to Section 4041(b) of ERISA) or the withdrawal or partial withdrawal of the U.S. Borrower or any of its ERISA Affiliates from any Plan or Multiemployer Plan; (f) the receipt by the U.S. Borrower or any of its ERISA Affiliates from the PBGC or a plan administrator of any notice relating to the intention to terminate any Plan or Plans or to appoint a trustee to administer any Plan; (g) the receipt by the U.S. Borrower or any of its ERISA Affiliates of any intent to withdraw from a Multiemployer Plan, or the receipt by any Multiemployer Plan from the U.S. Borrower or any of its ERISA Affiliates of any notice, concerning the imposition of Withdrawal Liability or a determination that a Multiemployer Plan is, or is expected to be, insolvent, within the meaning of Title IV of ERISA, or is in "endangered" or "critical" status within the meaning of Section 305 of ERISA; (h) the occurrence of a nonexempt "prohibited transaction" with respect to which the U.S. Borrower or any of the Subsidiaries is a "disqualified person" (within the meaning of Section 4975 of the Code or Section 406 of ERISA) or a "party of interest" (within the meaning of Section 3(14) of ERISA) or with respect to which the U.S. Borrower or any such Subsidiary could otherwise be liable; (i) any other event or condition with respect to a Plan or Multiemployer Plan that could result in liability of the U.S. Borrower or any Subsidiary; or (j) any Foreign Benefit Event.

"***EU Bail-In Legislation Schedule***" shall mean the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor person), as in effect from time to time.

"*EURIBO Rate*" shall mean, with respect to any Eurocurrency Borrowing denominated in Euro for any Interest Period, the rate per annum determined at 11:00 a.m. (Brussels time) on the date that is two TARGET Days prior to the first day of such Interest Period by the European Money Market Institute (or any other person that takes over the administration of such rate) as the rate at which interbank deposits in Euro are being offered by one prime bank to another within the EMU zone for such Interest Period, as set forth on the Reuters screen page that displays such rate (currently EURIBOR01) (or, in the event such rate does not exist at such time, a comparable successor rate that, at such time, is broadly accepted by the U.S. syndicated loan market for loans denominated in Euro in lieu of such rate or, if no such broadly accepted comparable successor rate exists at such time, a successor index rate as may be agreed to by the Administrative Agent and the Borrower so long as the Lenders shall have received at least five Business Days prior written notice thereof and the Administrative Agent shall not have received, within five Business Days of such notice to the Lenders, a written notice from the Lenders holding a majority in aggregate principal amount of the Loans stating that such Lenders object to such rate); *provided* that, to the extent that an interest rate is not ascertainable pursuant to the foregoing provisions of this definition, the "EURIBO Rate" shall be the Interpolated EURIBO Rate. Notwithstanding the forgoing, if the EURIBO Rate for any Interest Period determined as provided for herein would be less than zero, then it shall be deemed to be zero for such Interest Period.

"***Euro***" *or* "***€***" shall mean the single currency of the European Union as constituted by the Treaty on European Union as adopted as lawful currency by certain member states under legislation of the European Union for European Monetary Union.

"***Eurocurrency***", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Adjusted LIBO Rate **or the EURIBO Rate**.

"***Event of Default***" shall have the meaning assigned to such term in Article VII.

"***Exchange Rate***" shall mean, on any day, with respect to any currency other than dollars (for purposes of determining the Dollar Equivalent) or dollars (for purposes of determining the Alternative Currency Equivalent), the rate at which such currency may be exchanged into dollars or the applicable Alternative Currency, as the case may be, as set forth at approximately 11:00 a.m., Local Time, on such date on the applicable Bloomberg Key Cross Currency Rates Page. In the event that any such rate does not appear on any Bloomberg Key Cross Currency Rates Page, the Exchange Rate shall be determined by reference to such other publicly available service for displaying exchange rates as may be agreed by the Administrative Agent and Holdings for such purpose, or, in the absence of such agreement, such Exchange Rate shall instead be the arithmetic average of the spot rates of exchange of the Administrative Agent in the market where its foreign currency exchange operations in respect of such currency are then being conducted, at or about 10:00 a.m., Local Time, on such date for the purchase of dollars or the applicable Alternative Currency, as the case may be, for delivery two Business Days later; *provided* that, if at the time of any such determination, for any reason, no such spot rate is being quoted, the Administrative Agent may use any other reasonable method it deems appropriate to determine such rate, and such determination shall be presumed correct absent manifest error.

"***Excluded Subordinated Indebtedness***" shall mean Subordinated Indebtedness incurred after the Closing Date in an aggregate principal amount outstanding at any time not to exceed $350,000,000.

"***Excluded Taxes***" shall mean, with respect to the Administrative Agent, any Lender, any Issuing Bank or any other recipient of any payment to be made by or on account of any obligation of a Borrower hereunder, (a) income or franchise Taxes imposed on (or measured by) its net income (i) by any Governmental Authority of the United States of America (or any political subdivision or taxing authority thereof or therein), or the jurisdiction under the laws of which such recipient is organized or in which its principal office is located or, in the case of any Lender, in which its applicable lending office is located, or (ii) that are Other Connection Taxes; (b) any branch profits Taxes imposed by any Governmental Authority of the United States of America (or any political subdivision or taxing authority thereof or therein) or any similar Tax imposed by any other jurisdiction described in clause (a) above, (c) in the case of a Foreign Lender (other than an assignee pursuant to a request by a Borrower under Section 2.21(a)), any withholding Tax that is imposed on amounts payable to such Foreign Lender resulting from any requirement of law in effect at the time such Foreign Lender becomes a party to this Agreement (or designates a new lending office), except to the extent that such Foreign Lender (or its assignor, if any) was entitled, at the time of designation of a new lending office (or assignment), to receive additional amounts from such Borrower with respect to such withholding Tax pursuant to Section 2.20(a); (d) any withholding Tax that is attributable to such Lender's failure to comply with Section 2.20(g) and (e) any U.S. Federal withholding Taxes imposed under FATCA; *provided* that, notwithstanding any of the other provisions of this definition, in the event that, following an Event of Default, the N.Z. Swingline Lender gives written notice requiring the Multicurrency Revolving Credit Lenders to acquire participations in all or a portion of the outstanding N.Z. Swingline Loans pursuant to Section 2.22(e), any withholding Tax that is imposed on amounts payable to the Multicurrency Revolving Credit Lenders in respect of such N.Z. Swingline Loans after the date of such notice shall not be an Excluded Tax; *provided further* that, notwithstanding any of the other provisions of this definition, in the event that the Multicurrency Revolving Credit Lenders acquire participations in a Letter of Credit pursuant to Section 2.23(d), any withholding Tax that is imposed on amounts payable by the N.Z. Borrower to the Multicurrency Revolving Credit Lenders in respect of such Letter of Credit after the time such participations are acquired shall not be an Excluded Tax.

"***Exempt Construction Loan***" shall mean any interim construction loan (or Guarantee thereof) (a) that is subject to or backed by an Approved Take Out Commitment or (b) in which the D&I Subsidiary that is the obligor of such construction loan has entered into a Qualifying Lease of the property securing such Exempt Construction Loan (or Guarantee thereof) and such lease supports a refinancing of the entire interim construction loan amount based upon prevailing permanent loan terms at the time the interim construction loan is closed. Notwithstanding the foregoing, construction loans (and Guarantees thereof) shall cease to be treated as Exempt Construction Loans in the event that any of the following occur: (i) the obligor of such Exempt Construction Loan is in default beyond any applicable notice and cure periods of any obligations under the credit agreement relating to such Exempt Construction Loan; or (ii) the underlying real property securing such Exempt Construction Loan has not been sold by a date which is no later than 15 months (unless subject to or backed by an Approved Take Out Commitment, in which case no deadline for the sale of such real property shall apply) after completion of construction.

"***Existing Credit Agreement***" shall mean the Second Amended and Restated Credit Agreement dated as of January 9, 2015 (as amended and supplemented pursuant to the First Amendment thereto, dated as of May 28, 2015, the Incremental Assumption Agreement, dated as of September 3, 2015, and the Second Amendment thereto, dated as of March 21, 2016), among the Borrowers, Holdings, the lenders party thereto and Credit Suisse AG, as administrative agent.

"***Existing Letter of Credit***" shall mean each Letter of Credit previously issued or deemed issued under the Existing Credit Agreement that (a) is outstanding on the date hereof and (b) is listed on Schedule 1.01(d).

"***Existing Tranche A Loan Refinancing*** " shall mean the repayment in full, on the Closing Date, of the Tranche A Loans (as defined in the Existing Credit Agreement).

"Existing Tranche B Loan Prepayment" shall mean the repayment in full, on or prior to the Closing Date, of each of the Tranche B-1 and Tranche B-2 Loans (each as defined in the Existing Credit Agreement).

"***Facility Fees***" shall have the meaning assigned to such term in Section 2.05(a).

"***FATCA***" shall mean Sections 1471 through 1474 of the Code, as of the date of this Agreement or any amended or successor version that is substantively comparable and not materially more onerous to comply with, any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code and any intergovernmental agreements in respect thereof (and any legislation, regulations or other official guidance pursuant to, or in respect of, such intergovernmental agreements).

"***Federal Funds Effective Rate***" shall mean, for any day, the weighted average of the rates on overnight Federal funds transactions with members of the Federal Reserve System, as published on the next succeeding Business Day by the Federal Reserve Bank of New York, or, if such rate is not so published for any day that is a Business Day, the average of the quotations for the day for such transactions received by the Administrative Agent from three depository institutions of recognized standing selected by it; provided that the Federal Funds Effective Rate shall be deemed to be not less than zero.

"***Fees***" shall mean the Facility Fees, the Ticking Fees, the Administrative Agent Fees, the L/C Participation Fees and the Issuing Bank Fees.

"***FHA Loans***" shall mean commercial or multi-housing mortgage loans originated by CBRE CM (or any other Mortgage Banking Subsidiary) and insured by the Federal Housing Administration or any other governmental entity.

"***Financial Officer***" of any person shall mean the chief financial officer, principal accounting officer, Treasurer or Controller of such person.

"***Fitch***" shall mean Fitch Ratings or any successor to the ratings agency business thereof.

"***Fixed Rate***", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Adjusted LIBO Rate**, the EURIBO Rate,** the Discount Rate or the Bank Bill Rate.

"***Flat Rate***", when used in reference to any Competitive Loan or Competitive Borrowing, refers to whether such Competitive Loan, or the Competitive Loans comprising such Competitive Borrowing, are bearing interest at a fixed rate of interest per annum, as specified by the Lender making such Competitive Loan in its related Competitive Bid.

"***Foreign Base Rate***" shall mean, with respect to any Alternative Currency (other than Canadian Dollars) in any jurisdiction, the rate of interest per annum determined by the Administrative Agent to be the rate of interest (in the absence of a Fixed Rate) charged by it to borrowers of similar quality as the applicable Borrower for short-term loans in such Alternative Currency in such jurisdiction. Notwithstanding anything to the contrary contained herein, Loans may be made or maintained as Foreign Base Rate Loans only to the extent specified in Section 2.08 or 2.15.

"***Foreign Benefit Event***" shall mean, with respect to any Foreign Pension Plan, (a) the existence of unfunded liabilities in excess of the amount permitted under any applicable law, or in excess of the amount that would be permitted absent a waiver from a Governmental Authority, (b) the failure to make the required contributions or payments, under any applicable law, on or before the due date for such contributions or payments, (c) the receipt of a notice by a Governmental Authority relating to the intention to terminate any such Foreign Pension Plan or to

appoint a trustee or similar official to administer any such Foreign Pension Plan, or alleging the insolvency of any such Foreign Pension Plan and (d) the incurrence of any liability in excess of $5,000,000 (or the equivalent thereof in another currency) by Holdings, the U.S. Borrower or any of its Subsidiaries under applicable law on account of the complete or partial termination of such Foreign Pension Plan or the complete or partial withdrawal of any participating employer therein or (e) the occurrence of any transaction that is prohibited under any applicable law and could reasonably be expected to result in the incurrence of any liability by Holdings, the U.S. Borrower or any of its Subsidiaries, or the imposition on Holdings, the U.S. Borrower or any of its Subsidiaries of any fine, excise tax or penalty resulting from any noncompliance with any applicable law, in each case in excess of $5,000,000 (or the equivalent thereof in another currency).

"***Foreign Lender***" shall mean, with respect to any Borrower, any Lender that is organized under the laws of a jurisdiction other than that in which such Borrower is located. For purposes of this definition, the United States of America, each State thereof and the District of Columbia shall be deemed to constitute a single jurisdiction.

"***Foreign Pension Plan***" shall mean any plan that under applicable law of any jurisdiction other than the United States of America is required to be funded through a trust or other funding vehicle other than a trust or funding vehicle maintained exclusively by a Governmental Authority.

"***Foreign Subsidiary***" shall mean any Subsidiary that is not a Domestic Subsidiary.

"***GAAP***" shall mean United States generally accepted accounting principles applied on a consistent basis.

"***Governmental Authority***" shall mean any Federal, state, local or foreign court or governmental agency, authority, instrumentality or regulatory body, including any supranational bodies (such as the European Union or the European Central Bank).

"***Granting Lender***" shall have the meaning assigned to such term in Section 9.04(j).

"***Guarantee***" of or by any person shall mean any obligation, contingent or otherwise, of such person guaranteeing or having the economic effect of guaranteeing any Indebtedness of any other person (the "***primary obligor***") in any manner, whether directly or indirectly, and including any obligation of such person, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment of such Indebtedness or other obligation, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Indebtedness or other obligation of the payment of such Indebtedness or other obligation or (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation; *provided*, *however*, that the term "Guarantee" shall not include (i) endorsements for collection or deposit in the ordinary course of business, (ii) customary environmental indemnities and non-recourse carve-out guarantees requested by lenders in financing transactions secured by real property, (iii) guarantees in respect of Exempt Construction Loans or (iv) completion and budget guarantees.

"***Guarantee Agreement***" shall mean the Guarantee Agreement dated as of the Closing Date, substantially in the form attached hereto as Exhibit G, among the Borrowers, Holdings, the Subsidiary Guarantors and the Administrative Agent for the benefit of the Lenders, together with each supplement thereto.

"***Guarantee Release Date***" shall have the meaning assigned to such term in Section 9.25(a).

"***Guarantors***" shall mean Holdings and the Subsidiary Guarantors.

"***Hazardous Materials***" shall mean (a) any petroleum products or byproducts and all other petroleum hydrocarbons, coal ash, radon gas, asbestos, urea formaldehyde foam insulation, polychlorinated biphenyls, chlorofluorocarbons and all other ozone-depleting substances and (b) any chemical, material, substance or waste that is prohibited, limited or regulated by or pursuant to any Environmental Law.

"***Hedging Agreement***" shall mean (a) any and all rate swap transactions, basis swaps, credit derivative transactions, forward rate transactions, commodity swaps, commodity options, forward commodity contracts, equity or equity index swaps or options, bond or bond price or bond index swaps or options or forward bond or forward bond price or forward bond index transactions, interest rate options, forward foreign exchange transactions, cap transactions, floor transactions, collar transactions, currency swap transactions, cross-currency rate swap transactions, currency options, spot contracts, or any other similar transactions or any combination of any of the foregoing (including any options to enter into any of the foregoing), whether or not any such transaction is governed by or subject to any master agreement, and (b) any and all transactions of any kind, and the related confirmations, which are subject to the terms and conditions of, or governed by, any form of master agreement published by the International Swaps and Derivatives Association, Inc., any International Foreign Exchange Master Agreement or any other master agreement (any such master agreement, together with any related schedules, a "***Master Agreement***"), including any such obligations or liabilities under any Master Agreement.

"***Hedging Obligations***" shall mean, with respect to any Person, the obligations of such Person under Hedging Agreements.

"***HMRC***" shall mean HM Revenue & Customs.

"***Incremental Assumption Agreement***" shall mean an Incremental Assumption Agreement among, and in form and substance satisfactory to, the applicable Borrowers, the Administrative Agent and one or more Incremental Revolving Credit Lenders or Incremental Term Lenders, as the case may be.

"***Incremental Revolving Credit Commitment***" shall mean the commitment of any Lender, established pursuant to Section 2.25, to make Incremental Revolving Loans to one or more Borrowers.

"***Incremental Revolving Credit Lender***" shall mean a Lender with an Incremental Revolving Credit Commitment or an outstanding Revolving Loan of any Class as a result of an Incremental Revolving Credit Commitment.

"***Incremental Revolving Loans***" shall mean Revolving Loans made by one or more Lenders to one or more Borrowers pursuant to Section 2.01(b). Incremental Revolving Loans may be made in the form of additional Revolving Loans or, to the extent permitted by Section 2.25 and provided for in the relevant Incremental Assumption Agreement, Specified Incremental Revolving Loans. Unless the context clearly indicates otherwise, the term "Incremental Revolving Loans" shall include Specified Incremental Revolving Loans.

"***Incremental Term Lender***" shall mean a Lender with an Incremental Term Loan Commitment or an outstanding Term Loan of any Class as a result of an Incremental Term Loan Commitment.

"***Incremental Term Loan Commitment***" shall mean the commitment of any Lender, established pursuant to Section 2.26, to make Incremental Term Loans to one or more Borrowers.

"***Incremental Term Loan Maturity Date***" shall mean the final maturity date of any Incremental Term Loan, as set forth in the applicable Incremental Assumption Agreement.

"***Incremental Term Loan Repayment Date***" shall mean each date on which the principal of any Incremental Term Loan is scheduled to be repaid, as set forth in the applicable Incremental Assumption Agreement.

"***Incremental Term Loans***" shall mean Term Loans made by one or more Lenders to one or more Borrowers pursuant to Section 2.01(b). Incremental Term Loans may be made in the form of additional Term Loans or, to the extent permitted by Section 2.26 and provided for in the relevant Incremental Assumption Agreement, Specified Incremental Term Loans. Unless the context clearly indicates otherwise, the term "Incremental Term Loans" shall include Specified Incremental Term Loans.

"***Indebtedness***" of any person shall mean, without duplication, (a) all obligations of such person for borrowed money or with respect to deposits or advances of any kind, (b) all obligations of such person evidenced by bonds, debentures, notes or similar instruments, (c) all obligations of such person upon which interest charges are customarily paid, (d) all obligations of such person under conditional sale or other title retention agreements relating to property or assets purchased by such person, (e) all obligations of such person issued or assumed as the deferred purchase price of property or services (excluding (i) with respect to clause (e), trade accounts payable and accrued obligations incurred in the ordinary course of business and (ii) only with respect to clauses (a) through (e), accrued obligations in respect of the Deferred Compensation Plan), (f) all Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on property owned or acquired by such person, whether or not the obligations secured thereby have been assumed, (g) all Guarantees by such person of Indebtedness of others (other than Guarantees by an Investment Subsidiary of any Indebtedness of any Co-investment Vehicle; *provided* that neither such Guarantee nor the related Indebtedness is recourse to Holdings, the U.S. Borrower or any other Subsidiary (other than an Investment Subsidiary)), (h) all Capital Lease Obligations of such person, (i) all obligations of such person as an account party in respect of letters of credit, (j) all obligations of such person in respect of bankers' acceptances, (k) all obligations of such person pursuant to any Receivables Securitization to the extent such obligations are reflected as indebtedness on the balance sheet of Holdings and (l) the aggregate liquidation preference of all outstanding Disqualified Stock issued by such person. The Indebtedness of any person shall include all Indebtedness of any partnership, or other entity in which such person is a general partner, or other equity holder with unlimited liability other than (x) Indebtedness which by its terms is expressly non-recourse to such person (subject to customary environmental indemnities or completion or budget guarantees, and subject to customary exclusions from liability by lenders in non-recourse financing transactions secured by real property (including by means of separate indemnification agreements or carve-out guarantees)) and (y) if such person is an Investment Subsidiary, the Indebtedness of a related Co-investment Vehicle. Notwithstanding the foregoing, in connection with the purchase of any business, Indebtedness shall not include post-closing payment adjustments to which the seller may become entitled so long as (i) such payment is to be determined by a final closing balance sheet or depends on the performance of such business after the closing of the purchase, (ii) at the time of closing, the amount of any such payment is not determinable and (iii) to the extent such payment thereafter becomes fixed and determined, the amount is paid within 60 days thereafter.

"***Indebtedness for Borrowed Money***" of any person shall mean, without duplication, (a) all obligations of such person for borrowed money (whether or not evidenced by bonds, debentures, notes, or similar instruments) or for the deferred purchase price of property or services (other than accounts payable in the ordinary course of such Person's business), (b) Capitalized Lease Obligations and (c) obligations under direct or indirect guaranties in respect of, and obligations (contingent or otherwise) to purchase or otherwise acquire, or otherwise to assure a creditor against loss in respect of, indebtedness or obligations of any other Person of the kinds referred to in clause (a) or (b) above.

"***Indemnified Taxes***" shall mean Taxes other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Loan Party under any Loan Document.

"***Insignia***" shall mean Insignia Financial Group, Inc., a Delaware corporation.

"***Interest Coverage Ratio***" shall mean, for any period, the ratio of (a) Consolidated EBITDA (less the amount, if any, thereof consisting of interest or investment income on the deployment of the proceeds of CBRE CM Permitted Indebtedness or loans under the CBRE Loan Arbitrage Facility) for the most recent Test Period ended on or prior to such date of determination to (b) Consolidated Interest Expense for such period.

"***Interest Payment Date***" shall mean (a) with respect to any Daily Rate Loan **(other than a SONIA Loan)**, the last Business Day of each March, June, September and December ~~and~~**,** (b) with respect to any Eurocurrency Loan or Flat Rate Loan, the last day of the Interest Period applicable to the Borrowing of which such Loan is a part and, in the case of a Eurocurrency Borrowing with an Interest Period of more than three months' duration or a Flat Rate Loan with an Interest Period of more than 90 days duration, each day that would have been an Interest Payment Date had successive Interest Periods of three months' or 90 days', as the case may be, duration been applicable to such Borrowing**, and (c) with respect to any SONIA Loan, each date that is on the numerically corresponding day (or on the last day, if there is no numerically corresponding day) in each calendar month that is one month after the Borrowing of such Loan;** ***provided*** **that, as to any SONIA Loan, if any such date would be a day other than a Business Day, such date shall be extended to the next succeeding Business Day unless such next succeeding Business Day would fall in the next calendar month, in which case such date shall be the next preceding Business Day**.

"***Interest Period***" shall mean, (a) with respect to any Eurocurrency Borrowing or Bank Bill Rate Borrowing, the period commencing on the date of such Borrowing and ending on the numerically corresponding day (or, if there is no numerically corresponding day, on the last day) in the calendar month that is 1,~~2,~~ 3 or 6 months thereafter (or (x) with respect to any Eurocurrency Borrowing, 12 months thereafter and (y) with respect to any Bank Bill Rate Borrowing, 9 or 12 months thereafter, in each case if, at the time of the relevant Borrowing, all Lenders participating therein agree to make an interest period of such duration available), as the applicable Borrower may elect, and (b) with respect to any Flat Rate Competitive Borrowing, the period commencing on the date of such Borrowing and ending on the date specified in the Competitive Bids in which the offers to make Flat Rate Competitive Loans comprising such Borrowing were extended; *provided*, *however*, that if any Interest Period would end on a day other than a Business Day, such Interest Period shall be extended to the next succeeding Business Day unless such next succeeding Business Day would fall in the next calendar month, in which case such Interest Period shall end on the next preceding Business Day. Interest shall accrue from and including the first day of an Interest Period to but excluding the last day of such Interest Period. For purposes hereof, the date of a Borrowing initially shall be the date on which such Borrowing is made and thereafter shall be the effective date of the most recent conversion or continuation of such Borrowing.

"Interpolated EURIBO Rate" **shall mean, with respect to the EURIBO Rate for any Loan, the rate which results from interpolating on a linear basis between: (a) the European Money Market Institute's interest settlement rates for deposits in Euro for the longest period (for which that rate is available) which is less than the Interest Period and (b) the European Money Market Institute's interest settlement rates for deposits in Euro for the shortest period (for which the rate is available) which exceeds the Interest Period, in each case, as of** approximately 11:00 a.m. **(Brussels time) on the date that is two Business Days prior to the commencement of such Interest Period.**

"Interpolated LIBO Rate" shall mean, with respect to the LIBO Rate for any Loan, the rate which results from interpolating on a linear basis between: (a) the ICE Benchmark Administration's Interest Settlement Rates for deposits in the currency of such Loan for the longest period (for which that rate is available) which is less than the Interest Period and (b) the ICE Benchmark Administration's Interest Settlement Rates for deposits in such currency for the shortest period (for which that rate is available) which exceeds the Interest Period, in each case, as of approximately 11:00 a.m. (London time) on the date that is two Business Days prior to ~~or, with respect to Eurocurrency Borrowings denominated in Pounds, at~~ approximately 11:00 a.m. (~~London time) on the same day as,~~ the commencement of such Interest Period.

"***Investment Subsidiary***" shall mean (a) any Subsidiary engaged principally in the business of buying and holding real estate related assets in anticipation of selling such assets or transferring such assets, which assets may include securities of companies engaged principally in such business, (b) any Subsidiary engaged principally in the business of investing in and/or managing Co-investment Vehicles and (c) any D&I Subsidiary.

"***IRS***" shall mean the United States Internal Revenue Service.

"***Issuing Bank***" shall mean, as the context may require, (a) Wells Fargo Bank, N.A., JPMorgan Chase Bank, N.A. and Bank of America, N.A., each in its capacity as an issuer of Letters of Credit hereunder, (b) with respect to each Existing Letter of Credit, the Lender that issued such Existing Letter of Credit and (c) any other Lender that may become an Issuing Bank pursuant to Section 2.23(i) or (k), with respect to Letters of Credit issued by such Lender. Any Issuing Bank may, in its discretion, arrange for one or more Letters of Credit to be issued by Affiliates of such Issuing Bank, in which case the term "Issuing Bank" shall include any such Affiliate with respect to Letters of Credit issued by such Affiliate.

"***Issuing Bank Fees***" shall have the meaning assigned to such term in Section 2.05(d).

"***L/C Commitment***" shall mean the commitment of each Issuing Bank to issue Letters of Credit pursuant to Section 2.23 up to an aggregate amount with respect to each Issuing Bank set forth in Schedule 2.01(a).

"***L/C Disbursement***" shall mean a payment or disbursement made by any Issuing Bank pursuant to a Letter of Credit.

"***L/C Exposure***" shall mean at any time the sum of (a) the Domestic L/C Exposure, (b) the Multicurrency L/C Exposure and (c) the U.K. L/C Exposure.

"***L/C Participation Fees***" shall mean the fees provided for in Section 2.05(c).

"***Lead Arrangers***" shall mean Wells Fargo Securities, LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated (or any other registered broker-dealer wholly-owned by Bank of America Corporation to which all or substantially all of Bank of America Corporation's or any of its subsidiaries' investment banking, commercial lending services or related businesses may be transferred following the date of this Credit Agreement), JPMorgan Chase Bank, N.A., The Bank of Nova Scotia, HSBC Bank USA, N.A., The Bank of Tokyo-Mitsubishi UFJ, Ltd. and The Royal Bank of Scotland PLC, and in their respective capacities as joint lead arrangers of the Credit Facilities.

"***Lenders***" shall mean (a) the persons listed on Schedule 2.01 (other than any such person that has ceased to be a party hereto pursuant to an Assignment and Acceptance) and (b) any person that has become a party hereto pursuant to an Assignment and Acceptance, an Incremental Assumption Agreement or a N.Z. Swingline Lender Designation Agreement. Unless the context clearly indicates otherwise, the term "Lenders" shall include the N.Z. Swingline Lender.

"***Letter of Credit***" shall mean (a) any letter of credit issued pursuant to Section 2.23 and (b) any Existing Letter of Credit. A Letter of Credit shall be a "***Domestic Letter of Credit***" if an Existing Letter of Credit and listed on Schedule 1.01(d) as a Domestic Letter of Credit or if issued or deemed issued under the Domestic Revolving Credit Commitments, a "***Multicurrency Letter of Credit***" if an Existing Letter of Credit and listed on Schedule 1.01(d) as a Multicurrency Letter of Credit or issued or deemed issued under the Multicurrency Revolving Credit Commitments or a "***U.K. Letter of Credit***" if issued or deemed issued under the U.K. Revolving Credit Commitments.

"***Leverage Ratio***" shall mean, on any date, the ratio of (a) Total Debt less Available Cash on such date to (b) Consolidated EBITDA for the most recent Test Period ended on or prior to such date of determination.

"***LIBO Rate***" shall mean, with respect to any Eurocurrency Borrowing **denominated in dollars** for any Interest Period, the rate per annum determined by the Administrative Agent at approximately 11:00 a.m., London time, on the date that is two Business Days prior to ~~or, with respect to Eurocurrency Borrowings denominated in Pounds, at approximately 11:00 a.m. (London time) on the same day as,~~ the commencement of such Interest Period by reference to the ICE Benchmark Administration Interest Settlement Rates for deposits in dollars~~, Pounds or Euro, as applicable~~ (as set forth by the Bloomberg Information Service or any successor thereto or any other service selected by the Administrative Agent which has been nominated by the ICE Benchmark Administration Limited (or any person which takes over the administration of that rate) as an authorized information vendor for the purpose of displaying such rates) (or, if the ICE Benchmark Administration Interest Settlement Rates for deposits in the applicable currency do not exist at such time, a comparable successor rate that, at such time, is broadly accepted by the U.S. syndicated loan market for loans denominated in ~~the applicable currency~~**dollars** in lieu of such rate or, if no such broadly accepted comparable successor rate exists at such time, a successor index rate as may be agreed to by the Administrative Agent and the Borrower so long as the Lenders shall have received at least five Business Days prior written notice thereof and the Administrative Agent shall not have received, within five Business Days of such notice to the Lenders, a written notice from the Required Lenders stating that the Required Lenders object to such rate) and; *provided* that, to the extent that an interest rate is not ascertainable pursuant to the foregoing provisions of this definition, the "LIBO Rate" shall be the Interpolated **LIBO** Rate.

"***Lien***" shall mean, with respect to any asset, (a) any mortgage, deed of trust, lien, pledge, encumbrance, charge or security interest in or on such asset and (b) the interest of a vendor or a lessor under any conditional sale agreement, capital lease or title retention agreement (or any financing lease having substantially the same economic effect as any of the foregoing) relating to such asset. For the avoidance of doubt, the grant by any person of a license to use intellectual property owned by, licensed to or developed by such person and such licensing activity shall not constitute a grant by such person of a Lien on such intellectual property.

"***Loan Documents***" shall mean this Agreement, the Letters of Credit, the Guarantee Agreement, each Incremental Assumption Agreement and each Loan Modification Agreement.

"***Loan Modification Agreement***" shall mean a Loan Modification Agreement in form and substance reasonably satisfactory to the Administrative Agent and the U.S. Borrower, among the U.S. Borrower, the other Loan Parties and one or more Accepting Lenders.

"***Loan Modification Offer***" shall have the meaning assigned to such term in Section 9.20(a).

"***Loan Parties***" shall mean the Borrowers and the Guarantors.

"***Loans***" shall mean the Revolving Loans, the Term Loans, the Competitive Loans and the N.Z. Swingline Loans. Unless the context clearly indicates otherwise, the term "Loans" shall

include any Incremental Revolving Loans, Incremental Term Loans, Other Revolving Loans and Other Term Loans.

"***Local Time***" shall mean, in relation to any Borrowing by (a) the U.S. Borrower, New York time, (b) the Canadian Borrower, Toronto time, (c) the U.K. Borrower, London time, (d) the Australian Borrower, Melbourne time, and (e) the New Zealand Borrower, Auckland time.

"***Management Subscription Agreements***" shall mean (a) each Management Subscription Agreement among CBRE Clarion, the executives party thereto and the other parties thereto and (b) contracts, agreements or other consensual arrangements between Holdings, CBRE Clarion or any of their respective Affiliates and directors or employees of CBRE Clarion or its subsidiaries, pursuant to which the parties thereto may be permitted or required, on terms substantially similar to the terms of the agreements described in clause (a) above, to purchase or otherwise acquire CBRE Clarion Units.

"***Margin Stock***" shall have the meaning assigned to such term in Regulation U.

"***Material Adverse Effect***" shall mean a materially adverse effect on (a) the business, assets, operations or financial condition of the U.S. Borrower and the Subsidiaries, taken as a whole, (b) the ability of the U.S. Borrower and the Loan Parties (taken as a whole) to perform the payment obligations under the Loan Documents or (c) the rights of or remedies available to the Lenders under any Loan Document.

"***Material Indebtedness***" shall mean Indebtedness (other than the Loans, Letters of Credit and Non-Recourse Indebtedness), or obligations in respect of one or more Hedging Agreements, of any one or more of Holdings, the U.S. Borrower and the Subsidiaries in an aggregate principal amount exceeding $200,000,000. For purposes of determining Material Indebtedness, the "principal amount" of the obligations of Holdings, the U.S. Borrower or any Subsidiary in respect of any Hedging Agreement at any time shall be the maximum aggregate amount (giving effect to any netting agreements) that Holdings, the U.S. Borrower or such Subsidiary would be required to pay if such Hedging Agreement were terminated at such time.

"***Moody's***" shall mean Moody's Investors Service, Inc., or any successor to the ratings agency business thereof.

"***Mortgage Banking Activities***" shall mean (a) the origination of mortgage loans in respect of commercial and multi-family residential real property, and the sale or assignment of such mortgage loans and the related mortgages to another person (other than the U.S. Borrower or any Subsidiary) within 120 days after the origination thereof (or thereafter, so long as the purchaser thereof is a quasi-federal governmental agency or enterprise or government-sponsored entity that shall have confirmed in writing its obligation to purchase such loans prior to such 120th day), *provided, however*, that in each case prior to origination of any mortgage loan, the U.S. Borrower or a Mortgage Banking Subsidiary, as the case may be, shall have entered into a legally binding and enforceable agreement with respect to such mortgage loan with a person that purchases such loans in the ordinary course of business, (b) the origination of FHA Loans and (c) servicing activities related to the activities described in clauses (a) and (b) above.

"***Mortgage Banking Subsidiary***" shall mean CBRE CM and its subsidiaries that are engaged in Mortgage Banking Activities.

"***Multicurrency L/C Disbursement***" shall mean a payment or disbursement made by any Issuing Bank pursuant to a Multicurrency Letter of Credit.

"***Multicurrency L/C Exposure***" shall mean, at any time, the sum of (a) the aggregate undrawn and unexpired amount of all outstanding Multicurrency Letters of Credit at such time denominated in Dollars, plus the Dollar Equivalent of the aggregate undrawn and unexpired amount of all outstanding Multicurrency Letters of Credit at such time denominated in

Alternative Currencies and (b) the aggregate principal amount of all Multicurrency L/C Disbursements denominated in dollars that have not yet been reimbursed at such time, plus the Dollar Equivalent of the aggregate principal amount of all Multicurrency L/C Disbursements denominated in Alternative Currencies that have not been reimbursed at such time. The Multicurrency L/C Exposure of any Multicurrency Revolving Credit Lender at any time shall equal its Pro Rata Percentage of the aggregate Multicurrency L/C Exposure at such time.

"***Multicurrency Letter of Credit***" shall mean any letter of credit issued (or deemed issued) pursuant to Section 2.23 and designated (or deemed designated) as such.

"***Multicurrency Revolving Credit Borrowing***" shall mean a Borrowing comprised of Multicurrency Revolving Loans.

"***Multicurrency Revolving Credit Commitment***" shall mean, with respect to each Lender, the commitment of such Lender to make Multicurrency Revolving Loans hereunder as set forth on Schedule 2.01, or in the Assignment and Acceptance pursuant to which such Lender assumed its Multicurrency Revolving Credit Commitment, as applicable, as the same may be (a) reduced from time to time pursuant to Section 2.09, (b) increased from time to time pursuant to Section 2.25 and (c) reduced or increased from time to time pursuant to assignments by or to such Lender pursuant to Section 9.04.

"***Multicurrency Revolving Credit Exposure***" shall mean, with respect to any Lender at any time, the aggregate principal amount at such time of all outstanding Multicurrency Revolving Loans of such Lender denominated in dollars, *plus* the Dollar Equivalent of the aggregate principal amount at such time of all outstanding Multicurrency Revolving Loans of such Lender denominated in Alternative Currencies, *plus* the aggregate amount at such time of such Lender's Multicurrency L/C Exposure, *plus* the aggregate amount at such time of such Lender's N.Z. Swingline Exposure.

"***Multicurrency Revolving Credit Lender***" shall mean a Lender with a Multicurrency Revolving Credit Commitment or outstanding Multicurrency Revolving Credit Exposure.

"***Multicurrency Revolving Loans***" shall mean the revolving loans made by the Multicurrency Revolving Credit Lenders to the Borrowers pursuant to Section 2.01(a)(iii).

"***Multiemployer Plan***" shall mean a multiemployer plan as defined in Section 4001(a)(3) of ERISA.

"***New Zealand Dollars***" or "***NZ$***" shall mean lawful currency of New Zealand.

"***Non-Guarantor Subsidiary***" shall mean any subsidiary of Holdings that is not a Loan Party.

"***Non-Recourse Indebtedness***" shall mean Indebtedness of, or Guarantees by, an Investment Subsidiary; *provided* that (a) such Indebtedness is incurred solely in relation to the permitted investment or real estate development activities of such Investment Subsidiary and (b) such Indebtedness is not Guaranteed by, or otherwise recourse to, Holdings, the U.S. Borrower or any Subsidiary other than an Investment Subsidiary (subject to customary environmental indemnities or completion or budget guarantees, and subject to customary exclusions from liability by lenders in non-recourse financing transactions secured by real property (including by means of separate indemnification agreements or carve-out guarantees)); *provided further* that, if any such Indebtedness is partially Guaranteed by or otherwise recourse to Holdings, the U.S. Borrower or any Subsidiary other than an Investment Subsidiary, the portion of such Indebtedness not so Guaranteed or recourse shall be "Non-Recourse Indebtedness" hereunder.

"***Notice of Competitive Bid Request***" shall mean a notification made pursuant to Section 2.27 in the form of Exhibit J-2, or another form approved by the Advance Agent.

"***N.Z. Swingline Commitment***" shall mean the commitment of the N.Z. Swingline Lender to make N.Z. Swingline Loans to the New Zealand Borrower pursuant to Section 2.22, as the same may be reduced from time to time pursuant to Section 2.09.

"***N.Z. Swingline Exposure***" shall mean at any time the aggregate principal amount at such time of all outstanding N.Z. Swingline Loans. The N.Z. Swingline Exposure of any Multicurrency Revolving Credit Lender at any time shall equal its Pro Rata Percentage of the aggregate N.Z. Swingline Exposure at such time.

"***N.Z. Swingline Lender***" shall mean any Lender or any of its Affiliates that may become a N.Z. Swingline Lender pursuant to Section 2.22(f).

"***N.Z. Swingline Lender Designation Agreement***" shall mean (a) the N.Z. Swingline Lender Designation Agreement dated as of October 31, 2017, among the U.S. Borrower, the New Zealand Borrower, the Administrative Agent and The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch, as N.Z. Swingline Lender and (b) any N.Z. Swingline Lender Designation Agreement among, and in a form and substance satisfactory to, the New Zealand Borrower, the U.S. Borrower and the Administrative Agent.

"***N.Z. Swingline Loan***" shall mean any loan made by the N.Z. Swingline Lender to the New Zealand Borrower pursuant to Section 2.22.

"***Net Income***" shall mean, with respect to any Person, the net income (loss) attributable to such Person, determined on a consolidated basis in accordance with GAAP and before any reduction in respect of dividends on preferred Equity Interests (other than dividends on Disqualified Stock).

"***Obligations***" shall have the meaning assigned to such term in the Guarantee Agreement.

"*Other Connection Taxes*" shall mean Taxes imposed as a result of a present or former connection between such recipient and the jurisdiction of the Governmental Authority imposing such Tax (or any political subdivision or taxing authority thereof or therein) other than a connection arising solely as a result of entering into any Loan Document.

"***Other Revolving Credit Commitments***" shall mean one or more Classes of revolving credit commitments that result from a modification of the Revolving Credit Commitments pursuant to a Loan Modification Offer.

"***Other Revolving Loans***" shall mean the revolving loans made pursuant to an Other Revolving Credit Commitment.

"***Other Taxes***" shall mean any and all present or future stamp, court or documentary intangible, recording, filing or similar Taxes or any other similar excise or property Taxes, charges or levies arising from any payment made under any Loan Document or from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under or otherwise with respect to, any Loan Document except any such Taxes that are imposed with respect to an assignment (other than an assignment made pursuant to Section 2.21(a)).

"***Other Term Loan Maturity Date***" shall mean the final maturity date of any Other Term Loan, as set forth in the applicable Loan Modification Agreement.

"***Other Term Loan Repayment Date***" shall mean each date on which the principal of any Other Term Loan is scheduled to be repaid, as set forth in the applicable Loan Modification Agreement.

"***Other Term Loans***" shall mean one or more Classes of term loans that result from a Permitted Amendment effected pursuant to a Loan Modification Offer.

"***Participant Register***" shall have the meaning assigned to such term in Section 9.04(g).

"***PBGC***" shall mean the Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

"***Performance Bond***" shall mean any letter of credit, bond, or similar security device securing (a) the obligation of the U.S. Borrower or any Subsidiary to complete construction of improvements to real property or (b) the obligations of the U.S. Borrower or any Subsidiary under the terms of a client contract.

"***Permitted Amendments***" shall have the meaning assigned to such term in Section 9.20(c).

"***Permitted Investors***" shall mean any member of senior management of the U.S. Borrower on the date hereof.

"***person***" shall mean any natural person, corporation, business trust, joint venture, association, company, limited liability company, partnership, Governmental Authority or other entity.

"***Plan***" shall mean any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA sponsored, maintained or contributed to by the U.S. Borrower or any ERISA Affiliate.

"***Platform***" shall have the meaning assigned to such term in Section 9.01.

"***Post-Transaction Period***" means, (a) with respect to any Specified Transaction, the period beginning on the date such Specified Transaction is consummated and ending on the last day of the eighth full consecutive fiscal quarter immediately following the date on which such Specified Transaction is consummated and (b) with respect to any Specified Restructuring, the period beginning on the date such Specified Restructuring is initiated and ending on the last day of the second full consecutive fiscal quarter immediately following the date on which such Specified Restructuring is initiated.

"***Pounds***" or "***£***" shall mean lawful currency for the time being of the United Kingdom.

"***Prime Rate***" shall mean the rate of interest per annum determined from time to time by Credit Suisse AG as its prime rate in effect at its principal office in New York City and notified to the U.S. Borrower.

"***Pro Forma Entity***" shall mean any Acquired Entity or Business or any Sold Entity or Business.

"***Pro Rata Percentage***" of any Domestic Revolving Credit Lender, Multicurrency Revolving Credit Lender or U.K. Revolving Credit Lender at any time shall mean the percentage of the Total Domestic Revolving Credit Commitment, Total Multicurrency Revolving Credit Commitments or Total U.K. Revolving Credit Commitment, respectively, represented by such Lender's Domestic Revolving Credit Commitment, Multicurrency Revolving Credit Commitment or U.K. Revolving Credit Commitment, respectively; *provided* that in the case of Section 2.17(a)(i) only, when a Defaulting Lender under a Class of Revolving Credit Commitments shall exist, the "Pro Rata Percentage" of any Revolving Credit Lender under such Class shall mean the percentage of the Total Domestic Revolving Credit Commitment, Total Multicurrency Revolving Credit Commitment or Total U.K. Revolving Credit Commitment, as the case may be (in each case disregarding any Defaulting Lender's Revolving Credit Commitment of such Class)

represented by such Lender's Domestic Revolving Credit Commitment, Multicurrency Revolving Credit Commitment or U.K. Revolving Credit Commitment, as the case may be. In the event that the Domestic Revolving Credit Commitments, Multicurrency Revolving Credit Commitments or U.K. Revolving Credit Commitments shall have expired or been terminated, the Pro Rata Percentages shall be determined on the basis of the Domestic Revolving Credit Commitments, Multicurrency Revolving Credit Commitments or U.K. Revolving Credit Commitments, as the case may be, most recently in effect.

"***Public Lender***" shall have the meaning assigned to such term in Section 9.01.

"***Purchase***" shall mean the purchase of a Purchased Loan by a Borrower (a) pursuant to an Auction or (b) in the open market; *provided* that no Default or Event of Default shall have occurred and be continuing.

"***Purchased Loan***" shall mean each Term Loan purchased by a Borrower pursuant to an Auction or in the open market, which Purchased Loan shall automatically be retired and not outstanding for any purposes of this Agreement or the other Loan Documents.

"Qualified Acquisition" shall mean any Significant Acquisition designated as such by Holdings to the Lenders at the time of the consummation thereof; *provided* that immediately after giving effect to such Significant Acquisition, no Default or Event of Default shall have occurred or be continuing or result therefrom.

"***Qualified Stock***" of any person shall mean any Equity Interest of such person that is not Disqualified Stock.

"***Qualifying Lease***" shall mean a lease agreement entered into by a D&I Subsidiary, as lessor, to lease the real property owned by such D&I Subsidiary upon completion of construction thereof to the extent that (a) the senior unsecured non-credit-enhanced long-term debt of the tenant or the guarantor of the tenant's obligations under such lease is rated BBB- or higher by S&P or Baa3 or higher by Moody's, (b) the obligation of such tenant to accept possession of such real property and begin paying rent under such lease is not subject to any material condition other than (i) completion of construction in accordance with all requirements of applicable law and approved plans and specifications and on or before a date certain and (ii) issuance of a certificate of occupancy, (c) such lease has a non-cancelable primary term of 10 years or more and (d) such tenant has not failed or refused to perform under such lease agreement or notified TCC or the applicable D&I Subsidiary of its intention to not perform under such lease agreement (*provided* that the failure of one (but not more than one) tenant under a Qualifying Lease to meet the ratings criteria set forth in clause (a) above shall not result in the disqualification of such lease as a Qualifying Lease so long as, at the time such lease was entered into, such ratings criteria were satisfied, and such tenant only fails to satisfy such ratings criteria due to subsequent rating downgrades).

"***Receivables***" shall mean a right to receive payment arising from a sale or lease of goods or the performance of services by a person pursuant to an arrangement with another person by which such other person is obligated to pay for goods or services under terms that permit the purchase of such goods and services on credit, and all proceeds thereof and rights (contractual or other) and collateral related thereto, and shall include, in any event, any items of property that would be classified as accounts receivable on the balance sheet of Holdings or any of the Subsidiaries prepared in accordance with GAAP or an "account", "chattel paper", an "instrument", a "general intangible" or a "payment intangible" under the Uniform Commercial Code as in effect in the State of New York and any "supporting obligations" or "proceeds" (as so defined) of any such items.

"***Receivables Securitization***" shall mean, with respect to the U.S. Borrower and/or any of the Subsidiaries, any transaction or series of transactions of securitizations involving Receivables pursuant to which the U.S. Borrower or any Subsidiary may sell, convey or otherwise transfer to

a Securitization Subsidiary (or, in the case of a Foreign Subsidiary, may factor), and may grant a corresponding security interest in, any Receivables (whether now existing or arising in the future) of the U.S. Borrower or any Subsidiary, and any assets related thereto including collateral securing such Receivables, contracts and all Guarantees or other obligations in respect of such Receivables, the proceeds of such Receivables and other assets which are customarily transferred, or in respect of which security interests are customarily granted, in connection with securitizations involving Receivables.

"***Receivables Securitization Amount***" shall mean, with respect to any Receivables Securitization, the amount of obligations outstanding under the legal documents entered into as part of such Receivables Securitization on any date of determination that would be characterized as principal if such Receivables Securitization were structured as a secured lending transaction rather than as a purchase.

"***Register***" shall have the meaning assigned to such term in Section 9.04(d).

"***Regulation T***" shall mean Regulation T of the Board as from time to time in effect and all official rulings and interpretations thereunder or thereof.

"***Regulation U***" shall mean Regulation U of the Board as from time to time in effect and all official rulings and interpretations thereunder or thereof.

"***Regulation X***" shall mean Regulation X of the Board as from time to time in effect and all official rulings and interpretations thereunder or thereof.

"***Related Fund***" shall mean, with respect to any Lender, any other person that (a) invests in bank loans and (b) is advised or managed by the same investment advisor as such Lender, by an Affiliate of such investment advisor or by such Lender.

"***Related Parties***" shall mean, with respect to any specified person, such person's Affiliates and the respective directors, trustees, officers, employees, agents and advisors of such person and such person's Affiliates.

"***Release***" shall mean any release, spill, emission, leaking, dumping, injection, pouring, deposit, disposal, discharge, dispersal, leaching or migration into or through the indoor or outdoor environment or within or upon any building or fixture.

"***Repayment Date***" shall mean a Tranche A Repayment Date, an Incremental Term Loan Repayment Date or an Other Term Loan Repayment Date.

"***Required Lenders***" shall mean, at any time, Lenders having Loans (excluding N.Z. Swingline Loans and Competitive Bid Loans), L/C Exposure, N.Z. Swingline Exposure, unused Revolving Credit Commitments and Term Loan Commitments (if any) representing at least a majority of the sum of all Loans outstanding (excluding N.Z. Swingline Loans and Competitive Bid Loans), L/C Exposure, N.Z. Swingline Exposure, unused Revolving Credit Commitments and Term Loan Commitments (if any) at such time; *provided* that the Loans, L/C Exposure, N.Z. Swingline Exposure, unused Revolving Credit Commitments and Term Loan Commitments (if any) of any Defaulting Lender shall be disregarded (in both the numerator and the denominator) in the determination of the Required Lenders at any time; *provided further* that, for purposes of declaring the Loans to be due and payable pursuant to Article VII, and for all purposes after the loans become due and payable pursuant to Article VII or the Domestic Revolving Credit Commitments shall have expired or terminated, the Competitive Loans of the Lenders shall be included in their respective Loans in determining the Required Lenders.

"***Responsible Officer***" of any person shall mean any executive officer or Financial Officer of such person and any other officer or similar official thereof responsible for the administration of the obligations of such person in respect of this Agreement.

"***Revolving Credit Borrowing***" shall mean a Domestic Revolving Credit Borrowing, a Multicurrency Revolving Credit Borrowing or a U.K. Revolving Credit Borrowing.

"***Revolving Credit Commitment***" shall mean a Domestic Revolving Credit Commitment, a Multicurrency Revolving Credit Commitment or a U.K. Revolving Credit Commitment.

"***Revolving Credit Exposure***" shall mean, with respect to any Lender at any time, the sum of such Lender's Domestic Revolving Credit Exposure, Multicurrency Revolving Credit Exposure and U.K. Revolving Credit Exposure.

"***Revolving Credit Lender***" shall mean a Domestic Revolving Credit Lender, a Multicurrency Revolving Credit Lender or a U.K. Revolving Credit Lender.

"***Revolving Credit Maturity Date***" shall mean March 4, 2024.

"***Revolving Loans***" shall mean the Domestic Revolving Loans, the Multicurrency Revolving Loans and the U.K. Revolving Loans. Unless the context clearly indicates otherwise, the term "Revolving Loans" shall include any Incremental Revolving Loans and Other Revolving Loans.

"***S&P***" shall mean S&P Global Ratings or any successor to the ratings agency business thereof.

"***Schedule I Bank***" shall mean a bank that is a Canadian chartered bank listed on Schedule I under the Bank Act (Canada).

"***SEC***" shall mean the Securities and Exchange Commission, or any Governmental Authority succeeding to any or all of its functions.

"***Secured Debt***" shall mean, at any time, the Total Debt that is secured by a Lien.

"***Securitization Subsidiary***" shall mean any Subsidiary formed solely for the purpose of engaging, and that engages only, in one or more Receivables Securitizations.

"Significant Acquisition" shall mean an Acquisition for aggregate consideration in excess of $300,000,000.

"***Significant Subsidiary***" shall mean, at any date of determination, any Subsidiary that would be a "significant subsidiary" as defined in Article 1, Rule 1-02 of Regulation S-X, promulgated pursuant to the Securities Act of 1933, as such regulation is in effect on the Closing Date; provided that, solely for purposes of Section 7(g) and (h), "Significant Subsidiary" shall also include two or more Subsidiaries that, when considered in the aggregate as a single Subsidiary, would constitute a Significant Subsidiary.

"***Sold Entity or Business***" shall have the meaning provided in the definition of the term "Consolidated EBITDA."

"*SONIA*" shall mean a rate per annum equal to the Sterling Overnight Index Average published by the SONIA Administrator on the SONIA Administrator's Website.

"*SONIA Administrator*" shall mean the Bank of England (or any successor administrator of the Sterling Overnight Index Average).

"*SONIA Administrator's Website*" shall mean the Bank of England's website, currently at http://www.bankofengland.co.uk, or any successor source for the Sterling Overnight Index Average identified as such by the SONIA Administrator from time to time.

"*SONIA Borrowing*" shall mean any Borrowing comprised of SONIA Loans.

"*SONIA Loan*" shall mean a Loan that bears interest at a rate determined by reference to the Daily Simple SONIA.

"*SONIA Rate Day*" shall have the meaning provided in the definition of the term "Daily Simple SONIA".

"*SONIA Reference Day*" shall have the meaning provided in the definition of the term "Daily Simple SONIA".

"***SPC***" shall have the meaning assigned to such term in Section 9.04(j).

"***Specified Incremental Revolving Credit Commitments***" shall have the meaning assigned to such term in Section 2.25(a).

"***Specified Incremental Revolving Loans***" shall have the meaning assigned to such term in Section 2.25(a).

"***Specified Incremental Term Loan Commitments***" shall have the meaning assigned to such term in Section 2.26(a).

"***Specified Incremental Term Loans***" shall have the meaning assigned to such term in Section 2.26(a).

"***Specified Restructuring***" means any restructuring initiative, cost saving initiative or other similar strategic initiative of Holdings or any of its Subsidiaries after the Closing Date described in reasonable detail in a certificate of a Responsible Officer delivered by the U.S. Borrower to the Administrative Agent.

"***Specified Transaction***" shall mean, with respect to any period, any investment (including any Acquisition), sale, transfer or other disposition of assets or property outside the ordinary course of business.

"***Statutory Reserves***" shall mean a fraction (expressed as a decimal), the numerator of which is the number one and the denominator of which is the number one minus the aggregate of the maximum reserve percentages (including any marginal, special, emergency or supplemental reserves) expressed as a decimal established by the Board and any other banking authority, domestic or foreign, to which the Administrative Agent or any Lender (including any branch, Affiliate, or other fronting office making or holding a Loan) is subject for Eurocurrency Liabilities (as defined in Regulation D of the Board). Eurocurrency Loans **denominated in dollars** shall be deemed to constitute Eurocurrency Liabilities (as defined in Regulation D of the Board) and to be subject to such reserve requirements without benefit of or credit for proration, exemptions or offsets that may be available from time to time to any Lender under such Regulation D. Statutory Reserves shall be adjusted automatically on and as of the effective date of any change in any reserve percentage.

"***Subordinated Indebtedness***" shall mean unsecured Indebtedness of Holdings or the U.S. Borrower, which may be Guaranteed on a subordinated basis by Holdings, the U.S. Borrower or one or more Subsidiary Guarantors, that (a) is expressly subordinated to the prior payment in full in cash of the Obligations, on terms and conditions reasonably satisfactory to the Administrative Agent, (b) contains no financial "maintenance" covenants, (c) matures on or after the 180th day following the latest final maturity date for any of the Loans and has no scheduled amortization, payments of principal, sinking fund payments or similar scheduled payments (other than regularly scheduled payments of interest) prior to the 180th day following the latest final maturity date for any of the Loans; *provided*, *however*, that Indebtedness that was Subordinated Indebtedness when issued shall not cease to be Subordinated Indebtedness solely as a result of the subsequent

extension of the final maturity date of any of the Loans pursuant to Section 9.20, and (d) in the case of any such Subordinated Indebtedness incurred after the Closing Date, provides that any such Guarantee by a Subsidiary shall be released automatically upon the Guarantee Release Date with respect to such Subsidiary.

"***subsidiary***" shall mean, with respect to any person (herein referred to as the "*parent*"), any corporation, partnership, association or other business entity of which securities or other ownership interests representing more than 50% of the equity or more than 50% of the ordinary voting power or more than 50% of the general partnership interests (other than the general partnership interests or similar interests owned, Controlled or held by the U.S. Borrower or any Subsidiary in any Co-investment Vehicle) are, at the time any determination is being made, owned, Controlled or held.

"***Subsidiary***" shall mean any subsidiary of Holdings; *provided*, *however*, that no CBRE CM Loan Securitization Fund shall be deemed to be a Subsidiary for purposes of this Agreement or the other Loan Documents.

"***Subsidiary Guarantor***" shall mean each Domestic Subsidiary listed on Schedule 1.01(a) and each other Subsidiary that is or becomes a party to the Guarantee Agreement, in each case for so long as such Subsidiary Guarantees the Obligations.

"***Take Out Commitment***" shall mean a written obligation of a person either (a) to purchase real property and the improvements thereon for an amount sufficient to repay the interim construction loan used to acquire and construct such real property and improvements or (b) to provide debt and/or equity financing the proceeds of which are to be used to repay the interim construction loan used to acquire and construct real property and improvements thereon.

"*TARGET DAY*" shall mean any day on which both (a) banks in London are open for general business and (b) the Trans-European Automated Real-time Gross Settlement Express Transfer (TARGET2) payment system (or, if such payment system ceases to be operative, such other payment system (if any) determined by the Administrative Agent to be a suitable replacement) is open for the settlement of payments in Euro.

"***Taxes***" shall mean any and all present or future taxes, levies, imposts, duties, deductions, charges, liabilities or withholdings imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

"***TCC***" shall mean Trammell Crow Company.

"***Term Borrowing***" shall mean a Borrowing comprised of Tranche A Loans, Incremental Term Loans or Other Term Loans.

"***Term Lender***" shall mean a Lender with an outstanding Term Loan.

"***Term Loan Commitments***" shall mean the Tranche A Commitments. Unless the context clearly indicates otherwise, the term "Term Loan Commitments" shall include any Incremental Term Loan Commitments.

"***Term Loans***" shall mean the Tranche A Loans. Unless the context clearly indicates otherwise, the term "Term Loans" shall include any Incremental Term Loans and Other Term Loans.

"***Test Period***" shall mean, for any determination under this Agreement, the most recent period of four consecutive fiscal quarters of Holdings ended on or prior to such date of determination (taken as one accounting period) in respect of which financials shall have been delivered to the Administrative Agent pursuant to Section 5.04(a) or (b), as applicable, for each fiscal quarter or fiscal year in such period; provided that, prior to the first date that such financials

have been delivered pursuant to Section 5.04(a) or (b), as applicable, the Test Period in effect shall be the period of four consecutive fiscal quarters of the Borrower ended June 30, 2017. A Test Period may be designated by reference to the last day thereof (i.e. the June 30, 2017 Test Period refers to the period of four consecutive fiscal quarters of the Borrower ended June 30, 2017), and a Test Period shall be deemed to end on the last day thereof.

"Ticking Fee" shall have the meaning assigned to such term in Section 2.05(e).

"***Total Assets***" shall mean, at any date of determination, the total consolidated assets of Holdings and its consolidated Subsidiaries at such date determined on a consolidated basis in accordance with GAAP, calculated on a pro forma basis to give effect to the inclusion or exclusion of the assets of any Pro Forma Entity acquired or sold on such date, but excluding the consolidated assets of any Subsidiary with Non-Recourse Indebtedness.

"***Total Debt***" shall mean, at any time, the total Indebtedness for Borrowed Money of Holdings and its consolidated subsidiaries at such time, determined on a consolidated basis in accordance with GAAP, excluding (a) CBRE CM Permitted Indebtedness, (b) Non-Recourse Indebtedness, (c) Indebtedness of the type described in clause (i) of the definition of such term (and any Guarantee of such Indebtedness) and Indebtedness under Performance Bonds, in each case, except to the extent of any unreimbursed drawings thereunder, (d) Exempt Construction Loans of any D&I Subsidiary, (e) the amount of any Indebtedness supported by Approved Credit Support, (f) Indebtedness under the CBRE Loan Arbitrage Facility, and (g) any Receivables Securitization; *provided* that, at the election of the Borrower, Excluded Subordinated Indebtedness may also be excluded so long as the proceeds of such Excluded Subordinated Indebtedness are used to prepay any Secured Debt.

"***Total Domestic Revolving Credit Commitment***" shall mean, at any time, the aggregate amount of the Domestic Revolving Credit Commitments, as in effect at such time. The Total Domestic Revolving Credit Commitment in effect on the Closing Date is $2,300,000,000.

"***Total Multicurrency Revolving Credit Commitment***" shall mean, at any time, the aggregate amount of the Multicurrency Revolving Credit Commitments, as in effect at such time. The Total Multicurrency Revolving Credit Commitment in effect on the Closing Date is $200,000,000.

"***Total U.K. Revolving Credit Commitment***" shall mean, at any time, the aggregate amount of the U.K. Revolving Credit Commitments, as in effect at such time. The Total U.K. Revolving Credit Commitment in effect on the Closing Date is $300,000,000.

"***Tranche A Borrowing***" shall mean a Borrowing comprised of Tranche A Loans.

"***Tranche A Commitment***" shall mean, with respect to each Lender, the commitment of such Lender to make Tranche A Loans hereunder as set forth on Schedule 2.01, or in the Assignment and Acceptance pursuant to which such Lender assumed its Tranche A Commitment, as applicable, as the same may be (a) reduced from time to time pursuant to Section 2.09, (b) increased from time to time pursuant to Section 2.26 and (c) reduced or increased from time to time pursuant to assignments by or to such Lender pursuant to Section 9.04.

"***Tranche A Lender***" shall mean a Lender with a Tranche A Commitment or an outstanding Tranche A Loan.

"***Tranche A Loans***" shall mean the term loans made by the Lenders to the U.S. Borrower pursuant to Section 2.01(a)(i) of this Agreement. Unless the context clearly indicates otherwise, the term "Tranche A Loans" shall include any Incremental Term Loans that are designated as such in the applicable Incremental Assumption Agreement and that are made on terms identical to the Tranche A Loans.

"***Tranche A Maturity Date***" shall mean March 4, 2024.

"***Tranche A Repayment Date***" shall have the meaning assigned to such term in Section 2.11(a)(i).

"***Transactions***" shall mean, collectively, (a) the execution, delivery and performance of this Agreement and each other Loan Document and the making of the Borrowings hereunder, (b) the execution and delivery of the Guarantee Agreement, (c) the Existing Tranche A Loan Refinancing, (d) the Existing Tranche B Loan Repayment and (e) the payment of all fees and expenses to be paid on or prior to the Closing Date and owing in connection with the foregoing.

"***Type***", when used in respect of any Loan or Borrowing, shall refer to the Rate by reference to which interest on such Loan or on the Loans comprising such Borrowing is determined. For purposes hereof, the term "***Rate***" shall include the Adjusted LIBO Rate, **the EURIBO Rate, the Daily Simple SONIA,** the Alternate Base Rate, the Bank Bill Rate, the Canadian Prime Rate, the U.S. Base Rate, the Foreign Base Rate, each Flat Rate and the Discount Rate applicable to Bankers' Acceptances and B/A Equivalent Loans.

"***U.K. Borrowing Entity***" shall mean the U.K. Borrower or any Borrower that is incorporated or otherwise organized under the laws of the United Kingdom or any political subdivision thereof.

"***U.K. L/C Disbursement***" shall mean a payment or disbursement made by any Issuing Bank pursuant to a U.K. Letter of Credit.

"***U.K. L/C Exposure***" shall mean, at any time, the sum of (a) the aggregate undrawn and unexpired amount of all outstanding U.K. Letters of Credit at such time denominated in dollars, plus the Dollar Equivalent of the aggregate undrawn and unexpired amount of all outstanding U.K. Letters of Credit at such time denominated in Alternative Currencies and (b) the aggregate principal amount of all U.K. L/C Disbursements denominated in dollars that have not yet been reimbursed at such time, plus the Dollar Equivalent of the aggregate principal amount of all U.K. L/C Disbursements denominated in Alternative Currencies that have not been reimbursed at such time. The U.K. L/C Exposure of any U.K. Revolving Credit Lender at any time shall equal its Pro Rata Percentage of the aggregate U.K. L/C Exposure at such time.

"***U.K. Letter of Credit***" shall mean any letter of credit issued (or deemed issued) pursuant to Section 2.23 and designated (or deemed designated) as such.

"***U.K. Revolving Credit Borrowing***" shall mean a Borrowing comprised of U.K. Revolving Loans.

"***U.K. Revolving Credit Commitment***" shall mean, with respect to each Lender, the commitment of such Lender to make U.K. Revolving Loans hereunder as set forth on Schedule 2.01, or in the Assignment and Acceptance pursuant to which such Lender assumed its U.K. Revolving Credit Commitment, as applicable, as the same may be (a) reduced from time to time pursuant to Section 2.09, (b) increased from time to time pursuant to Section 2.25 and (c) reduced or increased from time to time pursuant to assignments by or to such Lender pursuant to Section 9.04.

"***U.K. Revolving Credit Exposure***" shall mean, with respect to any Lender at any time, the aggregate principal amount at such time of all outstanding U.K. Revolving Loans of such Lender denominated in dollars, *plus* the Dollar Equivalent of the aggregate principal amount at such time of all outstanding U.K. Revolving Loans of such Lender denominated in Alternative Currencies, *plus* the aggregate amount at such time of such Lender's U.K. L/C Exposure.

"***U.K. Revolving Credit Lender***" shall mean a Lender with a U.K. Revolving Credit Commitment or outstanding U.K. Revolving Credit Exposure.

"***U.K. Revolving Loans***" shall mean the revolving loans made by the Lenders to the U.S. Borrower or the U.K. Borrower pursuant to Section 2.01(a)(iv).

"***USA PATRIOT Act*** " shall mean the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (Title III of Pub. L. No. 107-56 (signed into law on October 26, 2001)).

"***U.S. Base Rate***" shall mean, for any day, a rate per annum equal to the greater of (a) the rate of interest per annum determined from time to time by the Administrative Agent as its base rate in effect at its principal office in Toronto, Ontario for determining interest rates on U.S. dollar-denominated commercial loans made in Canada and (b) the Federal Funds Effective Rate in effect on such day plus ½ of 1%.

"***U.S. Person***" shall mean any person that is a "United States Person" as defined in Section 7701(a)(30) of the Code.

"***U.S. Tax Compliance Certificate***" shall have the meaning assigned to such term in Section 2.20(g)(ii)(B)(iii).

"***wholly owned Subsidiary***" of any person shall mean a subsidiary of such person of which securities (except for directors' qualifying shares) or other ownership interests representing 100% of the Equity Interests are, at the time any determination is being made, owned, controlled or held by such person or one or more wholly owned Subsidiaries of such person or by such person and one or more wholly owned Subsidiaries of such person; *provided* that, if required by applicable law, ownership of up to 2% of the shares of a Foreign Subsidiary by a third party will not cause such subsidiary to cease to be a "wholly owned Subsidiary".

"***Withdrawal Liability***" shall mean liability to a Multiemployer Plan as a result of a complete or partial withdrawal from such Multiemployer Plan, as such terms are defined in Part I of Subtitle E of Title IV of ERISA.

"***Write-Down and Conversion Powers***" shall mean, with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule.

SECTION 1.02. ***Terms Generally***. The definitions in Section 1.01 shall apply equally to both the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation". The word "will" shall be construed to have the same meaning and effect as the word "shall"; and the words "asset" and "property" shall be construed as having the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights. All references herein to Articles, Sections, Exhibits and Schedules shall be deemed references to Articles and Sections of, and Exhibits and Schedules to, this Agreement unless the context clearly indicates otherwise. Except as otherwise expressly provided herein, any reference in this Agreement to any Loan Document shall mean such document as amended, restated, amended and restated, extended, supplemented or otherwise modified from time to time.

SECTION 1.03. ***Classification of Loans and Borrowings***. For purposes of this Agreement, Loans may be classified and referred to by Class (*e.g.*, a "Domestic Revolving Loan") or by Type (*e.g.*, a "Eurocurrency Loan") or by Class and Type (*e.g.*, a "Domestic Eurocurrency Revolving Loan"). Borrowings also may be classified and referred to by Class (*e.g.*, a "Domestic Revolving Credit Borrowing") or by Type (*e.g.*, a "Eurocurrency Borrowing") or by Class and Type (*e.g.*, a "Domestic Eurocurrency Revolving Credit Borrowing").

SECTION 1.04. ***Exchange Rate Calculations.*** On each Calculation Date, the Administrative Agent shall (a) determine the Exchange Rate as of such Calculation Date and (b) give notice thereof to the Borrowers and to any Lender that shall have requested a copy of such notice (it being understood that a Lender shall not have the right to independently request a determination of the Exchange Rate). The Exchange Rate so determined shall become effective on such Calculation Date and shall remain effective until the next succeeding Calculation Date, and shall for all purposes of this Agreement (other than any other provision expressly requiring the use of a current Exchange Rate) be the Exchange Rate employed in converting amounts between dollars and Alternative Currencies; *provided* that for purposes of any determination under any provisions of this Agreement that require the use of a current exchange rate all amounts incurred or proposed to be incurred in currencies other than Dollars shall be translated into Dollars at the Exchange Rate then in effect on the date of such determination.

SECTION 1.05. ***Accounting Terms.*** All terms of an accounting or financial nature shall be construed in accordance with GAAP, as in effect from time to time; *provided*, *however*, that (i) if the U.S. Borrower notifies the Administrative Agent that the U.S. Borrower wishes to amend any covenant in Article VI or any related definition to eliminate the effect of any change in GAAP occurring after the date of this Agreement on the operation of such covenant (or if the Administrative Agent notifies the U.S. Borrower that the Required Lenders wish to amend Article VI or any related definition for such purpose to the extent that, without undue burden or expense, the U.S. Borrower, its auditors and/or its financial systems are capable of interpreting such provisions as if such change in GAAP had not occurred), then the U.S. Borrower's compliance with such covenant shall be determined on the basis of GAAP in effect immediately before the relevant change in GAAP became effective, until either such notice is withdrawn or such covenant is amended in a manner satisfactory to the U.S. Borrower and the Required Lenders and (ii) whenever in this Agreement it is necessary to determine whether a lease is a capital lease or an operating lease, such determination shall be made on the basis of GAAP as in effect on the date hereof.

SECTION 1.06. ***Divisions***. For all purposes under the Loan Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction's laws): (a) if any asset, right, obligation or liability of any person becomes the asset, right, obligation or liability of a different person, then it shall be deemed to have been transferred from the original person to the subsequent person, and (b) if any new person comes into existence, such new person shall be deemed to have been organized on the first date of its existence by the holders of its Equity Interests at such time.

ARTICLE II

The Credits

SECTION 2.01. ***Commitments***. (a) On the terms and subject to the conditions set forth herein and in reliance upon the representations and warranties set forth herein and in the other Loan Documents, each Lender agrees severally and not jointly to make (i) Tranche A Loans to the U.S. Borrower, in dollars, on the Closing Date and on one other date on or prior to the Delayed Draw Termination Date, in an aggregate principal amount for all such Tranche A Loans not to exceed its Tranche A Commitment, (ii) Domestic Revolving Loans to the U.S. Borrower, in dollars, at any time and from time to time on or after the Closing Date and prior to the earlier of the Revolving Credit Maturity Date and the termination of the Domestic Revolving Credit Commitment of such Lender in accordance with the terms hereof, in an aggregate principal amount at any time outstanding that will not result in such Lender's Domestic Revolving Credit Exposure (plus its Pro Rata Percentage of the Aggregate Competitive Loan Exposures) exceeding such Lender's Domestic Revolving Credit Commitment, (iii) Multicurrency Revolving Loans to the U.S. Borrower in dollars, Canadian Dollars or Australian Dollars, the Canadian Borrower in dollars or Canadian Dollars, or the Australian Borrower in Australian Dollars, at any time and from time to time on or after the Closing Date and prior to the earlier of the Revolving Credit Maturity Date and the termination of the Multicurrency Revolving Credit Commitment of such

Lender in accordance with the terms hereof, in an aggregate principal amount at any time outstanding that will not result in (x) such Lender's Multicurrency Revolving Credit Exposure exceeding such Lender's Multicurrency Revolving Credit Commitment or (y) the Aggregate Multicurrency Revolving Credit Exposure attributable to Loans to, and Letters of Credit issued for the account of, (A) the U.S. Borrower in Australian Dollars, the Australian Borrower and the New Zealand Borrower exceeding the ANZ Sublimit or (B) the U.S. Borrower in Canadian Dollars and the Canadian Borrower exceeding the Canadian Sublimit and (iv) U.K. Revolving Loans to the U.S. Borrower in dollars, Pounds or Euros or the U.K. Borrower in Pounds or Euro, at any time and from time to time on or after the Closing Date and prior to the earlier of the Revolving Credit Maturity Date and the termination of the U.K. Revolving Credit Commitment of such Lender in accordance with the terms hereof, in an aggregate principal amount at any time outstanding that will not result in such Lender's U.K. Revolving Credit Exposure exceeding such Lender's U.K. Revolving Credit Commitment. Within the limits set forth in the first sentence of this Section 2.01 and subject to the terms, conditions and limitations set forth herein, the Borrowers may borrow, pay or prepay and reborrow Revolving Loans. Amounts paid or prepaid in respect of Term Loans may not be reborrowed.

(b) Each Lender having an Incremental Revolving Credit Commitment or an Incremental Term Loan Commitment, severally and not jointly, hereby agrees, on the terms and subject to the conditions set forth herein and in the applicable Incremental Assumption Agreement and in reliance on the representations and warranties set forth herein and in the other Loan Documents, to make Incremental Revolving Loans or Incremental Term Loans, as applicable, to the Borrowers, in an aggregate principal amount not to exceed its Incremental Revolving Credit Commitment or Incremental Term Loan Commitment, as applicable. Amounts paid or prepaid in respect of Incremental Term Loans may not be reborrowed.

SECTION 2.02. ***Loans***. (a) Each Loan (other than N.Z. Swingline Loans and Competitive Loans) shall be made as part of a Borrowing consisting of Loans made by the Lenders ratably in accordance with their respective applicable Commitments; *provided*, *however*, that the failure of any Lender to make any Loan shall not in itself relieve any other Lender of its obligation to lend hereunder (it being understood, however, that no Lender shall be responsible for the failure of any other Lender to make any Loan required to be made by such other Lender). Except for Loans deemed made pursuant to Section 2.02(f) and Competitive Loans, the Loans comprising any Borrowing shall be in an aggregate principal amount that is (i) an integral multiple of the Borrowing Multiple and not less than the Borrowing Minimum (except with respect to any Borrowing of Incremental Revolving Loans, Incremental Term Loans, Other Revolving Loans or Other Term Loans, to the extent otherwise provided in the related Incremental Assumption Agreement or Loan Modification Agreement, as applicable), or (ii) equal to the remaining available balance of the applicable Commitments.

(b) Subject to Sections 2.08 and 2.15, each Borrowing (other than a Competitive Borrowing) shall be comprised entirely of Daily Rate Loans or Fixed Rate Loans as the applicable Borrower may request pursuant to Section 2.03. Each Lender may at its option make any Loan by causing any domestic or foreign branch or Affiliate of such Lender to make such Loan; *provided* that any exercise of such option shall not affect the obligation of the applicable Borrower to repay such Loan in accordance with the terms of this Agreement. Borrowings of more than one Type may be outstanding at the same time; *provided*, *however*, that the Borrowers shall not be entitled to request any Borrowing that, if made, would result in (i) more than (x) ten Fixed Rate Borrowings of Domestic Revolving Loans or (y) ten Fixed Rate Borrowings of Tranche A Loans being outstanding hereunder at any time or (ii) more than five Fixed Rate Borrowings of any other Class being outstanding hereunder at any time (which number of Fixed Rate Borrowings may be increased or adjusted by agreement between Holdings and the Administrative Agent in connection with any Incremental Term Loans, Incremental Revolving Loans, Other Term Loans or Other Revolving Loans). For purposes of the foregoing, Borrowings having different Interest Periods or Contract Periods, regardless of whether they commence on the same date, shall be considered separate Borrowings.

(c) Except with respect to Loans deemed made pursuant to Section 2.02(f), each Lender shall make each Loan to be made by it hereunder on the proposed date thereof by wire transfer of immediately available funds to such account as the Administrative Agent may designate not later than 4:00 p.m., Local Time, and the Administrative Agent shall promptly credit the amounts so received to an account in the name of the applicable Borrower, designated by such Borrower in the applicable Borrowing Request, or, if a Borrowing shall not occur on such date because any condition precedent herein specified shall not have been met, return the amounts so received to the respective Lenders.

(d) Unless the Administrative Agent shall have received notice from a Lender prior to the date of any Borrowing that such Lender will not make available to the Administrative Agent such Lender's portion of such Borrowing, the Administrative Agent may assume that such Lender has made such portion available to the Administrative Agent on the date of such Borrowing in accordance with paragraph (c) above and the Administrative Agent may, in reliance upon such assumption, make available to the applicable Borrower on such date a corresponding amount. If the Administrative Agent shall have so made funds available then, to the extent that such Lender shall not have made such portion available to the Administrative Agent, such Lender and the applicable Borrower severally agree to repay to the Administrative Agent forthwith on demand such corresponding amount together with interest thereon, for each day from the date such amount is made available to such Borrower until the date such amount is repaid to the Administrative Agent at (i) in the case of such Borrower, the interest rate applicable at the time to the Loans comprising such Borrowing and (ii) in the case of such Lender for the first three days, a rate determined by the Administrative Agent to represent its cost of overnight or short-term funds for the applicable currency and for each day thereafter, the higher of such rate and the applicable Daily Rate (which determination shall be conclusive absent manifest error). If such Lender shall repay to the Administrative Agent such corresponding amount, such amount shall constitute such Lender's Loan as part of such Borrowing for purposes of this Agreement.

(e) Notwithstanding any other provision of this Agreement, no Borrower shall be entitled to request any Revolving Credit Borrowing if the Interest Period or Contract Period, as the case may be, requested with respect thereto would end after the Revolving Credit Maturity Date.

(f) If any Issuing Bank shall not have received from the applicable Borrower the payment required to be made by Section 2.23(e) within the time specified in such Section, such Issuing Bank will promptly notify the Administrative Agent of the L/C Disbursement and the Administrative Agent will promptly notify each applicable Revolving Credit Lender of such L/C Disbursement and its Pro Rata Percentage thereof. Each Domestic Revolving Credit Lender (in respect of a Domestic L/C Disbursement), Multicurrency Revolving Credit Lender (in respect of a Multicurrency L/C Disbursement) and U.K. Revolving Credit Lender (in respect of a U.K. L/C Disbursement) shall pay by wire transfer of immediately available funds to the Administrative Agent not later than 2:00 p.m., Local Time, on such date (or, if such Revolving Credit Lender shall have received such notice later than 12:00 (noon), Local Time, on any day, not later than 10:00 a.m., Local Time, on the immediately following Business Day), an amount equal to such Revolving Credit Lender's Pro Rata Percentage of such L/C Disbursement (it being understood that such amount shall be deemed to constitute an ABR Revolving Loan (if denominated in dollars), a Canadian Prime Rate Revolving Loan (if denominated in Canadian Dollars**), a SONIA Loan (if denominated in Pounds**) or a Fixed Rate Loan with a one-month Interest Period or Contract Period, as the case may be (if denominated in any other Alternative Currency), of such Revolving Credit Lender and such payment shall be deemed to have reduced the applicable L/C Exposure), and the Administrative Agent will promptly pay to such Issuing Bank the amounts so received by it from such Revolving Credit Lenders. The Administrative Agent will promptly pay to the applicable Issuing Bank any amount received by it from a Borrower pursuant to Section 2.23(e) prior to the time that any Revolving Credit Lender makes any payment pursuant to this paragraph (f); any such amounts received by the Administrative Agent thereafter will be promptly remitted by the Administrative Agent to the Revolving Credit Lenders that shall have made such payments and to such Issuing Bank, as their interests may appear. If any Revolving Credit Lender shall not have made its applicable Pro Rata Percentage of such L/C Disbursement

available to the Administrative Agent as provided above, such Revolving Credit Lender and the applicable Borrower severally agree to pay interest on such amount, for each day from and including the date such amount is required to be paid in accordance with this paragraph to but excluding the date such amount is paid, to the Administrative Agent for the account of the applicable Issuing Bank at (i) in the case of such Borrower, a rate per annum equal to the interest rate applicable to Revolving Loans pursuant to Section 2.06(a) and (ii) in the case of such Revolving Credit Lender, for the first such day, a rate determined by such Issuing Bank to represent its cost of overnight or short-term funds for the applicable currency, and for each day thereafter, the higher of such rate and the applicable Daily Rate.

SECTION 2.03. ***Borrowing Procedure***. In order to request a Borrowing (other than a N.Z. Swingline Loan, a Competitive Loan or a deemed Borrowing pursuant to Section 2.02(f), as to which this Section 2.03 shall not apply), the applicable Borrower shall deliver in writing to the Administrative Agent a duly completed Borrowing Request (a) in the case of a Fixed Rate Borrowing, not later than 1:00 p.m., Local Time, three Business Days before a proposed Borrowing**,** (b) in the case of a Daily Rate Tranche A Borrowing, not later than 12:00 noon, Local Time, one Business Day before a proposed Borrowing**, (c) in the case of a SONIA Borrowing, not later than 12:00 noon, Local Time, four Business Days before a proposed Borrowing,** and (~~e~~**d**) in the case of any other Class of Daily Rate Borrowings, not later than 12:00 noon, Local Time, on the Business Day of a proposed Borrowing, provided that any Borrowing Request on the Business Day of a proposed ABR Borrowing shall be irrevocable. Each Borrowing Request shall be signed by or on behalf of the applicable Borrower and shall specify the following information: (i) the currency and Class of such Borrowing and whether such Borrowing is to be a Fixed Rate Borrowing or a Daily Rate Borrowing; (ii) the date of such Borrowing (which shall be a Business Day); (iii) the number and location of the account to which funds are to be disbursed (which shall be an account that complies with the requirements of Section 2.02(c)); (iv) the amount of such Borrowing; and (v) if such Borrowing is to be a Fixed Rate Borrowing, the Interest Period or Contract Period with respect thereto; *provided*, *however*, that, notwithstanding any contrary specification in any Borrowing Request, (x) each requested Borrowing shall comply with the requirements set forth in Section 2.02 and (y) except as expressly provided in Section 2.08 or 2.15, no Borrower may request a Daily Rate Borrowing that is a Foreign Base Rate Borrowing. If no election as to the Type of Borrowing is specified in any such notice, then the requested Borrowing shall be a Daily Rate Borrowing if denominated in dollars ~~or~~**,** Canadian Dollars **or Pounds**, and a Fixed Rate Borrowing with a one-month Interest Period or Contract Period otherwise. If no election as to the Class of any Revolving Credit Borrowing by the U.S. Borrower is received, then, to the extent of the available Domestic Revolving Credit Commitments, such Borrowing shall be a Domestic Revolving Credit Borrowing. If no Interest Period or Contract Period with respect to any Fixed Rate Borrowing is specified in any such notice, then the applicable Borrower shall be deemed to have selected an Interest Period or Contract Period of one month's duration. The Administrative Agent shall promptly advise the applicable Lenders of any notice given pursuant to this Section 2.03 (and the contents thereof), and of each Lender's portion of the requested Borrowing. Subject to Section 2.16, a Borrowing Request may be revoked by the applicable Borrower at any time prior to 4:00 p.m., Local Time, on the Business Day prior to the proposed date of Borrowing.

SECTION 2.04. ***Evidence of Debt*; *Repayment of Loans***. (a) The U.S. Borrower hereby unconditionally promises to pay to the Administrative Agent for the account of each Lender the principal amount of each Term Loan of such Lender as provided in Section 2.11. Each Borrower hereby unconditionally promises to pay to the Administrative Agent for the account of each Lender on the Revolving Credit Maturity Date the then unpaid principal amount of each Revolving Loan of such Lender made to such Borrower. The New Zealand Borrower hereby promises to pay to the N.Z. Swingline Lender the then unpaid principal amount of each N.Z. Swingline Loan on the Revolving Credit Maturity Date. The U.S. Borrower hereby unconditionally promises to pay to the Administrative Agent for the account of the applicable Lender the principal amount of each Competitive Loan made by such Lender on the last day of the Interest Period applicable to such Loan.

(b) Each Lender shall maintain in accordance with its usual practice an account or accounts evidencing the indebtedness of each Borrower to such Lender resulting from each Loan made by such Lender from time to time, including the amounts of principal and interest payable and paid to such Lender from time to time under this Agreement.

(c) The Administrative Agent shall maintain accounts in which it will record (i) the amount of each Loan made hereunder, the Class and Type thereof and the Interest Period or Contract Period applicable thereto, (ii) the amount of any principal or interest due and payable or to become due and payable from each Borrower to each Lender hereunder and (iii) the amount of any sum received by the Administrative Agent hereunder from any Borrower or any Guarantor and each Lender's share thereof.

(d) The entries made in the accounts maintained pursuant to paragraphs (b) and (c) above shall be *prima facie* evidence of the existence and amounts of the obligations therein recorded; *provided*, *however*, that the failure of any Lender or the Administrative Agent to maintain such accounts or any error therein shall not in any manner affect the obligations of any Borrower to repay the Loans in accordance with their terms.

(e) Any Lender may request that Loans made by it hereunder be evidenced by a promissory note. In such event, each applicable Borrower shall execute and deliver to such Lender a promissory note payable to such Lender and its registered assigns and in a form and substance reasonably acceptable to the Administrative Agent and such Borrower. Notwithstanding any other provision of this Agreement, in the event any Lender shall request and receive such a promissory note, the interests represented by such note shall at all times (including after any assignment of all or part of such interests pursuant to Section 9.04) be represented by one or more promissory notes payable to the payee named therein or its registered assigns.

SECTION 2.05. ***Fees***. (a) The U.S. Borrower agrees to pay to each Domestic Revolving Credit Lender, through the Administrative Agent, on the last Business Day of March, June, September and December in each year and on each date on which the Domestic Revolving Credit Commitment of such Lender shall expire or be terminated as provided herein, a facility fee equal to the Applicable Percentage per annum in effect from time to time on the daily amount (whether used or unused) of the Domestic Revolving Credit Commitment of such Lender during the preceding quarter (or other period commencing on the Closing Date or ending with the Revolving Credit Maturity Date or the date on which the Domestic Revolving Credit Commitment of such Lender shall expire or be terminated). The U.S. Borrower and the U.K. Borrower jointly and severally agree to pay to each U.K. Lender, through the Administrative Agent, on the last Business Day of March, June, September and December in each year and on each date on which the U.K. Revolving Credit Commitment of such Lender shall expire or be terminated as provided herein, a facility fee equal to the Applicable Percentage per annum in effect from time to time on the daily amount (whether used or unused) of the U.K. Revolving Credit Commitment of such Lender during the preceding quarter (or other period commencing on the Closing Date or ending with the Revolving Credit Maturity Date or the date on which the U.K. Revolving Credit Commitment of such Lender shall expire or be terminated). The U.S. Borrower, the Canadian Borrower, the Australian Borrower and the New Zealand Borrower jointly and severally agree to pay to each Multicurrency Revolving Credit Lender, through the Administrative Agent, on the last Business Day of March, June, September and December in each year and on each date on which the Multicurrency Revolving Credit Commitment of such Lender shall expire or be terminated as provided herein, a facility fee (together with the facility fees provided for in the preceding two sentences, the "***Facility Fees***") equal to the Applicable Percentage per annum in effect from time to time on the daily amount (whether used or unused) of the Multicurrency Revolving Credit Commitment of such Lender during the preceding quarter (or other period commencing on the Closing Date or ending with the Revolving Credit Maturity Date or the date on which the Multicurrency Revolving Credit Commitment of such Lender shall expire or be terminated). Notwithstanding the foregoing, if any Revolving Credit Exposure remains outstanding following any expiration or termination of the Revolving Credit Commitments as contemplated by the three preceding sentences, the Facility Fees shall continue

to accrue on such Revolving Credit Exposure for so long as such Revolving Credit Exposure remains outstanding and shall be payable on demand. In addition, the Facility Fees otherwise payable to any Defaulting Lender in respect of the unused portion of such Defaulting Lender's Revolving Credit Commitments shall not be payable for so long as, and with respect to the period during which, such Lender is a Defaulting Lender. All Facility Fees shall be computed on the basis of the actual number of days elapsed in a year of 360 days. The Facility Fee due to each Lender shall commence to accrue on and including the Closing Date and shall cease to accrue on the date on which the applicable Revolving Credit Commitment of such Lender shall expire or be terminated as provided herein and there is not any remaining Revolving Credit Exposure of such Lender.

(b) The Borrowers agree to pay to the Administrative Agent, for its own account, the administrative fees at the times and in the amounts agreed to by the U.S. Borrower and the Administrative Agent from time to time (the "***Administrative Agent Fees***").

(c) Each Borrower agrees to pay to each Domestic Revolving Credit Lender (in the case of Domestic L/C Exposure), each U.K. Revolving Credit Lender (in the case of U.K. L/C Exposure) and each Multicurrency Revolving Credit Lender (in the case of Multicurrency L/C Exposure) (in each case, other than a Defaulting Lender), through the Administrative Agent, on the last Business Day of March, June, September and December of each year and on the date on which the applicable Revolving Credit Commitment of such Lender shall expire or be terminated as provided herein, a fee calculated on such Lender's Pro Rata Percentage of the daily aggregate L/C Exposure in respect of such Borrower (excluding the portion thereof attributable to unreimbursed L/C Disbursements) during the preceding quarter (or shorter period commencing on the Closing Date or ending with the Revolving Credit Maturity Date or the date on which all Letters of Credit of the applicable Class have been canceled or have expired and the applicable Revolving Credit Commitments of all Lenders shall have been terminated) at a rate per annum equal to the Applicable Percentage from time to time used to determine the interest rate on Revolving Credit Borrowings of the applicable Class comprised of Fixed Rate Loans pursuant to Section 2.06 (the "***L/C Participation Fees***"). If the L/C Exposure of a Defaulting Lender is reallocated pursuant to Section 2.17(a)(i), then the L/C Participation Fee payable to the Lenders pursuant to this Section 2.05(c) shall be adjusted in accordance with such allocation. If the applicable Borrower cash collateralizes any portion of such Defaulting Lender's L/C Exposure pursuant to Section 2.17(a)(ii), such Borrower shall not be required to pay any L/C Participation Fees with respect to that portion of such Defaulting Lender's L/C Exposure during the period in which such L/C Exposure is cash collateralized. If all or any portion of such Defaulting Lender's L/C Exposure is neither reallocated nor cash collateralized pursuant to Section 2.17(a)(i) or (ii), then, without prejudice to any rights or remedies of any Issuing Bank or any other Lender hereunder, all L/C Participation Fees with respect to such L/C Exposure shall be payable to the applicable Issuing Banks until and to the extent that such L/C Exposure is reallocated and/or cash collateralized.

(d) Each Borrower agrees to pay to each Issuing Bank with respect to each Letter of Credit issued by such Issuing Bank the standard fronting, issuance and drawing fees as agreed by each Issuing Bank and such Borrower (the "***Issuing Bank Fees***").

(e) The U.S. Borrower agrees to pay to the Administrative Agent for the account of each Tranche A Lender, on the last Business Day of March 2018 and June 2018 and on each date on which the Tranche A Commitment of such Lender shall expire or be terminated as provided herein, a ticking fee (the "***Ticking Fee***") equal to the Applicable Percentage per annum in effect from time to time on the daily unused amount of the Tranche A Commitment (if any) of such Lender (commencing on January 30, 2018 and ending with the Delayed Draw Termination Date or the date on which the Tranche A Commitment of such Lender shall expire or be terminated.)

(f) All Fees shall be paid on the dates due, in immediately available funds, to the Administrative Agent for distribution, if and as appropriate, among the Lenders, except that the Issuing Bank Fees shall be paid directly to the applicable Issuing Bank. All Ticking Fees, L/C

Participation Fees and Issuing Bank Fees shall be computed on the basis of the actual number of days elapsed in a year of 360 days. Once paid, none of the Fees shall be refundable under any circumstances.

SECTION 2.06. ***Interest on Loans***. (a) Subject to the provisions of Section 2.07, the Loans comprising each ABR Borrowing shall bear interest (computed on the basis of the actual number of days elapsed over a year of 365 or 366 days, as the case may be) at a rate per annum equal to the Alternate Base Rate plus the Applicable Percentage in effect from time to time.

(b) Subject to the provisions of Section 2.07, the Loans comprising each Eurocurrency Borrowing shall bear interest (computed on the basis of the actual number of days elapsed over a year of 360 ~~days or, in the case of a Eurocurrency Loan denominated in Pounds, 365~~ days) at a rate per annum equal to (i) in the case of a Eurocurrency Competitive Borrowing, the Adjusted LIBO Rate for the Interest Period in effect for such Borrowing plus or minus (as the case may be) the Competitive Loan Margin offered by the Lender making such Loan and accepted by the U.S. Borrower in the Competitive Bid Accept/Reject Letter, ~~and~~ (ii) in the case of ~~all other~~ Eurocurrency Borrowings **denominated in dollars**, the Adjusted LIBO Rate for the Interest Period in effect for such Borrowing plus the Applicable Percentage in effect from time to time**, and (iii) in the case of Eurocurrency Borrowings denominated in Euro, the EURIBO Rate for the Interest Period in effect for such Borrowing plus the Applicable Percentage in effect from time to time.**

(c) Subject to the provisions of Section 2.07, the Loans comprising each SONIA Borrowing shall bear interest (computed on the basis of the actual number of days elapsed over a year of 365 or 366 days, as the case may be) at a rate per annum equal to the Daily Simple SONIA plus the Applicable Percentage in effect from time to time.

(d) ~~(c)~~ Subject to the provisions of Section 2.07, the Loans comprising each Canadian Prime Rate Borrowing shall bear interest (computed on the basis of the actual number of days elapsed over a year of 365 or 366 days, as the case may be) at a rate per annum equal to the Canadian Prime Rate plus the Applicable Percentage in effect from time to time.

(e) ~~(d)~~ Subject to the provisions of Section 2.07, the Loans comprising each B/A Borrowing shall be subject to an Acceptance Fee, payable by the Canadian Borrower on the date of acceptance of the relevant B/A and calculated as set forth in the definition of the term "Acceptance Fee" in Section 1.01.

(f) ~~(e)~~ Subject to the provisions of Section 2.07, the Loans comprising each Bank Bill Rate Borrowing, including each N.Z. Swingline Loan, shall bear interest (computed on the basis of the actual number of days elapsed over a year of 365 or 366 days, as the case may be), at a rate per annum equal to the Bank Bill Rate plus the Applicable Percentage in effect from time to time.

(g) ~~(f)~~ Subject to the provisions of Section 2.07, the Loans comprising each Foreign Base Rate Borrowing shall bear interest (computed on the basis of the actual number of days elapsed over a year of 365 or 366 days, as the case may be) at a rate per annum equal to the sum of the Foreign Base Rate and the Applicable Percentage in effect from time to time.

(h) ~~(g)~~ Subject to the provisions of Section 2.07, each Flat Rate Competitive Loan shall bear interest (computed on the basis of the actual number of days elapsed over a year of 365 or 366 days, as the case may be, or such other computational basis as may be set forth in the applicable Competitive Bid) at the rate per annum equal to the fixed rate of interest offered by the Lender making such Loan and accepted by the U.S. Borrower in the Competitive Bid Accept/Reject Letter.

(i) ~~(h)~~ Interest on each Loan (other than pursuant to B/A Borrowings) shall be payable on the Interest Payment Dates applicable to such Loan except as otherwise provided in this Agreement. The applicable Alternate Base Rate, Adjusted LIBO Rate, **EURIBO Rate, Daily**

Simple SONIA, Discount Rate or Bank Bill Rate, as the case may be, shall be determined by the Administrative Agent, and such determination shall be conclusive absent manifest error. Notwithstanding anything to the contrary in this Agreement, if any Daily Rate or any Fixed Rate shall be less than zero, such rate shall be deemed zero for purposes of this Agreement.

(j) ~~(i)~~ For the purposes of the Interest Act (Canada) and disclosure thereunder, whenever any interest or fee to be paid hereunder or in connection herewith is to be calculated on the basis of any period of time that is less than a calendar year, the yearly rate of interest to which the rate used in such calculation is equivalent is the rate so used multiplied by the actual number of days in the calendar year in which the same is to be ascertained and divided by 360, 365 or 366, as applicable. The rates of interest under this Agreement are nominal rates, and not effective rates or yields. The principal of deemed reinvestment of interest does not apply to any interest calculation under this Agreement.

SECTION 2.07. ***Default Interest***. If any Borrower shall default in the payment of the principal of or interest on any Loan or any other amount becoming due hereunder, by acceleration or otherwise, or under any other Loan Document, such Borrower shall on demand from time to time pay interest, to the extent permitted by law, on such defaulted amount to but excluding the date of actual payment (after as well as before judgment) (a) in the case of overdue principal, at the rate otherwise applicable to such Loan pursuant to Section 2.06 plus 2.00% per annum and (b) in all other cases, at a rate per annum (computed on the basis of the actual number of days elapsed over a year of (i) 365 or 366 days, as the case may be, when determined by reference to the Prime Rate **or Daily Simple SONIA**, ~~(ii) 365 days, in the case of a Eurocurrency Loan denominated in Pounds~~ and (~~ii~~**ii**) 360 days at all other times) equal to the rate that would be applicable to a Daily Rate Revolving Loan in the applicable currency plus 2.00%.

SECTION 2.08. ***Alternate Rate of Interest***. In the event, and on each occasion, that **(i)** on the day two Business Days prior to the commencement of any Interest Period for a Eurocurrency Borrowing the Administrative Agent shall have determined that deposits in the applicable currency in the principal amounts of the Loans comprising such Borrowing are not generally available in the applicable interbank market, or that the rates at which such deposits are being offered will not adequately and fairly reflect the cost to a majority in interest of the applicable Lenders of making or maintaining their Eurocurrency Loans during such Interest Period, or that reasonable means do not exist for ascertaining the Adjusted LIBO Rate **or the EURIBO Rate, or (ii) at any time the Administrative Agent shall have determined that adequate and reasonable means do not exist for ascertaining the Daily Simple SONIA**, the Administrative Agent shall, as soon as practicable thereafter, give written or fax notice of such determination to the applicable Borrowers and the applicable Lenders. In the event of any such determination, until the Administrative Agent shall have advised the applicable Borrowers and the applicable Lenders that the circumstances giving rise to such notice no longer exist, **(x)** any request by a Borrower for a Eurocurrency Borrowing in the affected currency**,** pursuant to Section 2.03 or 2.10 shall be deemed to be a request for ~~a Daily Rate~~**an ABR** Borrowing**, if the applicable currency is in dollars, or otherwise shall be ineffective, and (y) any outstanding SONIA Borrowing shall be converted to an ABR Borrowing in an amount equal to the Dollar Equivalent thereof on the date specified therefor** in such ~~currency~~**notice from the Administrative Agent**. Each determination by the Administrative Agent under this Section 2.08 shall be conclusive absent manifest error.

SECTION 2.09. ***Termination and Reduction of Commitments***. (a) The Tranche A Commitments (other than any Incremental Term Loan Commitments, which shall terminate as provided in the related Incremental Assumption Agreement) shall be reduced dollar-for-dollar by the aggregate principal amount of the Tranche A Loans made and, if not earlier terminated or reduced to zero, shall automatically terminate on the Delayed Draw Termination Date. The Revolving Credit Commitments (other than any Incremental Revolving Credit Commitments, which shall terminate as provided in the related Incremental Assumption Agreement) and the N.Z. Swingline Commitments shall automatically terminate on the Revolving Credit Maturity Date. The L/C Commitments shall automatically terminate on the earlier to occur of (i) the

termination of the Revolving Credit Commitments and (ii) the date that is five (5) days prior to the Revolving Credit Maturity Date.

(b) Upon at least three Business Days' prior written or fax notice (or telephone notice promptly confirmed by a written notice) to the Administrative Agent, a Borrower may, without premium or penalty, at any time in whole permanently terminate, or from time to time in part permanently reduce, the Term Loan Commitments or the Revolving Credit Commitments of any Class; *provided, however,* that (i) each partial reduction of the Term Loan Commitments or the Revolving Credit Commitments of any Class shall be in an integral multiple of the Borrowing Multiple and in a minimum amount equal to the Borrowing Minimum, (ii) the Total Domestic Revolving Credit Commitment shall not be reduced to an amount that is less than the sum of the Aggregate Domestic Revolving Credit Exposure and the Aggregate Competitive Loan Exposure at the time, (iii) the Total U.K. Revolving Credit Commitment shall not be reduced to an amount that is less than the Aggregate U.K. Revolving Credit Exposure at the time and (iv) the Total Multicurrency Revolving Credit Commitment shall not be reduced to an amount that is less than the Aggregate Multicurrency Revolving Credit Exposure at the time.

(c) Each reduction in the Term Loan Commitments or the Revolving Credit Commitments of any Class hereunder shall be made ratably among the Lenders in accordance with their respective applicable Commitments. The applicable Borrowers shall pay to the Administrative Agent for the account of the applicable Lenders, on the date of each termination or reduction, the Facility Fees on the amount of the Commitments so terminated or reduced accrued to but excluding the date of such termination or reduction.

(d) Reductions and terminations of any Other Revolving Credit Commitments shall be as provided for in the applicable Loan Modification Agreement.

SECTION 2.10. ***Conversion and Continuation of Borrowings***. Each Borrower shall have the right at any time upon prior notice to the Administrative Agent (a) not later than 1:00 p.m., Local Time, two Business Days prior to conversion, to convert any Eurocurrency Borrowing denominated in dollars into an ABR Borrowing or to convert any B/A Borrowing into a Canadian Prime Rate Borrowing, (b) not later than 1:00 p.m., Local Time, three Business Days prior to conversion or continuation, to convert any ABR Borrowing into a Eurocurrency Borrowing denominated in dollars, to convert any Canadian Prime Rate Borrowing into a B/A Borrowing or to continue any Eurocurrency Borrowing as a Eurocurrency Borrowing for an additional Interest Period and (c) not later than 1:00 p.m., Local Time, three Business Days prior to conversion, to convert the Interest Period with respect to any Eurocurrency Borrowing to another permissible Interest Period, subject in each case to the following:

(i) each conversion or continuation shall be made pro rata among the Lenders in accordance with the respective principal amounts of the Loans comprising the converted or continued Borrowing;

(ii) if less than all the outstanding principal amount of any Borrowing shall be converted or continued, then each resulting Borrowing shall satisfy the limitations specified in Sections 2.02(a) and 2.02(b) regarding the principal amount and maximum number of Borrowings of the relevant Type;

(iii) each conversion shall be effected by each Lender and the Administrative Agent by recording for the account of such Lender the new Loan of such Lender resulting from such conversion and reducing the Loan (or portion thereof) of such Lender being converted by an equivalent principal amount; accrued interest on any Eurocurrency Loan (or portion thereof) being converted shall be paid by the applicable Borrower at the time of conversion;

(iv) if any Eurocurrency Borrowing is converted at a time other than the end of the Interest Period applicable thereto, the applicable Borrower shall pay, upon demand, any amounts due to the Lenders pursuant to Section 2.16;

(v) any portion of a Borrowing maturing or required to be repaid in less than one month may not be converted into or continued as a Eurocurrency Borrowing or a B/A Borrowing;

(vi) any portion of a Eurocurrency Borrowing or a B/A Borrowing that cannot be converted into or continued as a Eurocurrency Borrowing or a B/A Borrowing by reason of the immediately preceding clause shall be automatically converted at the end of the Interest Period in effect for such Borrowing into an ABR Borrowing or a Canadian Prime Rate Borrowing, as the case may be;

(vii) no Interest Period may be selected for any Eurocurrency Term Borrowing that would end later than a Repayment Date occurring on or after the first day of such Interest Period if, after giving effect to such selection, the aggregate outstanding amount of (x) the Eurocurrency Term Borrowings comprised of Tranche A Loans, Specified Incremental Term Loans or Other Term Loans, as applicable, with Interest Periods ending on or prior to such Repayment Date and (y) the ABR Term Borrowings comprised of Tranche A Loans, Specified Incremental Term Loans or Other Term Loans, as applicable, would not be at least equal to the principal amount of Term Borrowings to be paid on such Repayment Date;

(viii) no B/A Borrowing may be converted or continued other than at the end of the Contract Period applicable thereto; and

(ix) upon notice to the applicable Borrower from the Administrative Agent given at the request of the Required Lenders, after the occurrence and during the continuance of an Event of Default, no outstanding Loan may be converted into, or continued as, a Eurocurrency Loan or a B/A Loan and any outstanding Eurocurrency Borrowing or B/A Borrowing shall, at the end of the Interest Period or Contract Period applicable thereto (unless repaid pursuant to the terms hereof), automatically be converted to an ABR Borrowing or a Canadian Prime Rate Borrowing, as the case may be.

Each notice pursuant to this Section 2.10 shall refer to this Agreement and specify (a) the identity, amount and Class of the Borrowing that the applicable Borrower requests be converted or continued, (b) whether such Borrowing is to be converted to or continued as a Eurocurrency Borrowing, an ABR Borrowing, a B/A Borrowing or a Canadian Prime Rate Borrowing, (c) if such notice requests a conversion, the date of such conversion (which shall be a Business Day) and (d) if such Borrowing is to be converted to or continued as a Eurocurrency Borrowing or a B/A Borrowing, the Interest Period or Contract Period with respect thereto. If no Interest Period or Contract Period is specified in any such notice with respect to any conversion to or continuation as a Eurocurrency Borrowing or a B/A Borrowing, the applicable Borrower shall be deemed to have selected an Interest Period or Contract Period of one month's duration. The Administrative Agent shall advise the applicable Lenders of any notice given pursuant to this Section 2.10 and of each Lender's portion of any converted or continued Borrowing. If a Borrower shall not have given notice in accordance with this Section 2.10 to continue any Borrowing into a subsequent Interest Period or Contract Period (and shall not otherwise have given notice in accordance with this Section 2.10 to convert such Borrowing), such Borrowing shall, at the end of the Interest Period or Contract Period applicable thereto (unless repaid pursuant to the terms hereof), automatically be continued as a Eurocurrency Borrowing or a B/A Borrowing with an Interest Period or Contract Period of one month or 30 days, respectively. The U.S. Borrower shall not have the right to convert or continue the Interest Period with respect to any Competitive Loan pursuant to this Section 2.10.

SECTION 2.11. ***Repayment of Term Borrowings***. (a) (i) The U.S. Borrower shall pay to the Administrative Agent, for the account of the Tranche A Lenders, on March 5, May 15, August 15, and November 15 of each year (each, a " ***Tranche A Repayment Date***"), commencing on the first Tranche A Repayment Date to occur after the Delayed Draw Termination Date, an aggregate amount equal to 0.25% of the principal amount of the Tranche A Loans (as adjusted from time to time pursuant to Sections 2.11(d), 2.12 and 2.26(d)) outstanding on the Delayed Draw Termination Date, with the balance payable on the Tranche A Maturity Date. Notwithstanding the foregoing, if the Leverage Ratio on the last day of the Test Period immediately prior to any Tranche A Repayment Date (other than the Tranche A Maturity Date) was less than or equal to 2.50 to 1.00, no scheduled amortization payment shall be required on such Tranche A Repayment Date.

(ii) The applicable Borrowers shall pay to the Administrative Agent, for the account of the Incremental Term Lenders, on each Incremental Term Loan Repayment Date, a principal amount of the Incremental Term Loans equal to the amount set forth for such date in the applicable Incremental Assumption Agreement (as adjusted from time to time to give effect to prepayments as provided for in the applicable Incremental Assumption Agreement), together in each case with accrued and unpaid interest on the principal amount to be paid to but excluding the date of such payment.

(iii) The applicable Borrowers shall pay to the Administrative Agent, for the account of the applicable Accepting Lenders, on each Other Term Loan Repayment Date, a principal amount of the Other Term Loans equal to the amount set forth for such date in the applicable Loan Modification Agreement (as adjusted from time to time to give effect to prepayments as provided for in the applicable Loan Modification Agreement), together in each case with accrued and unpaid interest on the principal amount to be paid to but excluding the date of such payment.

(b) To the extent not previously paid, all Tranche A Loans, Specified Incremental Term Loans and Other Term Loans shall be due and payable on the Tranche A Maturity Date, the applicable Incremental Term Loan Maturity Date and the applicable Other Term Loan Maturity Date, respectively, together with accrued and unpaid interest on the principal amount to be paid to but excluding the date of payment.

(c) All repayments pursuant to this Section 2.11 shall be subject to Section 2.16, but shall otherwise be without premium or penalty.

(d) Following any conversion or exchange of any Affected Class of Term Loans pursuant to Section 9.20, the amortization schedule set forth above for such Affected Class will be deemed modified by eliminating pro rata from each of the remaining scheduled amortization payments for such Class an aggregate amount equal to the principal amount of Term Loans of Accepting Lenders of such Affected Class that accepted the related Loan Modification Offer.

SECTION 2.12. ***Prepayment***. (a) Each Borrower shall have the right at any time and from time to time to prepay any Borrowing (other than (x) Bankers' Acceptances or B/A Equivalent Loans, which may, however, be defeased as provided below and (y) Competitive Borrowings, which may be prepaid only with the consent of the applicable Lender), in whole or in part, upon at least three Business Days' prior written or fax notice (or telephone notice promptly confirmed by written or fax notice) in the case of Fixed Rate Loans, **four Business Days' prior written or fax notice (or telephone notice promptly confirmed by written or fax notice) in the case of SONIA Loans** or written or fax notice (or telephone notice promptly confirmed by written or fax notice) on the Business Day of prepayment in the case of **any other** Daily Rate Loans, to the Administrative Agent before 1:00 p.m., Local Time; *provided*, *however*, that each partial prepayment shall be in an amount that is an integral multiple of the Borrowing Multiple and not less than the Borrowing Minimum; and *provided further* that the Canadian Borrower may defease any B/A or B/A Equivalent Loan by depositing with the Administrative Agent an amount that, together with Acceptance Fees accruing on such amount to the end of the

Contract Period for such B/A or B/A Equivalent Loan at such rate as the Administrative Agent shall specify upon receipt of such amount, is sufficient to pay such maturing B/A or B/A Equivalent Loan when due.

(b) Optional prepayments shall be applied to Classes of Loans as directed by the U.S. Borrower in the applicable notice of prepayment. Within each Class of Term Loans, optional prepayments shall be applied against the remaining scheduled amortization payments thereof as directed by the U.S. Borrower.

(c) Each notice of prepayment shall specify the prepayment date and the principal amount of each Borrowing (or portion thereof) to be prepaid, shall commit the applicable Borrower to prepay such Borrowing by the amount stated therein on the date stated therein; provided that a notice of optional prepayment delivered by a Borrower may state that such notice is conditioned upon the effectiveness of other credit facilities, in which case such notice may be revoked by such Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not satisfied. All prepayments under this Section 2.12 shall be subject to Section 2.16 but otherwise without premium or penalty. All prepayments under this Section 2.12 shall be accompanied by accrued and unpaid interest on the principal amount to be prepaid to but excluding the date of payment.

SECTION 2.13. ***Mandatory Prepayments***. (a) In the event of any termination of all the Revolving Credit Commitments of a Class, the applicable Borrowers shall, on the date of such termination, repay or prepay all their respective outstanding Revolving Credit Borrowings (and N.Z. Swingline Borrowings (in the case of a termination of the Multicurrency Revolving Credit Commitments) of such Class, and replace all outstanding Letters of Credit of the applicable Class and/or deposit an amount equal to the L/C Exposure of the applicable Class in cash in a cash collateral account established with the Administrative Agent for the benefit of the applicable Lenders. If as a result of any partial reduction of the Revolving Credit Commitments of a Class, the Aggregate Domestic Revolving Credit Exposure (plus the Aggregate Competitive Loan Exposure), Aggregate Multicurrency Revolving Credit Exposure or Aggregate U.K. Revolving Credit Exposure would exceed the Total Domestic Revolving Credit Commitment, Total Multicurrency Revolving Credit Commitment or Total U.K. Revolving Credit Commitment, respectively, after giving effect thereto, then the applicable Borrowers shall, on the date of such reduction, repay or prepay Revolving Credit Borrowings (and/or N.Z. Swingline Loans (in the case of the Multicurrency Revolving Credit Commitments) and/or, subject to Section 2.12, Competitive Loans (in the case of Domestic Revolving Credit Commitments)) and/or cash collateralize Letters of Credit of the applicable Class in an amount sufficient to eliminate such excess.

(b) If as a result of fluctuations in exchange rates, on any Calculation Date, (i) the Aggregate Multicurrency Revolving Credit Exposure would exceed 105% of the Total Multicurrency Revolving Credit Commitment, (ii) the Aggregate U.K. Revolving Credit Exposure would exceed 105% of the Total U.K. Revolving Credit Commitment, (iii) the portion of the Multicurrency Revolving Credit Exposure represented by Loans to or Letters of Credit issued for the account of the Canadian Borrower would exceed 105% of the Canadian Sublimit or (iv) the portion of the Multicurrency Revolving Credit Exposure represented by Loans to or Letters of Credit issued for the account of the Australian Borrower and the New Zealand Borrower would exceed 105% of the ANZ Sublimit, then, in each case, the applicable Borrowers shall, within three Business Days of such Calculation Date, prepay Revolving Loans (or N.Z. Swingline Loans, in the case of the Multicurrency Revolving Credit Commitments) and/or cash collateralize Letters of Credit such that the applicable exposure does not exceed the applicable commitment or sublimit set forth above without giving effect to the words “105% of”.

SECTION 2.14. ***Reserve Requirements; Change in Circumstances***.
(a) Notwithstanding any other provision of this Agreement, if any Change in Law shall

(i) impose, modify or deem applicable any reserve, special deposit or similar requirement against assets of, deposits with, or for the account of, or credit extended by, any Lender or any Issuing Bank, except any such reserve requirement that is reflected in the Adjusted ~~LIBOR~~**LIBO** Rate, **the EURIBO Rate,** the Discount Rate or the Bank Bill Rate;

(ii) subject any Lender or any Issuing Bank to any Taxes (other than (A) Indemnified Taxes and (B) Excluded Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

(iii) ~~shall~~ impose on ~~such~~**any** Lender ~~of the~~**or any** Issuing Bank or any applicable interbank market any other condition affecting this Agreement or Fixed Rate Loans made by such Lender or any Letter of Credit or participation therein (other than any change to the basis or rate of taxation applicable to any Lender),

and the result of any of the foregoing shall be to increase the cost to such Lender or such Issuing Bank of making or maintaining any Fixed Rate Loan or increase the cost to any Lender of issuing or maintaining any Letter of Credit or purchasing or maintaining a participation therein or to reduce the amount of any sum received or receivable by such Lender or such Issuing Bank hereunder (whether of principal, interest or otherwise) by an amount deemed by such Lender or such Issuing Bank to be material ~~(after taking into account the last sentence of the definition of the term "Adjusted LIBO Rate", if applicable)~~, then the applicable Borrowers will pay to such Lender or such Issuing Bank, as the case may be, such additional amount or amounts (without duplication of amounts paid by the Borrowers pursuant to Section 2.20) as will compensate such Lender or such Issuing Bank, as the case may be, for such additional costs incurred or reduction suffered; *provided* that such amounts shall be proportionate and non-discriminatory relative to the amounts that such Lender or Issuing Bank charges borrowers or account parties for such additional amounts incurred in connection with substantially similar facilities as determined by such Lender or Issuing Bank acting in good faith exercising reasonable credit judgment.

(b) If any Lender or any Issuing Bank shall have determined that any Change in Law regarding capital adequacy or liquidity requirements has or would have the effect of reducing the rate of return on such Lender's or such Issuing Bank's capital or on the capital of such Lender's or such Issuing Bank's holding company, if any, as a consequence of this Agreement or the Loans made or participations in Letters of Credit purchased by such Lender pursuant hereto or the Letters of Credit issued by such Issuing Bank pursuant hereto to a level below that which such Lender or such Issuing Bank or such Lender's or the Issuing Bank's holding company could have achieved but for such Change in Law (taking into consideration such Lender's or such Issuing Bank's policies and the policies of such Lender's or such Issuing Bank's holding company with respect to capital adequacy or liquidity requirements) by an amount deemed by such Lender or such Issuing Bank to be material ~~(after taking into account the last sentence of the definition of the term "Adjusted LIBO Rate", if applicable)~~, then from time to time the applicable Borrower shall pay to such Lender or such Issuing Bank, as the case may be, such additional amount or amounts as will compensate such Lender or such Issuing Bank or such Lender's or such Issuing Bank's holding company for any such reduction suffered; *provided* that such amounts shall be proportionate and non-discriminatory relative to the amounts that such Lender or Issuing Bank charges borrowers or account parties for such additional amounts incurred in connection with substantially similar facilities as determined by such Lender or Issuing Bank acting in good faith exercising reasonable credit judgment.

(c) A certificate of a Lender or any Issuing Bank setting forth the amount or amounts necessary to compensate such Lender or such Issuing Bank or its holding company, as applicable, as specified in paragraph (a) or (b) above, and setting forth in reasonable detail the basis on which

such amount or amounts were calculated shall be delivered to the U.S. Borrower and shall be conclusive absent manifest error. The applicable Borrower shall pay such Lender or such Issuing Bank the amount shown as due on any such certificate delivered by it within 20 days after its receipt of the same.

(d) Failure or delay on the part of any Lender or such Issuing Bank to demand compensation for any increased costs or reduction in amounts received or receivable or reduction in return on capital shall not constitute a waiver of such Lender's or such Issuing Bank's right to demand such compensation; *provided* that the Borrowers shall not be under any obligation to compensate any Lender or such Issuing Bank under paragraph (a) or (b) above with respect to increased costs or reductions with respect to any period prior to the date that is 120 days prior to such request if such Lender or such Issuing Bank knew or could reasonably have been expected to know of the circumstances giving rise to such increased costs or reductions and of the fact that such circumstances would result in a claim for increased compensation by reason of such increased costs or reductions; *provided further* that the foregoing limitation shall not apply to any increased costs or reductions arising out of the retroactive application of any Change in Law within such 120-day period. The protection of this Section shall be available to each Lender and each Issuing Bank regardless of any possible contention of the invalidity or inapplicability of the Change in Law that shall have occurred or been imposed.

(e) For the avoidance of doubt, this Section 2.14 shall apply to all requests, rules, guidelines or directives concerning capital adequacy or liquidity requirements issued in connection with the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives concerning capital adequacy or liquidity requirements promulgated by the Bank for International Settlements, the Basel Committee on Banking Regulations and Supervisory Practices (or any successor or similar authority) or United States financial regulatory authorities, regardless of the date adopted, issued, promulgated or implemented but solely to the extent any Lender requesting any such compensation described in this Section 2.14 is generally imposing such charges on similarly situated borrowers where the terms of other syndicated credit facilities permit it to impose such charges.

SECTION 2.15. ***Change in Legality***. (a) Notwithstanding any other provision of this Agreement, if any Change in Law shall make it unlawful for any Lender to make or maintain any Eurocurrency Loan or to give effect to its obligations as contemplated hereby with respect to any Eurocurrency Loan, then, by written notice to the applicable Borrower and to the Administrative Agent:

(i) such Lender may declare that Eurocurrency Loans will not thereafter (for the duration of such unlawfulness) be made by such Lender hereunder (or be continued for additional Interest Periods and Daily Rate Loans will not thereafter (for such duration) be converted into Eurocurrency Loans), whereupon any request for a Eurocurrency Borrowing (or to convert an ABR Borrowing to a Eurocurrency Borrowing or to continue a Eurocurrency Borrowing for an additional Interest Period) shall, as to such Lender only, be deemed a request for a Daily Rate Loan (or a request to continue a Daily Rate Loan as such or to convert a Eurocurrency Loan into a Daily Rate Loan, as the case may be), unless such declaration shall be subsequently withdrawn; and

(ii) such Lender may require that all outstanding Eurocurrency Loans made by it be converted to Daily Rate Loans, in which event all such Eurocurrency Loans shall be automatically converted to Daily Rate Loans as of the effective date of such notice as provided in paragraph (b) below.

In the event any Lender shall exercise its rights under (i) or (ii) above, all payments and prepayments of principal that would otherwise have been applied to repay the Eurocurrency Loans that would have been made by such Lender or the converted Eurocurrency Loans of such Lender shall instead be applied to repay the Daily Rate Loans made by such Lender in lieu of, or resulting from the conversion of, such Eurocurrency Loans.

(b) For purposes of this Section 2.15, a notice to the applicable Borrower by any Lender shall be effective as to each Eurocurrency Loan made by such Lender, if lawful, on the last day of the Interest Period then applicable to such Eurocurrency Loan; in all other cases such notice shall be effective on the date of receipt by the applicable Borrower.

(c) Notwithstanding the foregoing provisions of this Section, a Lender shall not be entitled to compensation pursuant to this Section in respect of any Competitive Loan if the Change in Law that would otherwise entitle it to such compensation shall have been publicly announced prior to submission of the Competitive Bid pursuant to which such Loan was made.

SECTION 2.16. ***Indemnity***. The Borrowers shall indemnify each Lender against any loss or expense that such Lender may sustain or incur as a consequence of (a) any event, other than a default by such Lender in the performance of its obligations hereunder, which results in (i) such Lender receiving or being deemed to receive any amount on account of the principal of any Fixed Rate Loan prior to the end of the Interest Period or Contract Period in effect therefor, (ii) the conversion of any Fixed Rate Loan to a Daily Rate Loan, or the conversion of the Interest Period or Contract Period with respect to any Fixed Rate Loan, in each case other than on the last day of the Interest Period or Contract Period in effect therefor or (iii) any Fixed Rate Loan to be made by such Lender (including any Fixed Rate Loan to be made pursuant to a conversion or continuation under Section 2.10) not being made after notice of such Loan shall have been given by the Borrowers hereunder (any of the events referred to in this clause (a) being called a "***Breakage Event***") or (b) any default in the making of any payment or prepayment of any Fixed Rate Loan to be made hereunder. In the case of any Breakage Event, such loss shall include an amount equal to the excess, as reasonably determined by such Lender, of (i) its cost of obtaining funds for the Fixed Rate Loan that is the subject of such Breakage Event for the period from the date of such Breakage Event to the last day of the Interest Period in effect (or that would have been in effect) for such Loan over (ii) the amount of interest likely to be realized by such Lender in redeploying the funds released or not utilized by reason of such Breakage Event for such period. A certificate of any Lender setting forth any amount or amounts which such Lender is entitled to receive pursuant to this Section 2.16, and setting forth in reasonable detail the basis on which such amount or amounts were calculated, shall be delivered to the applicable Borrowers and shall be conclusive absent manifest error and the applicable Borrower shall pay such Lender the amount shown as due on any such certificate delivered by it within 20 days after its receipt of the same.

SECTION 2.17. ***Pro Rata Treatment***. Except as otherwise specified in this Agreement, each Borrowing, each payment or prepayment of principal of any Borrowing, each payment of interest on the Loans, each payment of the Facility Fees, each reduction of the Term Loan Commitments or the Revolving Credit Commitments and each conversion of any Borrowing to or continuation of any Borrowing as a Borrowing of any Type shall be allocated pro rata among the Lenders in accordance with their respective Loans or Commitments of a given Class. For purposes of determining the available Domestic Revolving Credit Commitments or Multicurrency Revolving Credit Commitments of the Lenders at any time, each outstanding Competitive Loan or N.Z. Swingline Loan shall be deemed to have utilized the Domestic Revolving Credit Commitments (in the case of a Competitive Loan) or Multicurrency Revolving Credit Commitments (in the case of a N.Z. Swingline Loan) of the Lenders (including those Lenders which shall not have made Competitive Loans or N.Z. Swingline Loans, as the case may be) pro rata in accordance with such respective Domestic Revolving Credit Commitments or Multicurrency Revolving Credit Commitments. Each Lender agrees that in computing such Lender's portion of any Borrowing to be made hereunder, the Administrative Agent may, in its discretion, round each Lender's percentage of such Borrowing to the next higher or lower whole dollar amount. Notwithstanding the foregoing, (a) if Letters of Credit are requested to be issued or N.Z. Swingline Loans are requested to be made under the Revolving Credit Commitments of a Class at any time that there exists a Defaulting Lender under the Revolving Credit Commitments of such Class then, (i) all or any part of such Defaulting Lender's aggregate L/C Exposure or N.Z. Swingline Exposure under such Class shall be reallocated among the non-Defaulting Lenders in accordance with their respective Pro Rata Percentages, but only to the extent the sum of all non-

Defaulting Lenders' Revolving Credit Exposure under such Class plus such Defaulting Lender's aggregate principal amount of all L/C Exposure and N.Z. Swingline Exposure, as the case may be under such Class, does not exceed the total of all non-Defaulting Lenders' Revolving Credit Commitments of such Class, and (ii) if the reallocation described in clause (i) cannot, or can only partially, be effected, the applicable Borrower shall within one Business Day following notice by the Administrative Agent (x) first, prepay such remaining N.Z. Swingline Exposure under such Class and (y) second, cash collateralize for the benefit of each applicable Issuing Bank only such Borrower's obligations corresponding to such Defaulting Lender's aggregate L/C Exposure under such Class (after giving effect to any partial reallocation pursuant to clause (i) above) in accordance with the procedures set forth in Section 2.23(j) for so long as such L/C Exposure is outstanding, and (b) a Borrower may elect that prepayments of Loans made pursuant to Section 2.12(a) not be applied to the Revolving Loans of a Defaulting Lender. For the avoidance of doubt, neither this Section 2.17 nor Section 2.18 shall limit the ability of any Borrower to (i) make a Purchase of and retire Purchased Loans or (ii) pay fees and interest with respect to Other Revolving Loans or Other Term Loans following the effectiveness of any Loan Modification Offer on a basis different from the Loans of such Class that will continue to be held by Lenders that were not Accepting Lenders.

SECTION 2.18. ***Sharing of Setoffs***. Each Lender agrees that if it shall, through the exercise of a right of banker's lien, setoff or counterclaim against a Borrower or any other Loan Party, or pursuant to a secured claim under Section 506 of Title 11 of the United States Code or other security or interest arising from, or in lieu of, such secured claim, received by such Lender under any applicable bankruptcy, insolvency or other similar law or otherwise, or by any other means other than as a result of non-pro rata payments expressly permitted hereunder (including under Sections 2.15 and 2.17), obtain payment (voluntary or involuntary) in respect of any Loan or Loans or L/C Disbursement as a result of which the unpaid principal portion of its Loans and participations in L/C Disbursements shall be proportionately less than the unpaid principal portion of the Loans and participations in L/C Disbursements of any other Lender of a Class, it shall be deemed simultaneously to have purchased from such other Lender at face value, and shall promptly pay to such other Lender the purchase price for, a participation in the Loans and L/C Exposure of such other Lender, so that the aggregate unpaid principal amount of the Loans and L/C Exposure and participations in Loans and L/C Exposure held by each Lender shall be in the same proportion to the aggregate unpaid principal amount of all Loans and L/C Exposure then outstanding as the principal amount of its Loans and L/C Exposure prior to such exercise of banker's lien, setoff or counterclaim or other event was to the principal amount of all Loans and L/C Exposure outstanding prior to such exercise of banker's lien, setoff or counterclaim or other event; *provided*, *however*, that if any such purchase or purchases or adjustments shall be made pursuant to this Section 2.18 and the payment giving rise thereto shall thereafter be recovered, such purchase or purchases or adjustments shall be rescinded to the extent of such recovery and the purchase price or prices or adjustment restored without interest. The Borrowers and Holdings expressly consent to the foregoing arrangements and agree that any Lender holding a participation in a Loan or L/C Disbursement deemed to have been so purchased may exercise any and all rights of banker's lien, setoff or counterclaim with respect to any and all moneys due and owing by any Borrower and Holdings to such Lender by reason thereof as fully as if such Lender had made a Loan directly to a Borrower in the amount of such participation. For the avoidance of doubt, this Section 2.18 shall not apply to any assignment of any Purchased Loan by any Lender to a Borrower or as otherwise specified in this Agreement.

SECTION 2.19. ***Payments***. (a) Each Borrower shall make each payment (including principal of or interest on any Borrowing or any L/C Disbursement or any Fees or other amounts) hereunder and under any other Loan Document not later than 2:00 p.m., Local Time, on the date when due in immediately available funds, without setoff, defense or counterclaim. Each such payment (other than (i) Issuing Bank Fees, which shall be paid directly to the applicable Issuing Bank, and (ii) principal of and interest on Competitive Loans and N.Z. Swingline Loans, which shall be paid directly to the applicable Domestic Revolving Credit Lender or N.Z. Swingline Lender except as otherwise provided in Section 2.22(e)) shall be made to the Administrative Agent at its offices at Eleven Madison Avenue, New York, NY 10010 to such account or

accounts as may be specified by the Administrative Agent. The Administrative Agent will promptly distribute to each Lender its pro rata share (or other applicable share as provided herein) of such payment.

(b) Except as otherwise expressly provided herein, whenever any payment (including principal of or interest on any Borrowing or any Fees or other amounts) hereunder or under any other Loan Document shall become due, or otherwise would occur, on a day that is not a Business Day, such payment may be made on the next succeeding Business Day, and such extension of time shall in such case be included in the computation of interest or Fees, if applicable.

(c) Unless the Administrative Agent shall have received notice from a Borrower prior to the date on which any payment is due to the Administrative Agent for the account of the Lenders or any Issuing Bank hereunder that such Borrower will not make such payment, the Administrative Agent may assume that such Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Lenders or such Issuing Bank, as the case may be, the amount due. In such event, if such Borrower does not in fact make such payment, then each of the Lenders or such Issuing Bank, as the case may be, severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender or such Issuing Bank, as the case may be, and to pay interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent, at a rate determined by the Administrative Agent to represent its cost of overnight or short-term funds (which determination shall be conclusive absent manifest error) in the applicable currency.

SECTION 2.20. ***Taxes***. (a) Any and all payments by or on account of any obligation of any Borrower or any Loan Party hereunder or under any other Loan Document shall be made free and clear of and without deduction for any Taxes; *provided* that if any Borrower or any Loan Party shall be required by applicable law to deduct or withhold any Taxes from such payments, then (i) only in the case of Indemnified Taxes and Other Taxes, the sum payable shall be increased as necessary so that after making all required deductions (including deductions applicable to Indemnified Taxes and Other Taxes payable under this Section) the Administrative Agent or such Lender (as the case may be) receives an amount equal to the sum it would have received had no such deductions or withholdings been made, (ii) such Borrower or such Loan Party shall make such deductions or withholdings and (iii) such Borrower or such Loan Party shall pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable law.

(b) In addition, the Borrowers shall pay any Other Taxes to the relevant Governmental Authority in accordance with applicable law.

(c) Each Borrower shall indemnify the Administrative Agent and each Lender, within 15 days after written demand therefor, for the full amount of any Indemnified Taxes or Other Taxes paid by the Administrative Agent or such Lender (whether directly or pursuant to Section 2.20(d)), as the case may be, on or with respect to any payment by or on account of any obligation of such Borrower or any Loan Party hereunder or under any other Loan Document (including Indemnified Taxes or Other Taxes imposed or asserted on or attributable to amounts payable under this Section) and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes or Other Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to the applicable Borrower by a Lender, or by the Administrative Agent on its behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(d) Each Lender shall severally indemnify the Administrative Agent, within 15 days after written demand therefor, for the full amount of (i) any Indemnified Taxes or Other Taxes attributable to such Lender (but only to the extent that no Loan Party has already indemnified the Administrative Agent for such Indemnified Taxes or Other Taxes and without limiting the obligation of the Loan Parties to do so), (ii) any Taxes attributable to such Lender’s failure to

comply with the provisions of Section 9.04(g) relating to the maintenance of a Participant Register and (iii) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to the Lender from any other source against any amount due to the Administrative Agent under this Section 2.20(d).

(e) If a Borrower determines in good faith that a reasonable basis exists for contesting a Tax, the relevant Lender (or participant), or the Administrative Agent, as applicable, shall cooperate with such Borrower in challenging such Tax at such Borrower's expense if requested by such Borrower. If a Lender (or participant) or the Administrative Agent receives a refund (including pursuant to a claim for refund made pursuant to the preceding sentence) in respect of any Indemnified Taxes or Other Taxes as to which it has been indemnified by a Borrower or with respect to which a Borrower has paid additional amounts pursuant to this Section 2.20, it shall within 30 days from the date of such receipt pay over such refund to such Borrower (but only to the extent of indemnity payments made, or additional amounts paid, by such Borrower under this Section 2.20 with respect to the Indemnified Taxes or Other Taxes giving rise to such refund), net of all out-of-pocket expenses of such Lender (or participant) or the Administrative Agent (together with any interest paid by the relevant Governmental Authority with respect to such refund); *provided, however*, that such Borrower, upon the request of such Lender (or participant) or the Administrative Agent, agrees to repay the amount paid over to such Borrower (plus penalties, interest or other charges) to such Lender (or participant) or the Administrative Agent in the event such Lender (or participant) or the Administrative Agent is required to repay such refund to such Governmental Authority.

(f) As soon as practicable after any payment of Indemnified Taxes or Other Taxes by a Borrower or any other Loan Party to a Governmental Authority, such Borrower shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(g) (i) Any Foreign Lender that is entitled to an exemption from or reduction of withholding Tax under the law of the jurisdiction in which a Borrower is located, or pursuant to any treaty to which such jurisdiction is a party, with respect to payments under this Agreement shall deliver to such Borrower (with a copy to the Administrative Agent), at the time or times reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation reasonably requested by such Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate and shall deliver to such Borrower and the Administrative Agent two further copies of any such form or certification (or any applicable successor form) on or before the date that any such form or certification expires or becomes obsolete and after the occurrence of any event requiring a change in the most recent form previously delivered by it to such Borrower. Each Lender that shall become a participant or a Lender pursuant to Section 9.04 shall, upon the effectiveness of the related transfer, be required to provide all the forms and statements required pursuant to this Section 2.20(g) *provided* that in the case of a participant such participant shall furnish all such required forms and statements to the Lender from which the related participation shall have been purchased.

Notwithstanding the foregoing, after a request by the Borrower or Administrative Agent pursuant to (g)(i), in the case of an applicable Borrower that is not a U.S. Person, such Borrower will use reasonable efforts, if requested by the applicable Lender, to provide to such Lender all applicable documentation (together, if requested, with any English translations thereof, to the extent available) required to be completed by such Lender in order to receive any

exemption or reduction of withholding Tax under the laws of the jurisdiction in which such Borrower is located, and such Lender shall not be required to complete, execute or submit any such documentation if such Lender is not reasonably satisfied that it is legally able to do so.

(ii) Without limiting the generality of the foregoing, in the event that a Borrower is a U.S. Person,

(A) any Lender that is a U.S. Person shall deliver to such Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of such Borrower or the Administrative Agent), executed originals of IRS Form W-9 certifying that such Lender is exempt from U.S. Federal backup withholding Tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to such Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of such Borrower or the Administrative Agent), whichever of the following is applicable:

(i) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed originals of IRS Form W-8BEN or IRS Form W-8BEN-E (or any successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN or IRS Form W-8BEN-E (or any successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(ii) executed originals of IRS Form W-8ECI;

(iii) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit I-1 to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code (a "***U.S. Tax Compliance Certificate***") and (y) executed originals of IRS Form W-8BEN or IRS Form W-8BEN-E (or any successor form); or

(iv) to the extent a Foreign Lender is not the beneficial owner, executed originals of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN or IRS Form W-8BEN-E (or any successor form), a U.S. Tax Compliance Certificate substantially in the form of Exhibit I-2 or Exhibit I-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; *provided* that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit I-4 on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to such Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of such Borrower or the Administrative Agent), executed originals of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. Federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit such Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. Federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to such Borrower and the Administrative Agent at the time or times prescribed by law and at such time or times reasonably requested by such Borrower or the Administrative Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by such Borrower or the Administrative Agent as may be necessary for such Borrower and the Administrative Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the applicable Borrower and the Administrative Agent in writing of its legal inability to do so.

(h) For purposes of determining withholding Taxes imposed under FATCA, from and after the Closing Date, the Administrative Agent shall treat (and the Lenders hereby authorize the Administrative Agent to treat) the Credit Agreement as not qualifying as a "grandfathered obligation" within the meaning of Treasury Regulation Section 1.1471-2(b)(2)(i).

(i) (i) Subject to paragraphs (ii) and (iii) below, each U.K. Borrowing Entity shall, at the request of any Lender or the Administrative Agent, assist such Lender in timely completing any procedural formalities incumbent upon such U.K. Borrowing Entity (as may be applicable in the United Kingdom at the applicable time) necessary for such Lender to receive payments under this Agreement or under any other Loan Document without withholding or deduction for Taxes imposed under the laws of the United Kingdom.

(ii) Each Lender that is entitled to an exemption from or reduction of withholding Tax on interest under any applicable double taxation treaty to which the United Kingdom is a party, and that holds a passport number under the HMRC Double Taxation Treaty Passport Scheme and wishes that scheme to apply to this Agreement and the other Loan Documents, shall include an indication of such choice by providing to the Administrative Agent and each applicable U.K. Borrowing Entity such Lender's scheme reference number as soon as reasonably practicable and in any event within 10 Business Days of making or acquiring a Loan with the applicable U.K. Borrowing Entity.

(iii) Without limiting paragraph (i) above, when a Lender provides the applicable scheme reference number to the Administrative Agent and each U.K. Borrowing Entity in accordance with paragraph (ii) above, each U.K. Borrowing Entity shall file with HMRC a duly completed HMRC Form DTTP-2 with respect to such Lender within 30 "working"

days (as such term is used in the terms and conditions of the HMRC Double Taxation Treaty Passport Scheme) of the date such Lender makes or acquires a Loan owing by such U.K. Borrowing Entity, and in each case each U.K. Borrowing Entity shall promptly provide such Lender and the Administrative Agent with a proof of, and a copy of, such filing. Unless impracticable, such filing shall be made by electronic online submission.

(j) Each party's obligations under this Section 2.20 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all obligations under any Loan Document.

SECTION 2.21. ***Assignment of Commitments Under Certain Circumstances; Duty to Mitigate*** . (a) In the event (i) any Lender or any Issuing Bank delivers a certificate requesting compensation pursuant to Section 2.14, (ii) any Lender or any Issuing Bank delivers a notice described in Section 2.15, (iii) any Borrower is required to pay any additional amount to any Lender or any Issuing Bank or any Governmental Authority on account of any Lender or any Issuing Bank pursuant to Section 2.20, (iv) any Lender refuses to consent to a proposed amendment, waiver, consent or other modification of this Agreement or any other Loan Document which has been approved by the Required Lenders and which additionally requires the consent of such Lender for approval pursuant to Section 9.08(b), (v) any Revolving Credit Lender refuses to consent to a proposed Loan Modification Offer with respect to its Revolving Credit Commitments, (vi) any Term Lender refuses to consent to a proposed Loan Modification Offer with respect to its Term Loans or (vii) any Lender becomes a Defaulting Lender, the U.S. Borrower may, at its sole expense and effort, upon notice to such Lender or such Issuing Bank and the Administrative Agent, require such Lender or such Issuing Bank to transfer and assign, without recourse (in accordance with and subject to the restrictions contained in Section 9.04), all of its interests, rights and obligations under this Agreement (or, in the case of clause (iv), (v) or (vi) above, all its interests, rights and obligations with respect to the Class of Loans or Commitments that is the subject of the related consent, amendment, waiver or other modification or that has ongoing funding requirements) to an assignee that shall assume such assigned obligations (which assignee may be another Lender, if a Lender accepts such assignment); *provided* that (x) such assignment shall not conflict with any law, rule or regulation or order of any court or other Governmental Authority having jurisdiction, (y) to the extent such approval would be required pursuant to Section 9.04 if an assignment of the applicable Loans or Commitments were being made to such assignee, the U.S. Borrower shall have received the prior written consent of the Administrative Agent (and, if a Revolving Credit Commitment is being assigned, of each Issuing Bank and the N.Z. Swingline Lender (in the case of a Multicurrency Revolving Credit Commitment)), which consent shall not unreasonably be withheld, and (z) the applicable Borrower or such assignee shall have paid to the affected Lender or affected Issuing Bank in immediately available funds an amount equal to the sum of the principal of and interest accrued to the date of such payment on the outstanding Loans or L/C Disbursements of such Lender or such Issuing Bank, respectively, plus all Fees and other amounts accrued for the account of such Lender or such Issuing Bank hereunder (including any amounts under Section 2.14, Section 2.16 and Section 2.20), in each case with respect to the Loans or Commitments subject to such assignment; *provided further* that, if prior to any such transfer and assignment the circumstances or event that resulted in such Lender's or such Issuing Bank's claim for compensation under Section 2.14 or notice under Section 2.15 or the amounts paid pursuant to Section 2.20, as the case may be, cease to cause such Lender or such Issuing Bank to suffer increased costs or reductions in amounts received or receivable or reduction in return on capital, or cease to have the consequences specified in Section 2.15, or cease to result in amounts being payable under Section 2.20, as the case may be (including as a result of any action taken by such Lender or such Issuing Bank pursuant to paragraph (b) below), or if such Lender or such Issuing Bank shall waive its right to claim further compensation under Section 2.14 in respect of such circumstances or event or shall withdraw its notice under Section 2.15 or shall waive its right to further payments under Section 2.20 in respect of such circumstances or event or shall consent to the proposed amendment, waiver, consent or other modification, as the case may be, then such Lender or such Issuing Bank shall not thereafter be required to make any such transfer and

assignment hereunder. Each party hereto agrees that an assignment required pursuant to this paragraph may be effected pursuant to an Assignment and Acceptance executed by the Borrower, the Administrative Agent and the assignee and that the Lender required to make such assignment need not be a party thereto.

(b) If (i) any Lender or any Issuing Bank shall request compensation under Section 2.14, (ii) any Lender or the Issuing Bank delivers a notice described in Section 2.15 or (iii) any Borrower is required to pay any additional amount to any Lender or any Issuing Bank or any Governmental Authority on account of any Lender or any Issuing Bank, pursuant to Section 2.20, then such Lender or such Issuing Bank shall use reasonable efforts (which shall not require such Lender or such Issuing Bank to incur an unreimbursed loss or unreimbursed cost or expense or otherwise take any action inconsistent with its internal policies or legal or regulatory restrictions or suffer any disadvantage or burden deemed by it to be significant) (x) to file any certificate or document reasonably requested in writing by a Borrower or (y) to assign its rights and delegate and transfer its obligations hereunder to another of its offices, branches or affiliates, if such filing or assignment would reduce its claims for compensation under Section 2.14 or enable it to withdraw its notice pursuant to Section 2.15 or would reduce amounts payable pursuant to Section 2.20, as the case may be, in the future. The Borrowers hereby agree to pay all reasonable costs and expenses incurred by any Lender or any Issuing Bank in connection with any such filing or assignment, delegation and transfer.

SECTION 2.22. ***N.Z. Swingline Loans***. (a) *N.Z. Swingline Commitments*. Subject to the terms and conditions and relying upon the representations and warranties herein set forth, the N.Z. Swingline Lender agrees to make N.Z. Swingline Loans to the New Zealand Borrower, in New Zealand Dollars, at any time and from time to time on and after the Closing Date and until the earlier of the Revolving Credit Maturity Date and the termination of the Multicurrency Revolving Credit Commitments in accordance with the terms hereof, in an aggregate principal amount at any time outstanding that will not result in (x) the aggregate principal amount of all N.Z. Swingline Loans exceeding $5,000,000 in the aggregate (such amount to be increased and/or decreased from time to time as mutually agreed between the New Zealand Borrower and the N.Z. Swingline Lender (but not to exceed $50,000,000 in any event) in a supplement to the applicable N.Z. Swingline Lender Designation Agreement that is delivered to the Administrative Agent), (y) the Aggregate Multicurrency Revolving Credit Exposure attributable to Loans to, and Letters of Credit issued for the account of, the Australian Borrower, the New Zealand Borrower and the U.S. Borrower in Australian Dollars exceeding the ANZ Sublimit or (z) the Aggregate Multicurrency Revolving Credit Exposure, after giving effect to any N.Z. Swingline Loan, exceeding the Total Multicurrency Revolving Credit Commitment. Each N.Z. Swingline Commitment may be terminated or reduced from time to time as provided herein. Within the foregoing limits, the New Zealand Borrower may borrow, pay or prepay and reborrow N.Z. Swingline Loans hereunder, subject to the terms, conditions and limitations set forth herein. Notwithstanding anything to the contrary herein, the N.Z. Swingline Lender shall not be required to make N.Z. Swingline Loans at any time that there exists a Defaulting Lender under the Multicurrency Revolving Credit Commitments.

(b) *N.Z. Swingline Loans*. The New Zealand Borrower shall notify the N.Z. Swingline Lender and the Administrative Agent by fax, or by telephone (confirmed by fax), not later than 12:00 noon, Auckland time, three Business Days prior to the day of a proposed N.Z. Swingline Loan. Such notice shall be delivered on a Business Day, shall refer to this Agreement and shall specify the requested date (which shall be a Business Day) and the amount of such N.Z. Swingline Loan. The N.Z. Swingline Lender shall make each N.Z. Swingline Loan available to the New Zealand Borrower by means of a credit to an account in the name of the New Zealand Borrower as designated by the New Zealand Borrower in such notice. Notwithstanding anything to the contrary set forth in Section 9.08(b), the borrowing mechanics in respect of the N.Z. Swingline Loans may be modified from time to time by the agreement of the Administrative Agent, the U.S. Borrower and the N.Z. Swingline Lender.

(c) *Prepayment.* The New Zealand Borrower shall have the right at any time and from time to time to prepay any N.Z. Swingline Loan, in whole or in part, upon giving written or fax notice (or telephone notice promptly confirmed by written or fax notice) to the N.Z. Swingline Lender and to the Administrative Agent before 12:00 noon, Auckland time, three Business Days prior to the date of prepayment at the N.Z. Swingline Lender's address for notices specified in Section 9.01 or in the applicable N.Z. Swingline Lender Designation Agreement. All principal payments of N.Z. Swingline Loans shall be accompanied by accrued interest on the principal amount being repaid to the date of payment and shall be subject to Section 2.16.

(d) *Interest*. Each N.Z. Swingline Loan shall be a Bank Bill Rate Loan (except to the extent required to be a Foreign Base Rate Loan as provided for herein) and, subject to the provisions of Section 2.07, shall bear interest as provided in Section 2.06(~~e~~f).

(e) *Participations*. If an Event of Default shall have occurred and be continuing, the N.Z. Swingline Lender may by written notice given to the Administrative Agent not later than 10:00 a.m., Auckland time, on any Business Day require the Multicurrency Revolving Credit Lenders to acquire participations on the next Business Day in all or a portion of the outstanding N.Z. Swingline Loans. Each notice shall specify the aggregate amount of N.Z. Swingline Loans in which such Revolving Credit Lenders will participate. The principal amount of any N.Z. Swingline Loans subject to any such notice, together with all accrued and unpaid interest thereon, shall immediately upon delivery of such notice be converted to Dollar Loans and obligations to pay interest in dollars, respectively, at the Exchange Rate prevailing on the date of such notice. The Administrative Agent will, promptly upon receipt of such notice, give notice to each Multicurrency Revolving Credit Lender specifying in such notice such Revolving Credit Lender's Pro Rata Percentage in dollars of such N.Z. Swingline Loan or Loans. In furtherance of the foregoing, each Multicurrency Revolving Credit Lender hereby absolutely and unconditionally agrees, upon receipt of notice as provided above, to pay to the Administrative Agent, for the account of the N.Z. Swingline Lender, such Lender's Pro Rata Percentage in dollars of such N.Z. Swingline Loans. Each Multicurrency Revolving Credit Lender acknowledges and agrees that its obligation to acquire participations in N.Z. Swingline Loans pursuant to this paragraph is absolute and unconditional and shall not be affected by any circumstance whatsoever, including the occurrence and continuance of a Default or an Event of Default, and that each such payment shall be made without any offset, abatement, withholding or reduction whatsoever. Each Multicurrency Revolving Credit Lender shall comply with its obligation under this paragraph by wire transfer of immediately available funds, in the same manner as provided in Section 2.02(c) with respect to Loans made by such Revolving Credit Lender (and Section 2.02(c) shall apply, *mutatis mutandis*, to the payment obligations of the Revolving Credit Lenders) and the Administrative Agent shall promptly pay to the N.Z. Swingline Lender the amounts so received by it from the Revolving Credit Lenders. The Administrative Agent shall notify the New Zealand Borrower of any participations in any N.Z. Swingline Loan of such Borrower acquired pursuant to this paragraph and thereafter payments in respect of such Swingline Loan shall be made in dollars and to the Administrative Agent and not to a N.Z. Swingline Lender. Any amount received by a Swingline Lender from the applicable Borrower (or other party on behalf of such Borrower) in respect of a Swingline Loan of such Swingline Lender after receipt by such N.Z. Swingline Lender of the proceeds of a sale of participations therein shall be promptly remitted to the Administrative Agent; any such amount received by the Administrative Agent shall be promptly remitted by the Administrative Agent to the Revolving Credit Lenders that shall have made their payments pursuant to this paragraph and to the applicable N.Z. Swingline Lender, as their interests may appear. The purchase of participations in a N.Z. Swingline Loan pursuant to this paragraph shall not relieve the applicable Borrower (or other party liable for obligations of such Borrower) of any default in the payment thereof.

(f) *Designation of N.Z. Swingline Lender*. The New Zealand Borrower may, at any time and from time to time, with the consent of such Lender or Lenders, designate one or more Lenders or their Affiliates to act as a N.Z. Swingline Lender under the terms of this Agreement; *provided* that the Administrative Agent shall be reasonably satisfied that such N.Z. Swingline Lender may make loans and other extensions of credit to the New Zealand Borrower in

compliance with applicable laws and regulations and without being subject to any unreimbursed or unindemnified Tax or other expenses. Upon the receipt by the Administrative Agent of a N.Z. Swingline Lender Designation Agreement executed by a N.Z. Swingline Lender, the New Zealand Borrower, the U.S. Borrower and the Administrative Agent and setting forth the amount of the New Zealand Swingline Commitment of such N.Z. Swingline Lender, such N.Z. Swingline Lender shall be a "N.Z. Swingline Lender" and a party to this Agreement. At any time that there shall be more than one N.Z. Swingline Lender under this Agreement, borrowings and repayments of N.Z. Swingline Loans shall be made ratably in accordance with the N.Z. Swingline Commitments of the N.Z. Swingline Lenders.

SECTION 2.23. ***Letters of Credit***. (a) *General*. Any Borrower may request from any Issuing Bank the issuance of a Letter of Credit for its own account or for the account of any of its Subsidiaries (in which case such Borrower and such Subsidiary shall be co-applicants with respect to such Letter of Credit), in a form reasonably acceptable to the Administrative Agent and such Issuing Bank, at any time and from time to time while the L/C Commitments to any Borrower remain in effect. This Section shall not be construed to impose an obligation upon any Issuing Bank to issue any Letter of Credit that is inconsistent with the terms and conditions of this Agreement.

(b) *Notice of Issuance, Amendment, Renewal, Extension; Certain Conditions* . In order to request the issuance of a Letter of Credit (or to amend, renew or extend an existing Letter of Credit), a Borrower shall deliver in writing to the Administrative Agent and the applicable Issuing Bank (reasonably in advance of the requested date of issuance, amendment, renewal or extension) a notice requesting the issuance of a Letter of Credit, or identifying the Letter of Credit to be amended, renewed or extended, the date of issuance, amendment, renewal or extension, the date on which such Letter of Credit is to expire (which shall comply with paragraph (c) below), the amount of such Letter of Credit, the name and address of the beneficiary thereof, whether such Letter of Credit is to be a Domestic Letter of Credit, a Multicurrency Letter of Credit or a U.K. Letter of Credit and such other information as shall be necessary to prepare such Letter of Credit. A Letter of Credit shall be issued, amended, renewed or extended only if, and upon issuance, amendment, renewal or extension of each Letter of Credit the applicable Borrower shall be deemed to represent and warrant that, after giving effect to such issuance, amendment, renewal or extension (i) the L/C Exposure shall not exceed $200,000,000, and the L/C Exposure attributable to all Letters of Credit issued by any Issuing Bank at any time shall not exceed the L/C Commitment of such Issuing Bank at such time, (ii) the sum of the Aggregate Domestic Revolving Credit Exposure and the Aggregate Competitive Loan Exposure shall not exceed the Total Domestic Revolving Credit Commitment, (iii) the Aggregate Multicurrency Revolving Credit Exposure shall not exceed the Total Multicurrency Revolving Credit Commitment, and the Aggregate Multicurrency Revolving Credit Exposure attributable to Loans to, and Letters of Credit issued for the account of, (x) the U.S. Borrower in Australian Dollars, the Australian Borrower and the New Zealand Borrower shall not exceed the ANZ Sublimit and (y) the Canadian Borrower and the U.S. Borrower borrowing Multicurrency Revolving Loans in Canadian Dollars shall not exceed the Canadian Sublimit and (iv) the Aggregate U.K. Revolving Credit Exposure shall not exceed the Total U.K. Revolving Credit Commitment. In addition, no Issuing Bank shall be required to issue any Letter of Credit if, immediately after giving effect thereto, the Domestic Revolving Credit Exposure, Multicurrency Revolving Credit Exposure or U.K. Revolving Credit Exposure of such Issuing Bank would exceed the Domestic Revolving Credit Commitment, Multicurrency Revolving Credit Commitment or U.K. Revolving Credit Commitment, as the case may be, of such Issuing Bank (with, for purposes of this sentence only, the Domestic L/C Exposure, Multicurrency L/C Exposure or U.K. L/C Exposure of any Issuing Bank being deemed to be the aggregate face amount of each Domestic Letter of Credit, Multicurrency Letter of Credit or U.K. Letter of Credit issued by such Issuing Bank and outstanding at such time); *provided* that the limitation in this sentence shall not apply to amendments, extensions or renewals of any Letter of Credit to the extent that the face amount of such Letter of Credit is not increased thereby. If requested by the Issuing Bank, the Borrower also shall submit a letter of credit application on the Issuing Bank's standard form in connection with any request for a Letter of Credit. In the event of any inconsistency between the terms and

conditions of this Agreement and the terms and conditions of any form of letter of credit application or other agreement submitted by the Borrower to, or entered into by the Borrower with, the Issuing Bank relating to any Letter of Credit, the terms and conditions of this Agreement shall control.

(c) *Expiration Date*. Each Letter of Credit shall expire at the close of business on the earlier of the date that is one year after the date of the issuance of such Letter of Credit and the date that is five Business Days prior to the Revolving Credit Maturity Date, unless such Letter of Credit expires by its terms on an earlier date; *provided, however*, that a Letter of Credit may, upon the request of a Borrower, include a provision whereby such Letter of Credit shall be renewed automatically for additional consecutive periods of 12 months or less (but not beyond the date that is five Business Days prior to the Revolving Credit Maturity Date) unless the Issuing Bank notifies the beneficiary thereof at least 30 days prior to the then applicable expiration date that such Letter of Credit will not be renewed.

(d) *Participations*. By the issuance of a Domestic Letter of Credit and without any further action on the part of any Issuing Bank or the Lenders, the Issuing Bank with respect to such Letter of Credit hereby grants to each Domestic Revolving Credit Lender, and each such Lender hereby acquires from such Issuing Bank, a participation in such Letter of Credit equal to such Lender's Pro Rata Percentage of the aggregate amount available to be drawn under such Letter of Credit, effective upon the issuance of such Letter of Credit (or, in the case of the Existing Letters of Credit, upon the Closing Date). By the issuance of a Multicurrency Letter of Credit and without any further action on the part of any Issuing Bank or the Lenders, the Issuing Bank with respect to such Letter of Credit hereby grants to each Multicurrency Revolving Credit Lender, and each such Lender hereby acquires from such Issuing Bank, a participation in such Letter of Credit equal to such Lender's Pro Rata Percentage of the aggregate amount available to be drawn under such Letter of Credit, effective upon the issuance of such Letter of Credit. By the issuance of a U.K. Letter of Credit and without any further action on the part of any Issuing Bank or the Lenders, the Issuing Bank with respect to such Letter of Credit hereby grants to each U.K. Revolving Credit Lender, and each such Lender hereby acquires from such Issuing Bank, a participation in such Letter of Credit equal to such Lender's Pro Rata Percentage of the aggregate amount available to be drawn under such Letter of Credit, effective upon the issuance of such Letter of Credit. In consideration and in furtherance of the foregoing, each Domestic Revolving Credit Lender, each Multicurrency Revolving Credit Lender and each U.K. Revolving Credit Lender hereby absolutely and unconditionally agrees to pay to the Administrative Agent, for the account of the applicable Issuing Bank, such Lender's Pro Rata Percentage of each Domestic L/C Disbursement, Multicurrency L/C Disbursement or U.K. L/C Disbursement, respectively, made by such Issuing Bank and not reimbursed by the applicable Borrower (or, if applicable, another party pursuant to its obligations under any other Loan Document) forthwith on the date due as provided in Section 2.02(e). Each Revolving Credit Lender acknowledges and agrees that its obligation to acquire participations pursuant to this paragraph in respect of Letters of Credit is absolute and unconditional and shall not be affected by any circumstance whatsoever, including the occurrence and continuance of a Default or an Event of Default, and that each such payment shall be made without any offset, abatement, withholding or reduction whatsoever.

(e) *Reimbursement*. If any Issuing Bank shall make any L/C Disbursement in respect of a Letter of Credit, the applicable Borrower shall pay to such Issuing Bank an amount equal to such L/C Disbursement not later than 12:00 noon New York time (i) on or prior to the Business Day following the day on which such Borrower shall have received notice from such Issuing Bank that payment of such draft will be made, if the applicable Borrower receives such notice from such Issuing Bank on or before 12:00 noon New York time on the day such L/C Disbursement is made and (ii) on or prior to the second Business Day following the day on which such Borrower shall have received notice from such Issuing Bank that payment of such draft will be made, if the applicable Borrower receives such notice from such Issuing Bank after 12:00 noon New York time on the day such L/C Disbursement is made; *provided* that to satisfy its reimbursement obligation under this paragraph (e), a Borrower may, subject to the conditions to borrowing set forth herein, request in accordance with Section 2.03 or 2.22 an ABR Revolving

Loan (in the case of a Domestic Letter of Credit), a Canadian Prime Rate Loan (in the case of a Multicurrency Letter of Credit denominated in Canadian Dollars), a N.Z. Swingline Loan (in the case of a Multicurrency Letter of Credit denominated in New Zealand Dollars**), a SONIA Loan (in the case of a U.K. Letter of Credit**) or a Fixed Rate Loan (in the case of a U.K. Letter of Credit **denominated in a currency other than Pounds** or a Multicurrency Letter of Credit denominated in a currency other than Canadian Dollars or New Zealand Dollars) to be made by the applicable Revolving Credit Lenders or the applicable N.Z. Swingline Lender, as the case may be, in the aggregate amount of any such L/C Disbursement.

(f) *Obligations Absolute*. Each Borrower's obligations to reimburse L/C Disbursements as provided in paragraph (e) above shall be absolute, unconditional and irrevocable, and shall be performed strictly in accordance with the terms of this Agreement, under any and all circumstances whatsoever, and irrespective of:

(i) any lack of validity or enforceability of any Letter of Credit or any Loan Document, or any term or provision therein;

(ii) any amendment or waiver of or any consent to departure from all or any of the provisions of any Letter of Credit or any Loan Document;

(iii) the existence of any claim, setoff, defense or other right that any Borrower, any other party guaranteeing, or otherwise obligated with, any Borrower, any Subsidiary or other Affiliate thereof or any other person may at any time have against the beneficiary under any Letter of Credit, any Issuing Bank, the Administrative Agent or any Lender or any other person, whether in connection with this Agreement, any other Loan Document or any other related or unrelated agreement or transaction;

(iv) any draft or other document presented under a Letter of Credit proving to be forged, fraudulent, invalid or insufficient in any respect or any statement therein being untrue or inaccurate in any respect;

(v) payment by the Issuing Bank under a Letter of Credit against presentation of a draft or other document that does not comply with the terms of such Letter of Credit; and

(vi) any other act or omission to act or delay of any kind of any Issuing Bank, the Lenders, the Administrative Agent or any other person or any other event or circumstance whatsoever, whether or not similar to any of the foregoing, that might, but for the provisions of this Section, constitute a legal or equitable discharge of a Borrower's obligations hereunder.

It is understood that any Issuing Bank may accept documents that appear on their face to be in order, without responsibility for further investigation, regardless of any notice or information to the contrary and, in making any payment under any Letter of Credit such Issuing Bank's exclusive reliance on the documents presented to it under such Letter of Credit as to any and all matters set forth therein, including reliance on the amount of any draft presented under such Letter of Credit, whether or not the amount due to the beneficiary thereunder equals the amount of such draft and whether or not any document presented pursuant to such Letter of Credit proves to be insufficient in any respect, if such document on its face appears to be in order, and whether or not any other statement or any other document presented pursuant to such Letter of Credit proves to be forged or invalid or any statement therein proves to be inaccurate or untrue in any respect whatsoever. The parties hereto expressly agree that, in the absence of gross negligence or willful misconduct on the part of any Issuing Bank (as determined by a court of competent jurisdiction in a final, nonappealable judgment) or the Issuing Bank's willful failure to pay under any Letter of Credit after the presentation to it by the beneficiary of a sight draft and certificate(s) strictly complying with the terms and conditions of a Letter of Credit (as determined by a court of competent jurisdiction in a final, non-appealable judgment), such Issuing Bank shall

be deemed to have exercised care in carrying out its obligations required hereunder. However, the foregoing shall not be construed to excuse any Issuing Bank from liability to the Borrowers to the extent of any direct damages (as opposed to consequential damages, claims in respect of which are hereby waived by the Borrowers to the extent permitted by applicable law) suffered by the Borrowers that are caused by such Issuing Bank's gross negligence or willful misconduct in determining whether drafts and other documents presented under a Letter of Credit comply with the terms thereof;

(g) *Disbursement Procedures*. Any Issuing Bank shall, promptly following its receipt thereof, examine all documents purporting to represent a demand for payment under such Letter of Credit. Such Issuing Bank shall as promptly as possible give telephonic notification, confirmed by fax, to the Administrative Agent and the applicable Borrower of such demand for payment and whether such Issuing Bank has made or will make an L/C Disbursement thereunder; *provided* that any failure to give or delay in giving such notice shall not relieve such Borrower of its obligation to reimburse such Issuing Bank or the Revolving Credit Lenders with respect to any such L/C Disbursement. The Administrative Agent shall promptly give each applicable Revolving Credit Lender notice thereof.

(h) *Interim Interest*. If any Issuing Bank shall make any L/C Disbursement in respect of a Letter of Credit, then, unless the applicable Borrower shall reimburse such L/C Disbursement in full on such date, the unpaid amount thereof shall bear interest for the account of such Issuing Bank, for each day from and including the date of such L/C Disbursement, to but excluding the earlier of the date of payment by such Borrower or the date on which interest shall commence to accrue thereon as provided in Section 2.02(f), at the rate per annum that would apply to such amount if such amount were a Daily Rate Revolving Loan.

(i) *Resignation or Removal of the Issuing Bank*. Any Issuing Bank may resign at any time by giving 30 days' prior written notice to the Administrative Agent, the Lenders and the U.S. Borrower, and may be removed at any time by the U.S. Borrower by notice to any Issuing Bank, the Administrative Agent and the Lenders. Upon the acceptance of any appointment as an Issuing Bank hereunder by a Lender that shall agree to serve as successor Issuing Bank, such successor shall succeed to and become vested with all the interests, rights and obligations of the retiring Issuing Bank and the retiring Issuing Bank shall be discharged from its obligations to issue additional Letters of Credit hereunder. At the time such removal or resignation shall become effective, the Borrowers shall pay all accrued and unpaid fees pursuant to Section 2.05(d). The acceptance of any appointment as an Issuing Bank hereunder by a successor Lender shall be evidenced by an agreement entered into by such successor, in a form reasonably satisfactory to the U.S. Borrower and the Administrative Agent, and, from and after the effective date of such agreement, (i) such successor Lender shall have all the rights and obligations of the previous Issuing Bank under this Agreement and the other Loan Documents and (ii) references herein and in the other Loan Documents to the term "Issuing Bank" shall be deemed to refer to such successor or to any previous Issuing Bank, or to such successor and all previous Issuing Banks, as the context shall require. After the resignation or removal of an Issuing Bank hereunder, the retiring Issuing Bank shall remain a party hereto and shall continue to have all the rights and obligations of an Issuing Bank under this Agreement and the other Loan Documents with respect to Letters of Credit issued by it prior to such resignation or removal, but shall not be required to issue additional Letters of Credit.

(j) *Cash Collateralization*. If any Event of Default shall occur and be continuing, the Borrowers shall, on the Business Day they receive notice from the Administrative Agent or the Required Lenders (or, if the maturity of the Loans has been accelerated, Revolving Credit Lenders holding participations in outstanding Letters of Credit representing greater than 50% of the aggregate undrawn amount of all outstanding Letters of Credit) thereof and of the amount to be deposited, deposit in an account with the Administrative Agent, for the benefit of the Revolving Credit Lenders, an amount in cash equal to the L/C Exposure as of such date. Such deposit shall be held by the Administrative Agent as collateral for the payment and performance of the Obligations. The Administrative Agent shall have exclusive dominion and control,

including the exclusive right of withdrawal, over such account. Other than any interest earned on the investment of such deposits in cash equivalents, which investments shall be made at the option and sole discretion of the Administrative Agent, such deposits shall not bear interest. Interest or profits, if any, on such investments shall accumulate in such account. Moneys in such account shall (i) automatically be applied by the Administrative Agent to reimburse any Issuing Bank for L/C Disbursements for which such Issuing Bank has not been reimbursed, (ii) be held for the satisfaction of the reimbursement obligations of the Borrowers for the L/C Exposure and (iii) if the maturity of the Loans has been accelerated (but subject to the consent of Revolving Credit Lenders holding participations in outstanding Letters of Credit representing greater than 50% of the aggregate undrawn amount of all outstanding Letters of Credit), be applied to satisfy the Obligations. If the Borrowers are required to provide an amount of cash collateral hereunder as a result of the occurrence of an Event of Default, such amount (to the extent not applied as aforesaid) shall be returned to the Borrowers within three Business Days after all Events of Default have been cured or waived.

(k) *Additional Issuing Banks.* The U.S. Borrower may, at any time and from time to time with the consent of the Administrative Agent (which consent shall not be unreasonably withheld) and such Lender, designate one or more additional Lenders to act as an issuing bank under the terms of this Agreement. Any Lender designated as an issuing bank pursuant to this paragraph (k) shall be deemed (in addition to being a Lender) to be the Issuing Bank with respect to Letters of Credit issued or to be issued by such Lender, and all references herein and in the other Loan Documents to the term "Issuing Bank" shall, with respect to such Letters of Credit, be deemed to refer to such Lender in its capacity as Issuing Bank, as the context shall require. Each Lender acting as an Issuing Bank hereunder shall promptly provide to the Administrative Agent such information with respect to the Letters of Credit issued by such Lender as the Administrative Agent may reasonably request to allow the Administrative Agent to calculate the L/C Exposure of any Class, the L/C Participation Fees and the other Obligations with respect to outstanding Letters of Credit.

SECTION 2.24. ***Bankers' Acceptances.*** (a) Subject to the terms and conditions of this Agreement, the Canadian Borrower may request a Multicurrency Revolving Credit Borrowing denominated in Canadian Dollars by presenting drafts for acceptance and purchase as B/As by the Multicurrency Revolving Credit Lenders.

(b) No Contract Period with respect to a B/A to be accepted and, if applicable, purchased as a Multicurrency Revolving Loan shall extend beyond the Revolving Credit Maturity Date. All B/As and B/A Loans shall be denominated in Canadian Dollars.

(c) To facilitate availment of B/A Loans, the Canadian Borrower hereby appoints each Multicurrency Revolving Credit Lender as its attorney to sign and endorse on its behalf (in accordance with a Borrowing Request relating to a B/A Loan pursuant to Section 2.03 or 2.10), in handwriting or by facsimile or mechanical signature as and when deemed necessary by such Multicurrency Revolving Credit Lender, blank forms of B/As in the form requested by such Multicurrency Revolving Credit Lender. The Canadian Borrower recognizes and agrees that all B/As signed and/or endorsed by a Multicurrency Revolving Credit Lender on behalf of the Canadian Borrower shall bind the Canadian Borrower as fully and effectually as if signed in the handwriting of and duly issued by the proper signing officers of the Canadian Borrower. Each Multicurrency Revolving Credit Lender is hereby authorized (in accordance with a Borrowing Request relating to a B/A Loan) to issue such B/As endorsed in blank in such face amounts as may be determined by such Multicurrency Revolving Credit Lender; *provided* that the aggregate amount thereof is equal to the aggregate amount of B/As required to be accepted and purchased by such Multicurrency Revolving Credit Lender. No Multicurrency Revolving Credit Lender shall be liable for any damage, loss or other claim arising by reason of any loss or improper use of any such instrument except for the gross negligence or wilful misconduct of such Multicurrency Revolving Credit Lender or its officers, employees, agents or representatives. Each Multicurrency Revolving Credit Lender shall maintain a record, which shall be made available to the Canadian Borrower upon its request, with respect to B/As (i) received by it in blank

hereunder, (ii) voided by it for any reason, (iii) accepted and purchased by it hereunder and (iv) canceled at their respective maturities. On request by or on behalf of the Canadian Borrower, a Multicurrency Revolving Credit Lender shall cancel all forms of B/As which have been pre-signed or pre-endorsed on behalf of the Canadian Borrower and that are held by such Multicurrency Revolving Credit Lender and are not required to be issued in accordance with the Canadian Borrower's notice. Alternatively, the Canadian Borrower agrees that, at the request of the Administrative Agent, the Canadian Borrower shall deliver to the Administrative Agent a "depository note" which complies with the requirements of the Depository Bills and Notes Act (Canada), and consents to the deposit of any such depository note in the book-based debt clearance system maintained by the Canadian Depository for Securities.

(d) Drafts of the Canadian Borrower to be accepted as B/As hereunder shall be signed as set forth in this Section 2.24. Notwithstanding that any person whose signature appears on any B/A may no longer be an authorized signatory for any Multicurrency Revolving Credit Lender or the Canadian Borrower at the date of issuance of a B/A, such signature shall nevertheless be valid and sufficient for all purposes as if such authority had remained in force at the time of such issuance and any such B/A so signed shall be binding on the Canadian Borrower.

(e) Promptly following the receipt of a Borrowing Request specifying a Multicurrency Revolving Credit Borrowing by way of B/A, the Administrative Agent shall so advise the Multicurrency Revolving Credit Lenders and shall advise each Multicurrency Revolving Credit Lender of the aggregate face amount of the B/A to be accepted by it and the applicable Contract Period (which shall be identical for all Multicurrency Revolving Credit Lenders). In the case of Multicurrency Revolving Loans comprised of B/A Loans, the aggregate face amount of the B/A to be accepted by a Multicurrency Revolving Credit Lender shall be in a minimum aggregate amount of C$100,000 and shall be a whole multiple of C$100,000, and such face amount shall be in the Multicurrency Revolving Credit Lenders' pro rata portions of such Multicurrency Revolving Credit Borrowing, *provided* that the Administrative Agent may in its sole discretion increase or reduce any Multicurrency Revolving Credit Lender's portion of such B/A Loan to the nearest C$100,000 without reducing the aggregate Multicurrency Revolving Credit Commitments.

(f) The Canadian Borrower may specify in a Borrowing Request pursuant to Section 2.03 or 2.10 that it desires that any B/A requested by such Borrowing Request be purchased by the Multicurrency Revolving Credit Lenders, in which case the Multicurrency Revolving Credit Lenders shall, upon acceptance of a B/A by a Multicurrency Revolving Credit Lender, purchase each B/A from the Canadian Borrower at the Discount Rate for such Multicurrency Revolving Credit Lender applicable to such B/A accepted by it and provide to the Administrative Agent the Discount Proceeds for the account of the Canadian Borrower. The Acceptance Fee payable by the Canadian Borrower to a Multicurrency Revolving Credit Lender under Section 2.06(~~d~~**e**) in respect of each B/A accepted by such Multicurrency Revolving Credit Lender shall be set off against and deducted from the Discount Proceeds payable by such Multicurrency Revolving Credit Lender under this Section 2.24.

(g) Each Multicurrency Revolving Credit Lender may at any time and from time to time hold, sell, rediscount or otherwise dispose of any or all B/As accepted and purchased by it.

(h) If a Multicurrency Revolving Credit Lender is not a chartered bank under the Bank Act (Canada) or if a Multicurrency Revolving Credit Lender notifies the Administrative Agent in writing that it is otherwise unable to accept Bankers' Acceptances, such Multicurrency Revolving Credit Lender will, instead of accepting and purchasing Bankers' Acceptances, make an advance (a "***B/A Equivalent Loan***") to the Canadian Borrower in the amount and for the same term as the draft that such Multicurrency Revolving Credit Lender would otherwise have been required to accept and purchase hereunder. Each such Multicurrency Revolving Credit Lender will provide to the Administrative Agent the Discount Proceeds of such B/A Equivalent Loan for the account of the Canadian Borrower. Each such B/A Equivalent Loan will bear interest at the same rate that would result if such Multicurrency Revolving Credit Lender had accepted (and been paid an

Acceptance Fee) and purchased (on a discounted basis at the Discount Rate) a Bankers' Acceptance for the relevant Contract Period (it being the intention of the parties that each such B/A Equivalent Loan shall have the same economic consequences for the Multicurrency Revolving Credit Lenders and the Canadian Borrower as the Bankers' Acceptance which such B/A Equivalent Loan replaces). All such interest shall be paid in advance on the date such B/A Equivalent Loan is made, and will be deducted from the principal amount of such B/A Equivalent Loan in the same manner in which the deduction based on the Discount Rate and the applicable Acceptance Fee of a Bankers' Acceptance would be deducted from the face amount of the Bankers' Acceptance.

(i) The Canadian Borrower waives presentment for payment and any other defense to payment of any amounts due to a Multicurrency Revolving Credit Lender in respect of a B/A accepted and purchased by it pursuant to this Agreement which might exist solely by reason of such B/A being held, at the maturity thereof, by such Multicurrency Revolving Credit Lender in its own right, and the Canadian Borrower agrees not to claim any days of grace if such Multicurrency Revolving Credit Lender, as holder, claims payment from or sues the Canadian Borrower on the B/A for payment of the amount payable by the Canadian Borrower thereunder. On the last day of the Contract Period of a B/A, or such earlier date as may be required or permitted pursuant to the provisions of this Agreement, the Canadian Borrower shall pay the Multicurrency Revolving Credit Lender that has accepted and purchased a B/A or advanced a B/A Equivalent Loan the full face amount of such B/A or B/A Equivalent Loan, as the case may be, and, after such payment, the Canadian Borrower shall have no further liability in respect of such B/A and such Multicurrency Revolving Credit Lender shall be entitled to all benefits of, and be responsible for all payments due to third parties under, such B/A.

(j) Except as required by any Multicurrency Revolving Credit Lender upon the occurrence of an Event of Default, no B/A Loan may be repaid by the Canadian Borrower prior to the expiry date of the Contract Period applicable to such B/A Loan; *provided*, *however*, that any B/A Loan may be defeased as provided in Section 2.12(a).

SECTION 2.25. ***Incremental Revolving Credit Commitments.*** (a) One or more Borrowers may, by written notice to the Administrative Agent from time to time, request Incremental Revolving Credit Commitments from one or more Incremental Revolving Credit Lenders, which may include any existing Lender (each of which shall be entitled to agree or decline to participate in its sole discretion); *provided* that each Incremental Revolving Credit Lender, if not already a Lender hereunder, to the extent such approval would be required pursuant to Section 9.04 if an assignment of the applicable Incremental Revolving Credit Commitments were being made to such Incremental Revolving Credit Lender, shall be subject to the approval of the Administrative Agent, each Issuing Bank and, in the case of Incremental Multicurrency Revolving Credit Commitments, the applicable N.Z. Swingline Lender (which approvals shall not be unreasonably withheld). Such written notice shall set forth (i) the identity of the Borrower or Borrowers to which the Incremental Revolving Credit Commitments shall be extended, (ii) the amount of the Incremental Revolving Credit Commitments being requested, (iii) the date on which such Incremental Revolving Credit Commitments are requested to become effective (which shall not be less than five (5) Business Days nor more than 60 days after the date of such notice, unless otherwise agreed to by the Administrative Agent) and (iv) whether such Incremental Revolving Credit Commitments are to be Domestic Revolving Credit Commitments, Multicurrency Revolving Credit Commitments, U.K. Revolving Credit Commitments or commitments to make revolving loans on terms different from the then existing Revolving Loans (such loans, "***Specified Incremental Revolving Loans***" and, such commitments, "***Specified Incremental Revolving Credit Commitments***").

(b) The applicable Borrower or Borrowers and each Incremental Revolving Credit Lender shall execute and deliver to the Administrative Agent an Incremental Assumption Agreement and such other documentation as the Administrative Agent shall reasonably specify to evidence the Incremental Revolving Credit Commitment of such Incremental Revolving Credit Lender. Each Incremental Assumption Agreement shall specify the terms of the Incremental Revolving Credit

Commitment and the Incremental Revolving Loans to be made thereunder; *provided* that (i) without the prior written consent of the Required Lenders, the final maturity date of any Specified Incremental Revolving Credit Commitments shall be no earlier than the Revolving Credit Maturity Date under this Agreement; *provided* that, at the election of the applicable Borrower or Borrowers, Specified Incremental Revolving Loans in an aggregate principal amount not to exceed $500,000,000 shall not be subject to this clause (i) and (ii) terms of any Specified Incremental Revolving Credit Commitments and the Specified Incremental Revolving Loans to be made thereunder, to the extent not consistent with the Revolving Credit Commitments and the Revolving Loans extended under this Agreement, shall be reasonably satisfactory to the Administrative Agent. The Administrative Agent shall promptly notify each Lender as to the effectiveness of each Incremental Assumption Agreement. Each of the parties hereto hereby agrees that, upon the effectiveness of any Incremental Assumption Agreement, this Agreement shall be deemed amended to the extent (but only to the extent) necessary to reflect the existence and terms of the Incremental Revolving Credit Commitment and the Incremental Revolving Loans evidenced thereby, and the Administrative Agent and the Borrowers may revise this Agreement to evidence such amendments.

(c) Notwithstanding the foregoing, no Incremental Revolving Credit Commitment shall become effective under this Section 2.25 unless, (i) on the date of such effectiveness, the conditions set forth in Section 4.01(b) and (c) shall be satisfied (it being understood that in the case of any Incremental Revolving Commitments being incurred for the purpose of financing an acquisition the condition set forth in Section 4.01(c) may, at the option of Holdings, be tested on the date the definitive agreements for such acquisition are entered into and the Administrative Agent shall have received a certificate to that effect dated such date) and executed by a Responsible Officer of the U.S. Borrower, (ii) at the time of, and after giving effect to, the incurrence of the Incremental Revolving Loans to be made under such Incremental Revolving Credit Commitment (assuming the full amount thereof was drawn at such time), Holdings would be in pro forma compliance with Sections 6.05 and 6.06 and (iii) if reasonably requested the Administrative Agent shall have received legal opinions, board resolutions and an officer's certificate consistent with those delivered on the Closing Date pursuant to Section 4.02 and such other documents as the Administrative Agent may reasonably request.

(d) Each of the parties hereto hereby agrees that the Administrative Agent may take any and all action as may be reasonably necessary to ensure that all Incremental Revolving Loans (other than Specified Incremental Revolving Loans), when originally made, are included in each Borrowing of outstanding Revolving Loans of the applicable Class on a pro rata basis. This may be accomplished (i) by requiring the outstanding Revolving Loans of the affected Class to be prepaid with the proceeds of a new Revolving Credit Borrowing of such Class, (ii) by causing Lenders of the affected Class to assign portions of their outstanding Revolving Loans of such Class to Incremental Revolving Credit Lenders or (iii) by any combination of the foregoing. Any conversion of Fixed Rate Loans to Daily Rate Loans contemplated in the preceding sentence shall be subject to Section 2.16. If any Incremental Revolving Loan is to be allocated to an existing Interest Period for a Eurocurrency Revolving Credit Borrowing of a Class then, subject to Section 2.07, the interest rate applicable to such Incremental Revolving Loan for the remainder of such Interest Period and the other economic consequences thereof shall be as set out in the applicable Incremental Assumption Agreement.

SECTION 2.26. ***Incremental Term Loan Commitments.*** (a) One or more Borrowers may, by written notice to the Administrative Agent from time to time, request Incremental Term Loan Commitments from one or more Incremental Term Lenders, which may include any existing Lender (each of which shall be entitled to agree or decline to participate in its sole discretion); *provided* that each Incremental Term Lender, if not already a Lender hereunder, to the extent such approval would be required pursuant to Section 9.04 if an assignment of the applicable Incremental Term Commitments were being made to such Incremental Term Lender, shall be subject to the approval of the Administrative Agent (which approval shall not be unreasonably withheld). Such notice shall set forth (i) the identity of the Borrower or Borrowers to which the Incremental Term Loan Commitments shall be provided, (ii) the amount of the

Incremental Term Loan Commitments being requested, (iii) if the Incremental Term Loan Commitments are requested in an Alternative Currency, the applicable currency, (iv) the date on which such Incremental Term Loan Commitments are requested to become effective (which shall not be less than five (5) Business Days nor more than 60 days after the date of such notice, unless otherwise agreed to by the Administrative Agent) and (v) whether such Incremental Term Loan Commitments are commitments to make additional Tranche A Loans of the same Class or commitments to make term loans of a different Class with terms different from the Tranche A Loans (such loans, "***Specified Incremental Term Loans***" and, such commitments, "***Specified Incremental Term Loan Commitments***").

(b) The applicable Borrower or Borrowers and each Incremental Term Lender shall execute and deliver to the Administrative Agent an Incremental Assumption Agreement and such other documentation as the Administrative Agent shall reasonably specify to evidence the Incremental Term Loan Commitment of such Incremental Term Lender. Each Incremental Assumption Agreement shall specify the terms of the Incremental Term Loan, to be made thereunder, *provided* that (i) without the prior written consent of the Required Lenders, the final maturity date of any Specified Incremental Term Loans shall be no earlier than the Tranche A Maturity Date under this Agreement and the weighted average life to maturity of such Specified Incremental Term Loans shall be no shorter than the weighted average life to maturity of the Tranche A Loans; *provided* that, at the election of the applicable Borrower or Borrowers, Specified Incremental Term Loans in an aggregate principal amount not to exceed $500,000,000 shall not be subject to this clause (i), (ii) in connection with any incurrence of additional Tranche A Loans, the amounts payable on each Tranche A Repayment Date may be adjusted to reflect the incurrence of such additional Tranche A Loans; *provided* that such adjustment shall not decrease the amounts payable to the Tranche A Lenders in any period after the incurrence of such additional Tranche A Loans and (iii) the other terms of any Specified Incremental Term Loans, to the extent not consistent with the Term Loans extended under this Agreement, shall be reasonably satisfactory to the Administrative Agent. The Administrative Agent shall promptly notify each Lender as to the effectiveness of each Incremental Assumption Agreement. Each of the parties hereto hereby agrees that, upon the effectiveness of any Incremental Assumption Agreement, this Agreement shall be deemed amended to the extent (but only to the extent) necessary to reflect the existence and terms of the Incremental Term Loan Commitment and the Incremental Term Loans evidenced thereby, and the Administrative Agent and the Borrowers may revise this Agreement to evidence such amendments.

(c) Notwithstanding the foregoing, no Incremental Term Loan Commitment shall become effective under this Section 2.26 unless, (i) on the date of such effectiveness, the conditions set forth in Section 4.01(b) and (c) shall be satisfied (it being understood that in the case of any Incremental Term Loan Commitments being incurred for the purpose of financing an acquisition the condition set forth in Section 4.01(c) may, at the option of Holdings, be tested on the date the definitive agreements for such acquisition are entered into) and the Administrative Agent shall have received a certificate to that effect dated such date and executed by a Responsible Officer of the U.S. Borrower, (ii) at the time of, and after giving effect to, the incurrence of the Incremental Term Loans under such Incremental Term Loan Commitments, Holdings would be in pro forma compliance with Sections 6.05 and 6.06 and (iii) if reasonably requested, the Administrative Agent shall have received legal opinions, board resolutions and an officer's certificate consistent with those delivered on the Closing Date pursuant to Section 4.02 and such other documents as the Administrative Agent may reasonably request.

(d) Each of the parties hereto hereby agrees that the Administrative Agent may take any and all action as may be reasonably necessary to ensure that all Incremental Term Loans (other than Specified Incremental Term Loans), when originally made, are included in each Borrowing of outstanding Tranche A Loans on a pro rata basis. This may be accomplished at the discretion of the Administrative Agent by requiring each Borrowing of outstanding Fixed Rate Term Loans to be converted into a Borrowing of Daily Rate Term Loans on the date of each Incremental Term Loan, or by allocating a portion of each Incremental Term Loan to each Borrowing of outstanding Fixed Rate Term Loans on a pro rata basis, even though as a result thereof such Incremental Term

Loan may effectively have a shorter Interest Period than the Term Loans included in the Borrowing of which they are a part (and notwithstanding any other provision of this Agreement that would prohibit such an initial Interest Period). Any conversion of Fixed Rate Term Loans to Daily Rate Term Loans required by the preceding sentence shall be subject to Section 2.16. If any Incremental Term Loan is to be allocated to an existing Interest Period for a Fixed Rate Term Borrowing then, subject to Section 2.07, the interest rate applicable to such Incremental Term Loan for the remainder of such Interest Period and the other economic consequences thereof shall be as set out in the applicable Incremental Assumption Agreement. In addition, to the extent that any Incremental Term Loans are Tranche A Loans, the scheduled amortization payments under Section 2.11(a)(i) required to be made after the making of such Incremental Term Loans shall be ratably increased by the aggregate principal amount of such Incremental Term Loans.

SECTION 2.27. ***Competitive Bid Procedure***. (a) Subject to the terms and conditions set forth herein, from time to time from and after the Closing Date and until the earlier of the Revolving Credit Maturity Date and the termination of the Domestic Revolving Credit Commitments in accordance with the terms hereof, the U.S. Borrower may request Competitive Bids and the U.S. Borrower may (but shall not have any obligation to) accept Competitive Bids and borrow Competitive Loans; *provided* that (i) the Aggregate Competitive Loan Exposures shall not exceed 50% of the Total Domestic Revolving Credit Commitment and (ii) the sum of the Aggregate Domestic Revolving Credit Exposures plus the Aggregate Competitive Loan Exposures shall not exceed the Total Domestic Revolving Credit Commitment. To request Competitive Bids, the U.S. Borrower shall deliver in writing to the Advance Agent a duly completed Competitive Bid Request, to be received by the Advance Agent, not later than 10:00 a.m., New York City time, five Business Days before the date of the proposed Competitive Borrowing. A Competitive Bid Request that does not conform substantially to Exhibit J-1 may be rejected in the Advance Agent's sole discretion. Each Competitive Bid Request shall specify the following information in compliance with Section 2.02:

(1) the aggregate amount of the requested Competitive Borrowing;

(2) the date of such Competitive Borrowing, which shall be a Business Day;

(3) whether such Competitive Borrowing is to be a Eurocurrency Competitive Borrowing or a Flat Rate Competitive Borrowing;

(4) the Interest Period to be applicable to such Competitive Borrowing, which shall be a period contemplated by the definition of the term "Interest Period"; and

(5) the location and number of the account of the U.S. Borrower to which funds are to be disbursed.

Promptly following receipt of a Competitive Bid Request in accordance with this Section, the Advance Agent shall deliver to the Domestic Revolving Credit Lenders a Notice of Competitive Bid Request, inviting the Domestic Revolving Credit Lenders to submit Competitive Bids.

(b) Each Domestic Revolving Credit Lender may (but shall not have any obligation to) make one or more Competitive Bids to the U.S. Borrower in response to a Competitive Bid Request. Each Competitive Bid by a Domestic Revolving Credit Lender must be received in writing by the Advance Agent, not later than 9:30 a.m., New York City time, four Business Days before the proposed date of such Competitive Borrowing. Competitive Bids that do not conform substantially to the format of Exhibit J-3 may be rejected by the Advance Agent, and the Advance Agent shall notify the applicable Domestic Revolving Credit Lender as promptly as practicable. Each Competitive Bid shall specify (i) the principal amount of the Competitive Loan or Loans that the Domestic Revolving Credit Lender is willing to make (which shall be a minimum of the Borrowing Minimum and an integral multiple of the Borrowing Multiple, and which may equal the entire principal amount of the Competitive Bid Request by the U.S. Borrower), (ii) the Competitive Bid Rate or Rates at which the Domestic Revolving Credit Lender is prepared to

make such Competitive Loan or Loans (expressed as a percentage rate per annum in the form of a decimal to no more than four decimal places) and (iii) the Interest Period applicable to each such Competitive Loan and the last day thereof (which shall be a period contemplated by the definition of the term "Interest Period").

(c) The Advance Agent shall promptly notify the U.S. Borrower by fax of the Competitive Bid Rate and the principal amount specified in each Competitive Bid and the identity of the Domestic Revolving Credit Lender that shall have made such Competitive Bid.

(d) Subject only to the provisions of this paragraph, the U.S. Borrower may accept or reject any Competitive Bid. The U.S. Borrower shall notify the Advance Agent by telephone, confirmed by fax in the form of a Competitive Bid Accept/Reject Letter, whether and to what extent it has decided to accept or reject each Competitive Bid, not later than 2:00 p.m., New York City time, three Business Days before the date of the proposed Competitive Borrowing; *provided* that (i) the failure of the U.S. Borrower to give such notice shall be deemed to be a rejection of each Competitive Bid, (ii) the U.S. Borrower shall not accept a Competitive Bid made at a particular Competitive Bid Rate if the U.S. Borrower rejects a Competitive Bid made at a lower Competitive Bid Rate, (iii) the aggregate amount of the Competitive Bids accepted by such Borrower shall not exceed the aggregate amount of the requested Competitive Borrowing specified in the related Competitive Bid Request and (iv) the U.S. Borrower may accept Competitive Bids at the same Competitive Bid Rate in part, which acceptance, in the case of multiple Competitive Bids at such Competitive Bid Rate, shall be made pro rata in accordance with the amount of each such Competitive Bid, *provided* that no Competitive Loan may be in an amount less than the Borrowing Minimum and amounts subject to pro rata allocation shall be rounded to integral multiples of the Borrowing Multiple in a manner which shall be in the discretion of the U.S. Borrower. A notice given by the U.S. Borrower pursuant to this paragraph (d) shall be irrevocable.

(e) The Advance Agent shall promptly notify each bidding Domestic Revolving Credit Lender by fax whether or not its Competitive Bid has been accepted (and, if so, the amount and Competitive Bid Rate so accepted), and each successful bidder will thereupon become bound, subject to the terms and conditions hereof, to make the Competitive Loan in respect of which its Competitive Bid has been accepted.

(f) If the Advance Agent shall elect to submit a Competitive Bid in its capacity as a Domestic Revolving Credit Lender, it shall submit such Competitive Bid directly to the U.S. Borrower at least one quarter of an hour earlier than the time by which the other Domestic Revolving Credit Lenders are required to submit their Competitive Bids to the Advance Agent pursuant to Section 2.27(b).

ARTICLE III

Representations and Warranties

Each of Holdings and each Borrower represents and warrants to the Administrative Agent, each Issuing Bank and each of the Lenders that:

SECTION 3.01. ***Organization; Powers***. Each of Holdings, each Borrower and each Significant Subsidiary (a) is duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization to the extent such concept is applicable, (b) has all requisite power and authority to own its property and assets and to carry on its business as now conducted and as proposed to be conducted, (c) is qualified to do business in, and is in good standing in, every jurisdiction where such qualification is required, except where the failure so to qualify could not reasonably be expected to result in a Material Adverse Effect and (d) has the power and authority to execute, deliver and perform its obligations under each of the Loan Documents to which it is or will be a party and, in the case of the Borrowers, to borrow hereunder.

SECTION 3.02. ***Authorization***. The execution, delivery and performance by the Loan Parties of the Loan Documents to which each is or will be a party and the consummation by the Loan Parties of the Transactions (including the borrowings by the Borrowers hereunder) (a) have been duly authorized by all requisite corporate, partnership and, if required, stockholder and partner action and (b) will not (i) violate (x) any provision of law, statute, rule or regulation in any material respect, or of the certificate or articles of incorporation, partnership agreements or other constitutive documents or by-laws of Holdings, any Borrower or any Subsidiary, (y) any order of any Governmental Authority or (z) any provision of any indenture, agreement or other instrument to which Holdings or any Borrower or any Subsidiary is a party or by which any of them or any of their property is or may be bound in any material respect, (ii) or give rise to any right to accelerate or to require the prepayment, repurchase or redemption of any obligation under any such indenture, agreement or other instrument or (iii) result in the creation or imposition of any Lien upon or with respect to any property or assets now owned or hereafter acquired by Holdings, any Borrower or any Subsidiary.

SECTION 3.03. ***Enforceability***. This Agreement has been duly executed and delivered by Holdings and each Borrower and constitutes, and each other Loan Document when executed and delivered by each Loan Party party thereto will constitute, a legal, valid and binding obligation of such Loan Party enforceable against such Loan Party in accordance with its terms, subject to the effects of bankruptcy, insolvency, fraudulent conveyance, moratorium and other similar laws relating to or affecting creditors' rights generally and to general equitable principles (whether considered in a proceeding in equity or at law) and an implied covenant of good faith and fair dealing.

SECTION 3.04. ***Governmental Approvals***. No action, consent or approval of, registration or filing with or any other action by any Governmental Authority is or will be required in connection with the Transactions, except (a) for such as have been made or obtained and are in full force and effect or (b) where the failure to obtain such consent or approval to make such registration or filing or other action, in the aggregate, could not reasonably be expected to have a Material Adverse Effect.

SECTION 3.05. ***Financial Statements***. Holdings has heretofore furnished to the Lenders (a) its consolidated balance sheets and statements of income, stockholders' equity and cash flows as of and for the fiscal year ended December 31, 2016, audited by and accompanied by the opinion of KPMG LLP, independent public accountants and (b) its unaudited consolidated balance sheets and statements of income, stockholders' equity and cash flows as of and for the fiscal quarters ended March 31, 2017 and June 30, 2017. Such financial statements present fairly in all material respects the financial condition and results of operations and cash flows of Holdings and its consolidated Subsidiaries as of such date and for such period. Such balance sheets and the notes thereto disclose all material liabilities, direct or contingent, of Holdings and its consolidated Subsidiaries as of the date thereof. Such financial statements were prepared in accordance with GAAP applied on a consistent basis, subject to normal year-end audit adjustments and the absence of footnotes in the case of the statements referred to in clause (b) above.

SECTION 3.06. ***No Material Adverse Change***. No event, change or condition has occurred that has had a material adverse effect on the business, assets, operations or financial condition, of Holdings, the U.S. Borrower and the Subsidiaries, taken as a whole, since December 31, 2016.

SECTION 3.07. ***Litigation; Compliance with Laws***. (a) Except as set forth on Schedule 3.09, there are not any actions, suits or proceedings at law or in equity or by or before any Governmental Authority now pending or, to the knowledge of Holdings or any Borrower, threatened against or affecting Holdings or any Borrower or any Subsidiary or any business, property or rights of any such person (i) that involve any Loan Document or the Transactions or (ii) that could reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect.

(b) None of Holdings, the U.S. Borrower or any of the Subsidiaries or any of their respective material properties or assets is in violation of, nor will the continued operation of their material properties and assets as currently conducted violate, any law, rule or regulation, or is in default with respect to any judgment, writ, injunction, decree or order of any Governmental Authority, where such violation or default could reasonably be expected to result in a Material Adverse Effect.

SECTION 3.08. ***Federal Reserve Regulations***. (a) None of Holdings, the U.S. Borrower or any of the Subsidiaries is engaged principally, or as one of its important activities, in the business of extending credit for the purpose of buying or carrying Margin Stock.

(b) No part of the proceeds of any Loan or any Letter of Credit will be used, whether directly or indirectly, and whether immediately, incidentally or ultimately, for any purpose that entails a violation of the provisions of Regulation T, U or X.

SECTION 3.09. ***Investment Company Act.*** None of Holdings, the U.S. Borrower or any Subsidiary (other than any Investment Subsidiary) is an "investment company" as defined in, or subject to regulation under, the Investment Company Act of 1940, as amended.

SECTION 3.10. ***Patriot Act; FCPA; OFAC*** . (a) Holdings, the U.S. Borrower and the Subsidiaries are, and except as otherwise disclosed in Holdings' Form 10-K for the fiscal year ended December 31, 2016, in compliance, in all material respects, with (i) (x) the Trading with the Enemy Act, as amended, and each of the foreign assets control regulations of the United States Treasury Department (31 CFR, Subtitle B, Chapter V, as amended) and those administered by the U.S. Department of State and any other enabling legislation or executive order relating thereto and (y) the economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by United Nations Security Council, the European Union or Her Majesty's Treasury of the United Kingdom (collectively, "***Sanctions***"), and any other enabling legislation or executive order relating thereto, and (ii) the USA PATRIOT Act. No part of the proceeds of the Loans will be used by Holdings, the U.S. Borrower or any of the Subsidiaries for any payments to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended, the UK Bribery Act 2010, the Canadian Corruption of Foreign Public Officials Act, and, to the extent applicable to any Borrower, the OECD Convention on Combating Bribery of Foreign Officials in International Business Transactions and the United Nations Convention Against Corruption (collectively, the "***Anti-Corruption Laws***").

(b) None of Holdings, the U.S. Borrower or any Subsidiary or, to the knowledge of Holdings or the U.S. Borrower, any director, officer, agent, employee or Affiliate of Holdings, the Borrower or any Subsidiary as of the Closing Date, (i) is a person on the list of "Specially Designated Nationals and Blocked Persons" or any other Sanctions-related list of designated persons maintained by the United States Treasury Department or the U.S. Department of State or by the United Nations Security Council, the European Union or any member state of the European Union, or Her Majesty's Treasury of the United Kingdom (ii) is operating, organized or resident in a country or territory which is itself the target of Sanctions, (iii) is any person 50% or more owned or otherwise controlled by any such person or persons or (iv) is the subject of any Sanctions; and none of Holdings, the U.S. Borrower or any Subsidiary will use the proceeds of the Loans for the purpose of financing the activities of any person, or in any country or territory, at the time of such financing, that is the subject of any Sanctions.

SECTION 3.11. ***Use of Proceeds***. The Borrowers will use the proceeds of the Loans (other than Incremental Revolving Loans, Other Revolving Loans and Incremental Term Loans) and will request the issuance of Letters of Credit only for the purposes specified in the preliminary statement to this Agreement.

SECTION 3.12. ***Tax Returns***. Each of Holdings, the U.S. Borrower and the Subsidiaries has filed or caused to be filed all Federal and all material state, local and foreign Tax returns or materials required to have been filed by it and has paid or caused to be paid all material Taxes due and payable by it and all material assessments received by it, except Taxes that are being contested in good faith by appropriate proceedings and for which Holdings, the U.S. Borrower or such Subsidiary, as applicable, shall have set aside on its books adequate reserves.

SECTION 3.13. ***No Material Misstatements***. The information, reports, financial statements, exhibits and schedules furnished in writing by or on behalf of Holdings or any Borrower to the Administrative Agent or any Lender in connection with the negotiation of any Loan Document or included therein or delivered pursuant thereto (other than projections and forward-looking information, pro forma financial information or information of a general economic or industry specific nature), when taken as a whole together with any reports, proxy statements and other materials filed by Holdings, the U.S. Borrower or any Subsidiary with the SEC, or any Governmental Authority succeeding to any or all of the functions of said Commission, or with any national securities exchange, or distributed to its shareholders, as the case may be, do not contain any material misstatement of fact or omitted, omits or will omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were, are or will be made, not materially misleading as of the time when made or delivered; *provided* that to the extent any such information, report, financial statement, exhibit or schedule was based upon or constitutes a forecast or projection, each of Holdings and each Borrower represents only that it acted in good faith and utilized reasonable assumptions and due care in the preparation of such information, report, financial statement, exhibit or schedule.

ARTICLE IV

Conditions of Lending

SECTION 4.01. ***All Credit Events***. The obligations of the Lenders (including the N.Z. Swingline Lenders) to make Loans (other than Incremental Term Loans and Incremental Revolving Credit Commitments which will be subject to such terms and conditions specified in the relevant Incremental Assumption Agreement) and of the Issuing Banks to issue, amend, extend or renew any Letter of Credit (each such event being called a "***Credit Event***") are subject to the satisfaction of the following conditions on the date of each Credit Event:

(a) The Administrative Agent shall have received a notice of such Borrowing as required by Section 2.03 (or such notice shall have been deemed given in accordance with Section 2.03) or, in the case of the issuance, amendment, extension or renewal of a Letter of Credit, the applicable Issuing Bank and the Administrative Agent shall have received a notice requesting the issuance, amendment, extension or renewal of such Letter of Credit as required by Section 2.23(b) or, in the case of the Borrowing of a N.Z. Swingline Loan, the applicable N.Z. Swingline Lender shall have received a notice requesting such N.Z. Swingline Loan as required by Section 2.22(b).

(b) The representations and warranties set forth in Article III hereof and in each other Loan Document shall be true and correct in all material respects on and as of the date of such Credit Event with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date in which case such representations and warranties shall have been true and correct in all materials respect as of such earlier date.

(c) At the time of and immediately after such Credit Event, no Event of Default or Default shall have occurred and be continuing.

Each Credit Event shall be deemed to constitute a representation and warranty by each Borrower and Holdings on the date of such Credit Event as to the matters specified in Section 4.01(b) and (c).

SECTION 4.02. ***Closing Date***. The effectiveness of this Agreement is subject to the satisfaction of the following conditions:

(a) The Administrative Agent shall have received, on behalf of itself, the Lenders and each Issuing Bank, a favorable written opinion of (i) the General Counsel or Deputy General Counsel of the U.S. Borrower, in form and substance reasonably satisfactory to the Administrative Agent, (ii) Simpson Thacher & Bartlett LLP, counsel for Holdings and the Borrowers, in form and substance reasonably satisfactory to the Administrative Agent and (iii) each foreign counsel listed on Schedule 4.02(a), in form and substance reasonably satisfactory to the Administrative Agent, in each case (x) dated on the Closing Date, (y) addressed to the Issuing Banks, the Administrative Agent and the Lenders and (z) covering such matters relating to the Loan Documents and the Transactions as the Administrative Agent shall reasonably request, and Holdings and the Borrowers hereby request such counsel to deliver such opinions.

(b) The Administrative Agent shall have received (i) a copy of the certificate, articles of incorporation or partnership agreement (or comparable organizational document), including all amendments thereto, of each Loan Party, certified as of a recent date by the Secretary of State (or comparable entity) of the jurisdiction of its organization, and a certificate as to the good standing (where such concept is applicable) of each Loan Party as of a recent date, from such Secretary of State (or comparable entity); (ii) a certificate of the Secretary or Assistant Secretary of each Loan Party dated on the Closing Date and certifying (w) that attached thereto is a true and complete copy of the by-laws (or comparable organizational document) of such Loan Party as in effect on the Closing Date and at all times since the date of the resolutions described in clause (x) below, (x) that attached thereto is a true and complete copy of resolutions duly adopted by the Board of Directors or partners (or comparable governing body) of such Loan Party authorizing the execution, delivery and performance of the Loan Documents to which such person is a party and, in the case of the Borrowers, the borrowings hereunder, and that such resolutions have not been modified, rescinded or amended and are in full force and effect, (y) that the certificate, articles of incorporation or partnership agreement (or comparable organizational document) of such Loan Party have not been amended since the date of the last amendment thereto shown on the certificate of good standing furnished pursuant to clause (i) above and (z) as to the incumbency and specimen signature of each officer executing any Loan Document or any other document delivered in connection herewith on behalf of such Loan Party; (iii) a certificate of another officer as to the incumbency and specimen signature of the Secretary or Assistant Secretary executing the certificate pursuant to clause (ii) above; and (iv) such other documents as the Administrative Agent may reasonably request.

(c) The Administrative Agent shall have received a certificate, dated on or shortly prior to the Closing Date and signed by a Responsible Officer of the U.S. Borrower, confirming compliance with the conditions precedent set forth in Section 4.02(f).

(d) The Administrative Agent shall have received a certificate of a Financial Officer of Holdings, in form and substance reasonably satisfactory to the Administrative Agent, to the effect that Holdings and its Subsidiaries, on a consolidated basis after giving effect to the Transactions and the other transactions contemplated hereby, are solvent (which certificate shall be substantially similar to the corresponding certificate delivered in connection with the closing of the Existing Credit Agreement).

(e) The Administrative Agent shall have received all Fees, and other amounts due and payable on or prior to the Closing Date, including, to the extent invoiced two days prior to the Closing Date, reimbursement or payment of all out-of-pocket expenses required to be reimbursed or paid by the Borrowers hereunder or under any other Loan Document.

(f) (i) The representations and warranties set forth in Article III shall be true and correct in all material respects on the Closing Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date in which case such representations and warranties shall have been true and correct in all

materials respect as of such earlier date and (ii) no Default or Event of Default shall have occurred and be continuing.

(g) The Existing Tranche A Loan Refinancing and the Existing Tranche B Loan Prepayment shall have occurred (or shall occur substantially concurrently with the Closing Date).

(h) The Administrative Agent shall have received, at least two (2) Business Days prior to the Closing Date, all documentation and other information reasonably requested by it (on behalf of itself or any Lender) at least 10 Business Days prior to the Closing Date that is required by U.S. regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including the USA PATRIOT Act.

(i) The Guarantee Agreement and all other documents required by Section 5.09, shall have been duly executed by each Loan Party that is to be a party thereto and shall be in full force and effect on the Closing Date.

(j) The Administrative Agent shall have received counterparts of this Agreement that, when taken together, bear the signatures of Holdings, the Borrowers, each Revolving Credit Lender set forth on Schedule 2.01, each Term Lender set forth on Schedule 2.01 and each Issuing Bank set forth on Schedule 2.01(a).

ARTICLE V

Affirmative Covenants

Each of Holdings and each Borrower covenants and agrees with each Lender that so long as this Agreement shall remain in effect and until the Commitments have been terminated and the principal of and interest on each Loan, all Fees and all other expenses or amounts payable under any Loan Document shall have been paid in full and all Letters of Credit have been canceled or have expired and all amounts drawn thereunder have been reimbursed in full, unless the Required Lenders shall otherwise consent in writing, each of Holdings and each Borrower will, and will cause each of the Significant Subsidiaries to:

SECTION 5.01. ***Existence; Businesses and Properties; Compliance with Laws***. (a) Do or cause to be done all things necessary to preserve, renew and keep in full force and effect its legal existence, except (i) as otherwise permitted under Section 6.04 or (ii) in the case of any Significant Subsidiaries, except as could not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect.

(b) Except as could not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect: (i) except as permitted under Section 6.04, do or cause to be done all things necessary to obtain, preserve, renew, extend and keep in full force and effect the rights, licenses, permits, franchises, authorizations, patents, copyrights, trademarks and trade names necessary to the conduct of its business and (ii) comply and cause all Subsidiaries to comply with all applicable laws, rules, regulations and decrees and orders of any Governmental Authority, including Environmental Laws, whether now in effect or hereafter enacted.

SECTION 5.02. ***Insurance***. Keep its insurable properties adequately insured at all times by financially sound and reputable insurers; maintain such other insurance, to such extent and against such risks, including fire and other risks insured against by extended coverage, as is customary with companies in the same or similar businesses operating in the same or similar locations, including public liability insurance against claims for personal injury or death or property damage occurring upon, in, about or in connection with the use of any properties owned, occupied or controlled by it; and maintain such other insurance as may be required by law.

SECTION 5.03. ***Obligations and Taxes***. Pay its Material Indebtedness and other material obligations promptly and in accordance with their terms and pay and discharge promptly

when due all material Taxes, assessments and governmental charges or levies imposed upon it or upon its income or profits or in respect of its property, before the same shall become delinquent or in default, as well as all lawful material claims for labor, materials and supplies or otherwise that, if unpaid, might give rise to a Lien upon such properties or any part thereof; *provided*, *however*, that such payment and discharge shall not be required with respect to any such Tax, assessment, charge, levy or claim so long as the validity or amount thereof shall be contested in good faith by appropriate proceedings and the U.S. Borrower shall have set aside on its books adequate reserves with respect thereto in accordance with GAAP and such contest operates to suspend collection of the contested obligation, Tax, assessment or charge and enforcement of a Lien.

SECTION 5.04. ***Financial Statements, Reports, etc***. In the case of Holdings, furnish to the Administrative Agent (which shall furnish such statements, certificates or other documents received pursuant to this Section 5.04 to each Lender and Issuing Bank):

(a) within 90 days after the end of each fiscal year, its consolidated balance sheet and related statements of income, stockholders' equity and cash flows showing the financial condition of Holdings and its consolidated subsidiaries as of the close of such fiscal year and the results of its operations and the operations of such consolidated subsidiaries for such year, together with comparative figures for the immediately preceding fiscal year, all audited by KPMG LLP or other independent public accountants of recognized national standing and accompanied by an opinion of such accountants (which shall not be qualified as to the scope of such audit or as to "going concern") to the effect that such consolidated financial statements fairly present in all material respects the financial condition and results of operations of Holdings and its consolidated subsidiaries on a consolidated basis in accordance with GAAP consistently applied;

(b) within 45 days after the end of each of the first three fiscal quarters of each fiscal year, its consolidated balance sheet and related statements of income, stockholders' equity and cash flows showing the financial condition of Holdings and its consolidated subsidiaries as of the close of such fiscal quarter and the results of its operations and the operations of such consolidated subsidiaries during such fiscal quarter and the then elapsed portion of the fiscal year, and comparative figures for the same periods in the immediately preceding fiscal year, all certified by one of its Financial Officers as fairly presenting in all material respects the financial condition and results of operations of Holdings and its consolidated subsidiaries on a consolidated basis in accordance with GAAP consistently applied, subject to normal year-end audit adjustments and the absence of footnotes;

(c) concurrently with any delivery of financial statements under paragraph (a) or (b) above, a certificate of a Financial Officer (i) certifying that no Event of Default or Default has occurred or, if such an Event of Default or Default has occurred, specifying the nature and extent thereof and any corrective action taken or proposed to be taken with respect thereto and (ii) setting forth computations in reasonable detail satisfactory to the Administrative Agent demonstrating compliance with the covenants contained in Sections 6.05 and 6.06;

(d) concurrently with any delivery of financial statements under clause (a) above, a certificate of the accounting firm that reported on such financial statements stating whether they obtained knowledge during the course of their examination of such financial statements of any Default or Event of Default with respect to the covenants contained in Sections 6.05 and 6.06 has occurred (which certificate may be limited to the extent required by accounting rules or guidelines);

(e) [Reserved];

(f) promptly after the same become publicly available, copies of all material reports filed by Holdings and the U.S. Borrower with the SEC, or with any national securities exchange, or distributed to its shareholders, as the case may be;

(g) [Reserved]; and

(h) subject to applicable law and third party confidentiality agreements entered into by Holdings or the U.S. Borrower in the ordinary course of business, promptly, from time to time, such other information regarding the operations, business affairs and financial condition of Holdings, the U.S. Borrower or any Subsidiary, or compliance with the terms of any Loan Document, as the Administrative Agent may reasonably request (including on behalf of any Lender).

The U.S. Borrower and Holdings hereby acknowledge and agree that all financial statements and certificates furnished pursuant to paragraphs (a), (b), (c) and (d) above (i) are hereby deemed to be Borrower Materials suitable for distribution, and to be made available, to Public Lenders as contemplated by Section 9.01 and may be treated by the Administrative Agent and the Lenders as if the same had been marked "PUBLIC" in accordance with such section and (ii) shall be deemed to have been delivered on the date on which the U.S. Borrower or Holdings posts such documents, or provides a link thereto on the U.S. Borrower's website on the Internet at http://cbre.com or such other website with respect to which the U.S. Borrower may from time to time notify the Administrative Agent and to which the Lenders have access or (y) files a Form 10-K or 10-Q for the relevant fiscal period, as applicable, with the SEC, or with any national securities exchange, or distributed to its shareholders, as the case may be.

SECTION 5.05. ***Notices of Default***. Furnish to the Administrative Agent (which shall furnish such notice to each Lender and Issuing Bank) prompt written notice of any Event of Default or Default upon any Responsible Officer obtaining actual knowledge thereof, specifying the nature and extent thereof and the corrective action (if any) taken or proposed to be taken with respect thereto.

SECTION 5.06. ***[Reserved]***.

SECTION 5.07. ***Maintaining Records; Access to Properties and Inspections*** . Keep proper books of record and account in which full, true and correct entries in all material respects in conformity with GAAP and all material requirements of law are made of all dealings and transactions in relation to its business and activities. Subject to applicable law and third party confidentiality agreements entered into by the Loan Parties in the ordinary course of business, each Loan Party will, and will cause each of its Subsidiaries to, provided that, in the absence of an Event of Default, such visits and inspections shall be limited to once per fiscal year, permit any representatives designated by the Administrative Agent to visit and inspect the financial records and the properties of Holdings, the U.S. Borrower or any Subsidiary at reasonable times and as often as reasonably requested (but in all events upon reasonable prior notice) and to make extracts from and copies of such financial records, and permit any representatives designated by the Administrative Agent to discuss the affairs, finances and condition of Holdings, the U.S. Borrower or any Subsidiary with the officers thereof.

SECTION 5.08. ***Use of Proceeds***. Use the proceeds of the Loans and request the issuance of Letters of Credit only for the purposes described in Section 3.11, in any Incremental Assumption Agreement (with respect to Incremental Revolving Loans and Incremental Term Loans) or in any Loan Modification Agreement (with respect to Other Revolving Loans), and in ease case for purposes that are not prohibited by Section 3.08(b) or Section 3.10.

SECTION 5.09. ***Additional Loan Parties***. Holdings will cause any existing and any subsequently acquired or organized Domestic Subsidiary which provides a Guarantee in respect of any Material Indebtedness to become party to the Guarantee Agreement and each other applicable Loan Document; *provided* that (i) no such Domestic Subsidiary that is not "100%

owned" (as defined in Rule 3-10(h)(i) of Regulation S-X of Securities Act of 1933) shall be required at any time to Guarantee any of the Obligations to the extent that such a Guarantee would, directly or indirectly, result in Holdings or the U.S. Borrower being required to file separate financial statements of each of the Subsidiary Guarantors with the SEC and such separate financial statements are not otherwise being provided to the SEC at such time, (ii) the requirements described in this Section 5.09 shall not apply to any Domestic Subsidiary for which the provision of a Guarantee pursuant to the Guarantee Agreement would be prohibited by applicable law of any jurisdiction to which it is subject or would result in adverse tax consequences to Holdings or its Subsidiaries and (iii) the Guarantee of any Obligations by any such Domestic Subsidiary shall be automatically released if such release is necessary to comply with the immediately preceding proviso or the provisions of Section 9.25.

ARTICLE VI

Negative Covenants

Each of Holdings and each Borrower covenants and agrees with each Lender that, so long as this Agreement shall remain in effect and until the Commitments have been terminated and the principal of and interest on each Loan, all Fees and all other expenses or amounts payable under any Loan Document have been paid in full and all Letters of Credit have been cancelled or have expired and all amounts drawn thereunder have been reimbursed in full, unless the Required Lenders shall otherwise consent in writing:

SECTION 6.01. ***Indebtedness***. Holdings and the Borrowers will not cause or permit any of the Non-Guarantor Subsidiaries to incur, create, assume or permit to exist any Indebtedness, except:

(a) Indebtedness existing on the date hereof and set forth in Schedule 6.01(a) and any extensions, renewals or replacements of such Indebtedness to the extent the principal amount of such Indebtedness is not increased and neither the final maturity nor the weighted average life to maturity of such Indebtedness is shortened;

(b) intercompany Indebtedness of the Non-Guarantor Subsidiaries (including, for the avoidance of doubt, any such Indebtedness owing to Holdings, the Borrowers or any Guarantor);

(c) Indebtedness under Performance Bonds or with respect to workers' compensation claims, in each case incurred in the ordinary course of business;

(d) CBRE CM Permitted Indebtedness, Indebtedness under the CBRE Loan Arbitrage Facility, Exempt Construction Loans, Indebtedness in respect of any Receivables Securitization, to the extent the aggregate Receivables Securitization Amount attributable at any time in respect of all Receivables Securitizations does not exceed $250,000,000 and Non-Recourse Indebtedness;

(e) Indebtedness of any person existing at the time such person is acquired by the U.S. Borrower or a Subsidiary in connection with an acquisition and not incurred in anticipation or contemplation thereof and any extensions, renewals or replacements of such Indebtedness to the extent the principal amount of such Indebtedness is not increased and neither the final maturity nor the weighted average life to maturity of such Indebtedness is shortened;

(f) Indebtedness of Foreign Subsidiaries in an aggregate principal amount at any time outstanding not in excess of $600,000,000; and

(g) Non-Guarantor Subsidiaries may incur Indebtedness at any time if, after giving effect thereto, the aggregate principal amount of all Indebtedness incurred by Non-

Guarantor Subsidiaries pursuant to this paragraph (g) and outstanding at such time does not exceed 15% of Total Assets at such time (after giving pro forma effect to any assets to be acquired in connection with the incurrence of such Indebtedness).

SECTION 6.02. ***Liens***. Holdings and the Borrowers will not, nor will they cause or permit any of the Subsidiaries to, create, incur, assume or permit to exist any Lien on any property or assets (including Equity Interests or other securities of any person, including any Subsidiary) now owned or hereafter acquired by it or on any income or revenues or rights in respect of any thereof, except:

(a) Liens on property or assets of the U.S. Borrower and its Subsidiaries existing on the date hereof and (i) set forth in Schedule 6.02(a) or (ii) encumbering property or assets with a fair market value on the date hereof of less than $10,000,000; *provided* that such Liens shall secure only those obligations which they secure on the date hereof and extensions, renewals and replacements thereof permitted hereunder;

(b) any Lien created under the Loan Documents;

(c) any Lien existing on any property or asset prior to the acquisition thereof by the U.S. Borrower or any Subsidiary; *provided* that (i) such Lien is not created in contemplation of or in connection with such acquisition and (ii) such Lien does not apply to any other property or assets of the U.S. Borrower or any Subsidiary;

(d) Liens for Taxes, fees, assessments or other governmental charges not yet due, or if material, which are being contested in compliance with Section 5.03;

(e) carriers', warehousemen's, mechanics', materialmen's, repairmen's or other like Liens arising in the ordinary course of business and securing obligations that are not due and payable, or if material, which are being contested in compliance with Section 5.03;

(f) pledges and deposits made in the ordinary course of business in compliance with workmen's compensation, unemployment insurance and other social security laws or regulations;

(g) deposits to secure the performance of bids, trade contracts (other than for Indebtedness), leases (other than Capital Lease Obligations), statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature incurred in the ordinary course of business;

(h) zoning restrictions, easements, rights-of-way, restrictions on use of real property and other similar encumbrances incurred in the ordinary course of business which, in the aggregate, are not substantial in amount and do not materially detract from the value of the property subject thereto or interfere with the ordinary conduct of the business of the U.S. Borrower or any of its Subsidiaries;

(i) Liens arising out of judgments or awards in respect of which Holdings, the U.S. Borrower or any of the Subsidiaries shall in good faith be prosecuting an appeal or proceedings for review in respect of which there shall be secured a subsisting stay of execution pending such appeal or proceedings;

(j) Liens on investments made by CBRE CM in connection with the CBRE CM Loan Arbitrage Facility to secure Indebtedness under the CBRE CM Loan Arbitrage Facility, if such investments were acquired by CBRE CM with the proceeds of such Indebtedness;

(k) Liens on investments made by the U.S. Borrower or CBRE, Inc. in connection with the CBRE Loan Arbitrage Facility to secure Indebtedness under the CBRE Loan Arbitrage Facility, if such investments were acquired by the U.S. Borrower or CBRE, Inc., as the case may be, with the proceeds of such Indebtedness;

(l) Liens on mortgage loans originated and owned or held by CBRE CM or any Mortgage Banking Subsidiary pursuant to any CBRE CM Mortgage Warehousing Facility or the CBRE CM Repo Arrangement, and Liens in connection with CBRE CM Lending Program Securities;

(m) Liens on Receivables securing any Receivables Securitization permitted to be outstanding under Section 6.01;

(n) any Lien existing on any property or asset of any person that exists at the time such person becomes a Subsidiary; *provided* that (i) such Lien was not created in contemplation of or in connection with such acquisition and (ii) such Lien does not apply to any property or assets of the U.S. Borrower or any other Subsidiary;

(o) Liens arising solely by virtue of any statutory, common law or contractual provision relating to bankers' liens, rights of set-off or similar rights and remedies as to deposit accounts or other funds maintained with a creditor depository institution or relating to Liens on brokerage accounts;

(p) Liens on the assets or Equity Interests of an Investment Subsidiary to secure Exempt Construction Loans, Non-Recourse Indebtedness and Guarantees thereof;

(q) [Reserved];

(r) any Lien in relation to personal property acquired by the New Zealand Borrower in the ordinary course of its normal business; *provided* that such Lien shall be permitted only if (i) it is given by the New Zealand Borrower (as buyer) in favor of a seller of the personal property, (ii) it secures (and only secures) all or part of the purchase price for the personal property and (iii) it is discharged within 60 days of its creation;

(s) any security in relation to personal property acquired by the New Zealand Borrower that is created or provided for by (i) a transfer of an account receivable or chattel paper, (ii) a lease for a term of more than 1 year, or (iii) a commercial consignment, that does not secure payment or performance of an obligation (all terms used in Section 6.02(r) and (s) and not defined in this Agreement have the meaning specified thereto in the New Zealand Personal Property Securities Act 1999); and

(t) other Liens not permitted by the foregoing; *provided* that, at the time of the incurrence thereof, neither the obligations secured thereby nor the aggregate fair market value of the assets subject thereto shall exceed 10% of Total Assets at the time.

SECTION 6.03. ***[Reserved]***.

SECTION 6.04. ***Mergers, Consolidations and Sales of Assets***. (a) Holdings will not, and will not permit any Borrower to, merge into or consolidate with any other person unless (i) at the time thereof and immediately after giving effect thereto no Event of Default or Default shall have occurred and be continuing and (ii) the person formed by such consolidation or into which Holdings or such Borrower is merged shall be a person organized and existing under the laws of (x) in the case of Holdings and the U.S. Borrower, the United States of America, any State thereof or the District of Columbia, and (y) in case of any other Borrower, the jurisdiction of such Borrower or, if the Administrative Agent and each applicable Lender to such Borrower are reasonably satisfied that such Lenders may make loans and other extensions of credit to such Borrower in the applicable currency or currencies in the proposed jurisdiction in compliance with

applicable laws and regulations and without being subject to any unreimbursed or unindemnified Tax or other expense, any other jurisdiction, and, in each case, shall expressly assume pursuant to an instrument executed and delivered to the Administrative Agent, and in form and substance reasonably satisfactory to the Administrative Agent, Holding's or such Borrower's, as the case may be, obligations for performance of every covenant of this Agreement on the part of such person to be performed (unless, in the case of a Borrower other than the U.S. Borrower, such Borrower will cease to be a Subsidiary upon the consummation of such transaction and the conditions for release of such Borrower pursuant to Section 9.25 are satisfied). For the avoidance of doubt, this Section 6.04 shall only apply to a merger or consolidation in which Holdings or the applicable Borrower is not the surviving person. Upon any consolidation by Holdings or a Borrower with or merger by Holdings or a Borrower into any other person, the successor person formed by such consolidation or into which Holdings or such Borrower is merged shall succeed to, and be substituted for, and may exercise every right and power of, Holdings or such Borrower under this Agreement with the same effect as if such successor person had been named as Holdings or such Borrower herein.

(b) Holdings will not, nor will it cause or permit any of the Significant Subsidiaries to, sell, transfer, lease or otherwise dispose of in one transaction or in a series of transactions, all or substantially all of the property of Holdings and its Subsidiaries taken as a whole.

SECTION 6.05. ***Interest Coverage Ratio***. Holdings will not permit the Interest Coverage Ratio on the last day of any fiscal quarter to be less than 2.00 to 1.00.

SECTION 6.06. ***Maximum Leverage Ratio***. Holdings will not permit the Leverage Ratio on the last day of any fiscal quarter to be greater than (i) 4.25 to 1.00 or (ii) for the first four full fiscal quarters following the consummation of a Qualified Acquisition, 4.75 to 1.00.

ARTICLE VII

Events of Default

In case of the happening of any of the following events ("***Events of Default***"):

(a) any representation or warranty made or deemed made in or in connection with any Loan Document or the borrowings or issuances of Letters of Credit hereunder, or any representation, warranty, statement or information contained in any report, certificate, financial statement or other instrument furnished in connection with or pursuant to any Loan Document, shall prove to have been false or misleading in any material respect when so made, deemed made or furnished;

(b) failure to make any payment of any principal of any Loan or the reimbursement with respect to any L/C Disbursement when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or by acceleration thereof or otherwise;

(c) failure to make any payment of any interest on any Loan or L/C Disbursement or any Fee or any other amount (other than an amount referred to in (b) above) due under any Loan Document, when and as the same shall become due and payable, and such default shall continue unremedied for a period of five (5) Business Days;

(d) failure by Holdings or any Borrower to observe or perform any covenant, condition or agreement contained in Section 5.01(a), 5.05, 5.08 or in Article VI;

(e) default shall be made in the due observance or performance by Holdings, any Borrower or any Subsidiary of any covenant, condition or agreement contained in any Loan Document (other than those specified in (b), (c) or (d) above) and such default shall

continue unremedied for a period of 30 days after written notice thereof being delivered from the Administrative Agent or the Required Lenders to the U.S. Borrower;

(f) (i) Holdings, any Borrower or any Subsidiary shall fail to pay any principal or interest, regardless of amount, due in respect of any Material Indebtedness, when and as the same shall become due and payable and such failure shall continue after the applicable grace period, if any, specified in the agreement or instrument relating to such Material Indebtedness has expired, or (ii) any other event or condition occurs that results in any Material Indebtedness becoming due prior to its scheduled maturity or that enables or permits (with or without the giving of notice, the lapse of time or both) the holder or holders of any Material Indebtedness or any trustee or agent on its or their behalf to cause any Material Indebtedness to become due; *provided* that this clause (ii) shall not apply to (x) secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the property or assets securing such Indebtedness and (y) Indebtedness existing on the Closing Date which by its terms provides for an option by the payee thereof to require repayment prior to the scheduled maturity thereof;

(g) an involuntary proceeding shall be commenced or an involuntary petition shall be filed in a court of competent jurisdiction seeking (i) relief in respect of Holdings, any Borrower or any Significant Subsidiary, or of a substantial part of the property or assets of Holdings, any Borrower or a Significant Subsidiary, under Title 11 of the United States Code, as now constituted or hereafter amended, or any other Federal, state or foreign bankruptcy, insolvency, receivership or similar law, (ii) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for Holdings, any Borrower or any Significant Subsidiary or for a substantial part of the property or assets of Holdings, any Borrower or any Significant Subsidiary or (iii) the winding-up or liquidation of Holdings or the U.S. Borrower; and such proceeding or petition shall continue undismissed for 60 days or an order or decree approving or ordering any of the foregoing shall be entered;

(h) Holdings, any Borrower or any Significant Subsidiary shall (i) voluntarily commence any proceeding or file any petition seeking relief under Title 11 of the United States Code, as now constituted or hereafter amended, or any other Federal, state or foreign bankruptcy, insolvency, receivership or similar law, (ii) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or the filing of any petition described in (g) above, (iii) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for Holdings, any Borrower or any Significant Subsidiary or for a substantial part of the property or assets of Holdings, any Borrower or any Significant Subsidiary, (iv) file an answer admitting the material allegations of a petition filed against it in any such proceeding, (v) make a general assignment for the benefit of creditors, (vi) become unable, admit in writing its inability or fail generally to pay its debts as they become due or (vii) take any action for the purpose of effecting any of the foregoing;

(i) one or more enforceable judgments for the payment of money in an aggregate amount in excess of $200,000,000 shall be rendered against Holdings, any Borrower, any Subsidiary or any combination thereof, which judgment is not fully covered by insurance of an independent, third-party insurance company that has been notified of such judgment and has not denied coverage, and the same shall remain undischarged, unvacated or unbonded pending appeal for a period of 60 consecutive days during which execution shall not be effectively stayed;

(j) an ERISA Event shall have occurred that, in the opinion of the Required Lenders, when taken together with all other such ERISA Events, could reasonably be expected to result in a Material Adverse Effect;

(k) any Guarantee under the Guarantee Agreement for any reason shall cease to be in full force and effect (other than in accordance with its terms or the terms of this Agreement), or any Guarantor shall deny in writing that it has any further liability under the Guarantee Agreement (other than as a result of the discharge of such Guarantor in accordance with the terms of the Loan Documents); or

(l) there shall have occurred a Change in Control;

then, and in every such event (other than an event with respect to Holdings or the U.S. Borrower described in paragraph (g) or (h) above), and at any time thereafter during the continuance of such event, the Administrative Agent may, and at the request of the Required Lenders shall, by notice to the Borrowers, take either or both of the following actions, at the same or different times: (i) terminate forthwith the Commitments and (ii) declare the Loans then outstanding to be forthwith due and payable in whole or in part, whereupon the principal of the Loans so declared to be due and payable, together with accrued interest thereon and any unpaid accrued Fees and all other liabilities of the Borrowers accrued hereunder and under any other Loan Document, shall become forthwith due and payable, without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived by the Borrowers, anything contained herein or in any other Loan Document to the contrary notwithstanding; and in any event with respect to Holdings or the U.S. Borrower described in paragraph (g) or (h) above, the Commitments shall automatically terminate and the principal of the Loans then outstanding, together with accrued interest thereon and any unpaid accrued Fees and all other liabilities of the Borrowers accrued hereunder and under any other Loan Document, shall automatically become due and payable, without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived by the Borrowers, anything contained herein or in any other Loan Document to the contrary notwithstanding.

ARTICLE VIII

The Administrative Agent

Each of the Lenders and each Issuing Bank hereby irrevocably appoints the Administrative Agent its agent and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to the Administrative Agent by the terms of the Loan Documents, together with such actions and powers as are reasonably incidental thereto, including the determination of any successor LIBO Rate**, EURIBO Rate or Daily Simple SONIA** as contemplated by the definition of the term "LIBO Rate"**, "EURIBO Rate" and "Daily Simple SONIA"**.

The bank serving as the Administrative Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not an Agent, and such bank and its Affiliates may accept deposits from, lend money to and generally engage in any kind of business with Holdings, any Borrower or any Subsidiary or other Affiliate thereof as if it were not an Agent hereunder.

The Administrative Agent shall have no duties or obligations except those expressly set forth in the Loan Documents. Without limiting the generality of the foregoing, (a) the Administrative Agent shall not be subject to any fiduciary or other implied duties, regardless of whether a Default has occurred and is continuing, (b) the Administrative Agent shall not have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby that the Administrative Agent is required to exercise in writing by the Required Lenders (or such other number or percentage of the Lenders as shall be necessary under the circumstances as provided in Section 9.08), and (c) except as expressly set forth in the Loan Documents, the Administrative Agent shall not have any duty to disclose, nor shall it be liable for the failure to disclose, any information relating to Holdings, any Borrower or any of the Subsidiaries that is communicated to or obtained by the bank serving as Administrative Agent or any of its Affiliates in any capacity. The Administrative Agent shall not

be liable for any action taken or not taken by it with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary under the circumstances as provided in Section 9.08) or in the absence of its own gross negligence or willful misconduct. The Administrative Agent shall not be deemed to have knowledge of any Default unless and until written notice thereof is given to such Agent by Holdings, a Borrower or a Lender, and the Administrative Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with any Loan Document, (ii) the contents of any certificate, report or other document delivered thereunder or in connection therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth in any Loan Document, (iv) the validity, enforceability, effectiveness or genuineness of any Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Article IV or elsewhere in any Loan Document, other than to confirm receipt of items expressly required to be delivered to such Agent.

The Administrative Agent shall be entitled to rely upon, and shall not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing believed by it to be genuine and to have been signed or sent by the proper person. The Administrative Agent may also rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper person, and shall not incur any liability for relying thereon. The Administrative Agent may consult with legal counsel (who may be counsel for a Borrower), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

The Administrative Agent may perform any and all its duties and exercise its rights and powers by or through any one or more sub-agents appointed by it. The Administrative Agent and any such sub-agent may perform any and all its duties and exercise its rights and powers by or through their respective Related Parties. The exculpatory provisions of the preceding paragraphs shall apply to any such sub-agent and to the Related Parties of the Administrative Agent and any such sub-agent, and shall apply to their respective activities in connection with the syndication of the Credit Facilities as well as activities as Administrative Agent.

Subject to the appointment and acceptance of a successor Administrative Agent as provided below, the Administrative Agent may resign at any time by notifying the Lenders, the Issuing Banks and the U.S. Borrower. Upon any such resignation, the Required Lenders shall have the right, in consultation with the U.S. Borrower and, unless an Event of Default shall have occurred and be continuing, with the consent of the U.S. Borrower (which shall not be unreasonably withheld), to appoint a successor. If no successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within 30 days after the retiring Administrative Agent gives notice of its resignation, then the retiring Administrative Agent may, on behalf of the Lenders and the Issuing Banks, appoint a successor Administrative Agent which shall be a bank with an office in New York, New York, or an Affiliate of any such bank. If no successor Administrative Agent has been appointed pursuant to the immediately preceding sentence by the 30th day after the date such notice of resignation was given by such Administrative Agent, such Administrative Agent's resignation shall become effective and the Required Lenders shall thereafter perform all the duties of such Administrative Agent hereunder and/or under any other Loan Document until such time, if any, as the Required Lenders appoint a successor Administrative Agent.

If any person serving as an Administrative Agent is a Defaulting Lender pursuant to clause (e) of the definition thereof, the Required Lenders may, by notice in writing to the U.S. Borrower and such person remove such person as Administrative Agent and, in consultation with the U.S. Borrower and, unless an Event of Default shall have occurred and be continuing, with the consent of the U.S. Borrower (which shall not be unreasonably withheld), appoint a successor. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within 30 days (or such earlier day as shall be agreed by the Required

Lenders), then such removal shall nonetheless become effective and the Required Lenders shall thereafter perform all the duties of the Administrative Agent hereunder and/or under any other Loan Document until such time, if any, as the Required Lenders appoint a successor Administrative Agent.

Any such resignation by or removal of such Administrative Agent hereunder shall also constitute, to the extent applicable, its resignation as an Issuing Bank, in which case such resigning Administrative Agent or such Administrative Agent subject to removal (a) shall not be required to issue any further Letters of Credit hereunder and (b) shall maintain all of its rights as Issuing Bank with respect to any Letters of Credit issued by it prior to the date of such resignation or removal. Upon the acceptance of its appointment as Administrative Agent hereunder by a successor, such successor shall succeed to and become vested with all the rights, powers, privileges and duties of the retiring Administrative Agent, and the retiring Administrative Agent shall be discharged from its duties and obligations hereunder. The fees payable by the Borrowers to a successor Administrative Agent shall be the same as those payable to its predecessor unless otherwise agreed between the U.S. Borrower and such successor. After an Administrative Agent's resignation or removal hereunder, the provisions of this Article and Section 9.05 shall continue in effect for the benefit of such retiring Administrative Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while acting as Administrative Agent.

Each Lender acknowledges that it has, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender also acknowledges that it will, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement or any other Loan Document, any related agreement or any document furnished hereunder or thereunder.

No Lender shall have any right individually to enforce any Guarantee of the Obligations, it being understood and agreed that all powers, rights and remedies under the Loan Documents may be exercised solely by the Administrative Agent on behalf of the Lenders in accordance with the terms thereof. Each Lender, whether or not a party hereto, will be deemed, by its acceptance of the benefits of the Guarantees of the Obligations provided under the Loan Documents, to have agreed to the foregoing provisions. The provisions of this paragraph are for the sole benefit of the Lenders and shall not afford any right to, or constitute a defense available to, any Loan Party.

The Administrative Agent hereby acknowledges that any Guarantee by a Subsidiary shall be released automatically upon the occurrence of a Guarantee Release Date with respect to such Subsidiary.

None of the Lenders or other persons identified on the facing page of this Agreement as a "syndication agent" or "documentation agent" shall have any right, power, obligation, liability, responsibility or duty under this Agreement other than those applicable to all Lenders. Without limiting the foregoing, none of the Lenders or other persons so identified shall have or be deemed to have any fiduciary relationship with any Lender. Each Lender acknowledges that it has not relied, and will not rely, on any of the Lenders or other persons so identified in deciding to enter into this Agreement or in taking or not taking action hereunder.

ARTICLE IX

Miscellaneous

SECTION 9.01. ***Notices***. Notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by e-mail or fax, as follows:

(a) if to a Borrower or Holdings, to it in care of the U.S. Borrower at CBRE Services, Inc., 400 South Hope Street, 25th Floor, Los Angeles, CA 90071, Attention of Deputy Chief Financial Officer (Fax No. (213) 613 3735) with a copy to be sent to 2929 Arch Street, Suite 1500, Philadelphia, PA 19104, Attention of Jim Groch, Chief Financial Officer (Fax No. (215) 921 7401); at CBRE Services, Inc., 400 South Hope Street, 25th Floor, Los Angeles, CA 90071, Attention of Deputy General Counsel (Fax No. (213) 613 3735); and at CBRE Services, Inc., 100 N. Sepulveda Blvd., Suite 1100, El Segundo, CA 90245, Attention of Treasurer (Fax No. (310) 606 5035);

(b) if to Credit Suisse AG, Cayman Islands Branch as Administrative Agent, to Credit Suisse AG, Cayman Islands Branch, Eleven Madison Avenue, 9th Floor, New York, NY 10010, Attention of Sean Portrait - Agency Manager (Fax No. (212) 322 2291), Email: agency.loanops@credit-suisse.com;

(c) if to Wells Fargo Bank, N.A. as Issuing Bank, to Wells Fargo Bank, N.A., Attention: Standby Letters of Credit Department, 794 Davis Street, 2nd Floor, San Leandro, CA 94577-6922, Fax No. (704) 715 0205, Email: standbyLC@wellsfargo.com;

(d) if to JPMorgan Chase Bank, N.A. as Issuing Bank, to JPMorgan Chase Bank, N.A., Attention: Standby LC Department, 10420 Highland Manor Drive, Floor 04, Tampa, FL 33610-9128, Fax No. (813) 432 5161, Email: GTS.IB.Standby@jpmchase.com;

(e) if to Bank of America, N.A. as Issuing Bank, to Bank of America, N.A., Global Trade Operations, One Fleet Way, 2nd Floor, Mail Code PA6-580-02-30, Scranton, PA 18507, Telephone 1 800 370 7519, General Fax No. 1 800 755 8743, Client Servicing E-mail Address: scranton_standby_lc@bankofamerica.com, SWIFT Address: BOFAUS;

(f) if to a Lender, to it at its address (or fax number or e-mail address) set forth in its Administrative Questionnaire or in the Assignment and Acceptance pursuant to which such Lender shall have become a party hereto; and

(g) if to The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch as N.Z. Swingline Lender, to The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch, HSBC House, Level 9, 1 Queen Street, Auckland (attention Relationship Manager), Fax No. +649 368 8799.

All notices and other communications given to any party hereto in accordance with the provisions of this Agreement shall be deemed to have been given on the date of receipt if delivered by hand or overnight courier service or sent by e-mail or fax or on the date five Business Days after dispatch by certified or registered mail if mailed, in each case delivered, sent or mailed (properly addressed) to such party as provided in this Section 9.01 or in accordance with the latest unrevoked direction from such party given in accordance with this Section 9.01. As agreed to among Holdings, the U.S. Borrower, the Administrative Agent and the applicable Lenders from time to time, notices and other communications may also be delivered to Holdings or any Borrower at the e-mail address provided from time to time by such person to the Administrative Agent. Holdings and any Borrower may each change the address or e-mail address for service of notice and other communications by a notice in writing to the other parties hereto.

Holdings hereby agrees, unless directed otherwise by the Administrative Agent or unless the electronic mail address referred to below has not been provided by the Administrative Agent to Holdings, that it will, or will cause its Subsidiaries to, provide to the Administrative Agent all information, documents and other materials that it is obligated to furnish to the Administrative Agent pursuant to the Loan Documents or to the Lenders under Article V, including all notices, requests, financial statements, financial and other reports, certificates and other information materials, but excluding any such communication that (i) is or relates to a Borrowing Request, a Competitive Bid Request, a notice pursuant to Section 2.10 or a notice requesting the issuance, amendment, extension or renewal of a Letter of Credit pursuant to Section 2.23, (ii) relates to the payment of any principal or other amount due under this Agreement prior to the scheduled date therefor, (iii) provides notice of any Default or Event of Default under this Agreement or any other Loan Document or (iv) is required to be delivered to satisfy any condition precedent to the effectiveness of this Agreement and/or any Borrowing or other extension of credit hereunder (all such non-excluded communications being referred to herein collectively as "***Communications***"), by transmitting the Communications in an electronic/soft medium that is properly identified in a format acceptable to the Administrative Agent to an electronic mail address as directed by the Administrative Agent. In addition, Holdings and the U.S. Borrower agree, and agree to cause the Subsidiaries, to continue to provide the Communications to the Administrative Agent or the Lenders, as the case may be, in the manner specified in the Loan Documents but only to the extent requested by the Administrative Agent.

Holdings and the U.S. Borrower hereby acknowledge that (i) the Administrative Agent will make available to the Lenders and the Issuing Banks materials and/or information provided by or on behalf of Holdings and the U.S. Borrower hereunder (collectively, the "***Borrower Materials***") by posting the Borrower Materials on Intralinks or another similar electronic system (the "***Platform***") and (ii) certain of the Lenders may be "public-side" Lenders (i.e., Lenders that do not wish to receive material non-public information with respect to the Borrower or its securities) (each, a "***Public Lender***"). Holdings and the U.S. Borrower hereby agree that (w) all Borrower Materials that are to be made available to Public Lenders shall be clearly and conspicuously marked "PUBLIC" which, at a minimum, shall mean that the word "PUBLIC" shall appear prominently on the first page thereof; (x) by marking Borrower Materials "PUBLIC," Holdings and the U.S. Borrower shall be deemed to have authorized the Administrative Agent and the Lenders to treat such Borrower Materials as not containing any material non-public information with respect to Holdings or its securities for purposes of United States federal and state securities laws (*provided*, *however*, that to the extent such Borrower Materials constitute Information, they shall be treated as set forth in Section 9.16); (y) all Borrower Materials marked "PUBLIC" are permitted to be made available through a portion of the Platform designated as "Public Investor" (or words of similar import); and (z) the Administrative Agent shall be entitled to treat any Borrower Materials that are not marked "PUBLIC" as being suitable only for posting on a portion of the Platform not marked as "Public Investor" (or words of similar import).

Each Public Lender agrees to cause at least one individual at or on behalf of such Public Lender to at all times have selected the "Private Side Information" or similar designation on the content declaration screen of the Platform in order to enable such Public Lender or its delegate, in accordance with such Public Lender's compliance procedures and applicable law, including United States Federal and state securities laws, to make reference to Communications that are not made available through the "Public Side Information" portion of the Platform and that may contain material non-public information with respect to the Borrower or its securities for purposes of United States Federal or state securities laws.

THE PLATFORM IS PROVIDED "AS IS" AND "AS AVAILABLE". NEITHER THE ADMINISTRATIVE AGENT NOR ANY OF ITS RELATED PARTIES WARRANTS THE ACCURACY OR COMPLETENESS OF THE COMMUNICATIONS OR THE ADEQUACY OF THE PLATFORM AND EACH EXPRESSLY DISCLAIMS LIABILITY FOR ERRORS OR OMISSIONS IN THE COMMUNICATIONS. NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY,

FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS OR FREEDOM FROM VIRUSES OR OTHER CODE DEFECTS IS MADE BY THE ADMINISTRATIVE AGENT OR ANY OF ITS RELATED PARTIES IN CONNECTION WITH THE COMMUNICATIONS OR THE PLATFORM. IN NO EVENT SHALL THE ADMINISTRATIVE AGENT OR ANY OF ITS RELATED PARTIES HAVE ANY LIABILITY TO ANY LOAN PARTY, ANY LENDER OR ANY OTHER PERSON FOR DAMAGES OF ANY KIND, WHETHER OR NOT BASED ON STRICT LIABILITY AND INCLUDING DIRECT OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES OR EXPENSES (WHETHER IN TORT, CONTRACT OR OTHERWISE) ARISING OUT OF ANY LOAN PARTY'S OR THE ADMINISTRATIVE AGENT'S TRANSMISSION OF COMMUNICATIONS THROUGH THE INTERNET, EXCEPT TO THE EXTENT THE LIABILITY OF ANY SUCH PERSON IS FOUND IN A FINAL RULING BY A COURT OF COMPETENT JURISDICTION TO HAVE RESULTED FROM SUCH PERSON'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT.

The Administrative Agent agrees that the receipt of the Communications by the Administrative Agent at its e-mail address set forth above shall constitute effective delivery of the Communications to the Administrative Agent for purposes of the Loan Documents. Each Lender agrees that receipt of notice to it (as provided in the next sentence) specifying that the Communications have been posted to the Platform shall constitute effective delivery of the Communications to such Lender for purposes of the Loan Documents. Each Lender agrees to notify the Administrative Agent in writing (including by electronic communication) from time to time of such Lender's e-mail address to which the foregoing notice may be sent by electronic transmission and that the foregoing notice may be sent to such e-mail address.

SECTION 9.02. ***Survival of Agreement***. All covenants, agreements, representations and warranties made by the Borrowers or Holdings herein and in the certificates or other instruments prepared or delivered in connection with or pursuant to this Agreement or any other Loan Document shall be considered to have been relied upon by the Lenders and the Issuing Banks and shall survive the making by the Lenders of the Loans and the issuance of Letters of Credit by the Issuing Banks, regardless of any investigation made by the Lenders or the Issuing Banks or on their behalf, and shall continue in full force and effect as long as the principal of or any accrued interest on any Loan or any Fee or any other amount payable under this Agreement or any other Loan Document is outstanding and unpaid or any Letter of Credit is outstanding and so long as the Commitments have not been terminated. The provisions of Sections 2.14, 2.16, 2.20 and 9.05 shall remain operative and in full force and effect regardless of the expiration of the term of this Agreement, the consummation of the transactions contemplated hereby, the repayment of any of the Loans, the expiration of the Commitments, the expiration of any Letter of Credit, the invalidity or unenforceability of any term or provision of this Agreement or any other Loan Document, or any investigation made by or on behalf of the Administrative Agent, any Lender or any Issuing Bank.

SECTION 9.03. ***Binding Effect***. This Agreement shall become effective when it shall have been executed by the Borrowers, Holdings and the Administrative Agent and when the Administrative Agent shall have received counterparts hereof which, when taken together, bear the signatures of all the Lenders.

SECTION 9.04. ***Successors and Assigns***. (a) Whenever in this Agreement any of the parties hereto is referred to, such reference shall be deemed to include the permitted successors and assigns of such party; and all covenants, promises and agreements by or on behalf of the Borrowers, Holdings, the Administrative Agent, the Issuing Banks or the Lenders that are contained in this Agreement shall bind and inure to the benefit of their respective successors and assigns.

(b) Each Lender may assign to one or more assignees all or a portion of its interests, rights and obligations under this Agreement (including all or a portion of its Commitment and the Loans at the time owing to it); *provided*, *however*, that (i) except in the case of an assignment of

Term Loans by a Lender to a Lender or an Affiliate or Related Fund of a Lender which does not result in any increased costs or other additional amounts being paid by a Borrower, (x) the U.S. Borrower and the Administrative Agent (and, in the case of any assignment of a Revolving Credit Commitment, each Issuing Bank (and in the case of a Multicurrency Revolving Credit Commitment, the applicable N.Z. Swingline Lender)) must give their prior written consent to such assignment (which consents shall not be unreasonably withheld or delayed), *provided*, *however*, that the consent of the U.S. Borrower shall not be required to any such assignment during the continuance of any Event of Default, and (y) (i) the amount of the Commitment or Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment and Acceptance with respect to such assignment is delivered to the Administrative Agent) shall not be less than $5,000,000 (or, if less, the entire remaining amount of such Lender's Commitment or Loans), *provided* that such minimum amount shall be aggregated for two or more simultaneous assignments to or by two or more Related Funds, (ii) the parties to each such assignment shall (x) electronically execute and deliver to the Administrative Agent an Assignment and Acceptance via an electronic settlement system acceptable to the Administrative Agent (which initially shall be ClearPar, LLC) or (y) manually execute and deliver to the Administrative Agent an Assignment and Acceptance and, except in the case of an assignment by a Lender to an Affiliate or Related Fund of such Lender, pay to the Administrative Agent a processing and recordation fee of $3,500 (which fee may be waived or reduced at the discretion of the Administrative Agent), *provided* that only one such fee shall be payable in the case of concurrent assignments to persons that, after giving effect thereto, will be Related Funds and (iii) the assignee, if it shall not be a Lender, shall deliver to the Administrative Agent an Administrative Questionnaire and any applicable tax forms. Upon acceptance and recording pursuant to Section 9.04(e), from and after the effective date specified in each Assignment and Acceptance, (A) the assignee thereunder shall be a party hereto and, to the extent of the interest assigned by such Assignment and Acceptance, have the rights and obligations of a Lender under this Agreement and (B) the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Acceptance, be released from its obligations under this Agreement (and, in the case of an Assignment and Acceptance covering all or the remaining portion of an assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto but shall continue to be entitled to the benefits of Sections 2.14, 2.16, 2.20 and 9.05, as well as to any Fees accrued for its account and not yet paid). Each party hereto agrees that an assignment required pursuant to Section 2.21 may be effected pursuant to an Assignment and Acceptance executed by the Borrower, the Administrative Agent and the assignee and that the Lender required to make such assignment need not be a party thereto.

(c) By executing and delivering an Assignment and Acceptance (including a Borrower Repurchase Assignment and Acceptance), the assigning Lender thereunder and the assignee thereunder shall be deemed to confirm to and agree with each other and the other parties hereto as follows: (i) such assigning Lender warrants that it is the legal and beneficial owner of the interest being assigned thereby free and clear of any adverse claim and that its Domestic Revolving Credit Commitment, Multicurrency Revolving Credit Commitment and U.K. Revolving Credit Commitment, and the outstanding balances of its Term Loans, Domestic Revolving Loans, Multicurrency Revolving Loans and U.K. Revolving Loans, in each case without giving effect to assignments thereof which have not become effective, are as set forth in such Assignment and Acceptance, (ii) except as set forth in (i) above, such assigning Lender makes no representation or warranty and assumes no responsibility with respect to any statements, warranties or representations made in or in connection with this Agreement, or the execution, legality, validity, enforceability, genuineness, sufficiency or value of this Agreement, any other Loan Document or any other instrument or document furnished pursuant hereto, or the financial condition of Holdings, any Borrower or any Subsidiary or the performance or observance by Holdings, any Borrower or any Subsidiary of any of its obligations under this Agreement, any other Loan Document or any other instrument or document furnished pursuant hereto; (iii) such assignee represents and warrants that it is legally authorized to enter into such Assignment and Acceptance; (iv) such assignee confirms that it has received a copy of this Agreement, together with copies of the most recent financial statements referred to in Section 3.05 or delivered pursuant to Section 5.04 and such other documents and information as it has deemed appropriate

to make its own credit analysis and decision to enter into such Assignment and Acceptance; (v) such assignee will independently and without reliance upon the Administrative Agent, such assigning Lender or any other Lender and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under this Agreement; (vi) such assignee appoints and authorizes the Administrative Agent to take such action as agent on its behalf and to exercise such powers under this Agreement as are delegated to the Administrative Agent by the terms hereof, together with such powers as are reasonably incidental thereto; and (vii) such assignee agrees that it will perform in accordance with their terms all the obligations which by the terms of this Agreement are required to be performed by it as a Lender.

(d) The Administrative Agent, acting for this purpose as an agent of the Borrowers, shall maintain at one of its offices in The City of New York a copy of each Assignment and Acceptance delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitment of, and principal amount of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "***Register***"). The entries in the Register shall be conclusive and the Borrowers, the Administrative Agent, the Issuing Banks and the Lenders shall treat each person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection by the Borrowers, and solely with respect to their own respective Loans, Letters of Credit and Commitments, as applicable, the Issuing Banks and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

(e) Upon its receipt of a duly completed Assignment and Acceptance executed by an assigning Lender and an assignee, an Administrative Questionnaire (including any tax documentation required therein) completed in respect of the assignee (unless the assignee shall already be a Lender hereunder), the processing and recordation fee referred to in paragraph (b) above, if any, and, if required, the written consent of the U.S. Borrower, the N.Z. Swingline Lenders, the Issuing Banks and the Administrative Agent to such assignment, the Administrative Agent shall (i) accept such Assignment and Acceptance, (ii) record the information contained therein in the Register and (iii) give prompt notice thereof to the U.S. Borrower, the Issuing Banks and the N.Z. Swingline Lenders. No assignment shall be effective unless it has been recorded in the Register as provided in this paragraph (e), and it shall be the sole responsibility of each assignee to confirm such recordation.

(f) Each Lender may without the consent of any Borrower, any N.Z. Swingline Lender, any Issuing Bank or the Administrative Agent sell participations to one or more banks or other entities in all or a portion of its rights and obligations under this Agreement (including all or a portion of its Commitment and the Loans owing to it); *provided*, *however*, that (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations, (iii) the participating banks or other entities shall be entitled to the benefit of the cost protection provisions contained in Sections 2.14, 2.16 and 2.20 to the same extent as if they were Lenders (but, with respect to any particular participant, to no greater extent than the Lender that sold the participation to such participant and solely to the extent that such participant agrees to comply with the requirements of Section 2.20(g) as though it were a Lender) and (iv) the Borrowers, the Administrative Agent, the Issuing Banks and the Lenders shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement, and such Lender shall retain the sole right to enforce the obligations of the Borrowers relating to the Loans or L/C Disbursements and to approve any amendment, modification or waiver of any provision of this Agreement (other than amendments, modifications or waivers decreasing any fees payable to such participants hereunder or the amount of principal of or the rate at which interest is payable on the Loans in which such participant has an interest, extending any scheduled principal payment date or date fixed for the payment of interest on the Loans in which such participant has an interest, increasing or extending the Commitments in which such participant has an interest or release all or substantially all of the value of the Guarantees).

(g) Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrowers, maintain a register on which it enters the name and address of each participant and the principal amounts (and stated interest) of each participant's interest in the loans or other obligations under this Agreement (the "***Participant Register***"); *provided* that no Lender shall have any obligation to disclose all or any portion of the Participant Register to the Borrowers, the Administrative Agent, or any other person (including the identity of any participant or any information relating to a participant's interest in the Commitments, Loans, or other Obligations) except to the extent necessary to establish that such Commitments, Loans, or other Obligations are in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(h) Any Lender or participant may, in connection with any assignment or participation or proposed assignment or participation pursuant to this Section 9.04, disclose to the assignee or participant or proposed assignee or participant any information relating to the Borrowers furnished to such Lender by or on behalf of a Borrower; *provided* that, prior to any such disclosure of information designated by a Borrower as confidential, each such assignee or participant or proposed assignee or participant shall execute an agreement whereby such assignee or participant shall agree (subject to customary exceptions) to preserve the confidentiality of such confidential information on terms no less restrictive than those applicable to the Lenders pursuant to Section 9.16.

(i) Any Lender may at any time assign all or any portion of its rights under this Agreement to secure extensions of credit to such Lender or in support of obligations owed by such Lender; *provided* that no such assignment shall release a Lender from any of its obligations hereunder or substitute any such assignee for such Lender as a party hereto.

(j) Notwithstanding anything to the contrary contained herein, any Lender (a "***Granting Lender***") may grant to a special purpose funding vehicle (an "***SPC***"), identified as such in writing from time to time by the Granting Lender to the Administrative Agent and the U.S. Borrower, the option to provide to a Borrower all or any part of any Loan that such Granting Lender would otherwise be obligated to make to such Borrower pursuant to this Agreement; *provided* that (i) nothing herein shall constitute a commitment by any SPC to make any Loan and (ii) if an SPC elects not to exercise such option or otherwise fails to provide all or any part of such Loan, the Granting Lender shall be obligated to make such Loan pursuant to the terms hereof. The making of a Loan by an SPC hereunder shall utilize the Commitment of the Granting Lender to the same extent, and as if, such Loan were made by such Granting Lender. Each party hereto hereby agrees that no SPC shall be liable for any indemnity or similar payment obligation under this Agreement (all liability for which shall remain with the Granting Lender). In furtherance of the foregoing, each party hereto hereby agrees (which agreement shall survive the termination of this Agreement) that, prior to the date that is one year and one day after the payment in full of all outstanding commercial paper or other senior indebtedness of any SPC, it will not institute against, or join any other person in instituting against, such SPC any bankruptcy, reorganization, arrangement, insolvency or liquidation proceedings under the laws of the United States or any State thereof. In addition, notwithstanding anything to the contrary contained in this Section 9.04, any SPC may (i) with notice to, but without the prior written consent of, the U.S. Borrower and the Administrative Agent and without paying any processing fee therefor, assign all or a portion of its interests in any Loans to the Granting Lender or to any financial institutions (consented to by the U.S. Borrower and Administrative Agent) providing liquidity and/or credit support to or for the account of such SPC to support the funding or maintenance of Loans and (ii) disclose on a confidential basis any non-public information relating to its Loans to any rating agency, commercial paper dealer or provider of any surety, guarantee or credit or liquidity enhancement to such SPC, subject to an agreement to preserve the confidentiality of such non-public information.

(k) Except as otherwise permitted under this Agreement, neither Holdings nor any Borrower shall assign or delegate any of its rights or duties hereunder without the prior written consent of the Administrative Agent, each Issuing Bank and each Lender, and any attempted assignment without such consent shall be null and void.

(l) Notwithstanding anything to the contrary, this Section 9.04 shall not prohibit the Lenders from assigning Term Loans pursuant to, and in accordance with the provisions of, the Auction Procedures by executing and delivering a Borrower Repurchase Assignment and Acceptance.

SECTION 9.05. ***Expenses; Indemnity***. (a) The Borrowers and Holdings agree, jointly and severally, to pay all reasonable out-of-pocket expenses incurred by the Administrative Agent, the Issuing Banks and the N.Z. Swingline Lenders in connection with the syndication of the Credit Facilities and the preparation and administration of this Agreement and the other Loan Documents or in connection with any amendments, modifications or waivers of the provisions hereof or thereof (whether or not the transactions hereby or thereby contemplated shall be consummated) or incurred by the Administrative Agent or any Lender in connection with the enforcement or protection of its rights in connection with this Agreement and the other Loan Documents or in connection with the Loans made or Letters of Credit issued hereunder, including the reasonable and documented fees, charges and disbursements of Cravath, Swaine & Moore LLP, counsel for the Administrative Agent.

(b) The Borrowers and Holdings agree, jointly and severally, to indemnify the Administrative Agent, each Lender, each Issuing Bank and each Related Party of any of the foregoing persons (each such person being called an "***Indemnitee***") against, and to hold each Indemnitee harmless from, any and all losses, claims, damages, liabilities and related expenses (other than Excluded Taxes), including reasonable fees, charges and disbursements of one firm of counsel, and, to the extent necessary, a single firm of local counsel in each appropriate local jurisdiction (which may include a single special counsel acting in multiple jurisdictions) and, in the case of an actual or perceived conflict of interest, a single firm of counsel for all affected Indemnitees, incurred by or asserted against any Indemnitee arising out of, in any way connected with, or as a result of any actual or threatened claim, litigation, investigation or proceeding, whether or not any Indemnitee is a party thereto (and regardless of whether such matter is initiated by a third party or by a Borrower, any other Loan Party or any of their respective Affiliates), relating to the execution or delivery of this Agreement or any other Loan Document or any agreement or instrument contemplated thereby, the performance by the parties thereto of their respective obligations thereunder or the consummation of the Transactions and the other transactions contemplated thereby and the use of the proceeds of the Loans or issuance of Letters of Credit; *provided* that such indemnity shall not, as to any Indemnitee, be available to the extent that such losses, claims, damages, liabilities or related expenses (w) are determined by a court of competent jurisdiction by final and nonappealable judgment to have resulted from the gross negligence, bad faith or willful misconduct of such Indemnitee or any Related Party thereof, (x) are related to any material breach of such Indemnitee's obligations hereunder or under any other Loan Document, if such Borrower or such Subsidiary has obtained a final and nonappealable judgment in its favor on such claim as determined by a court of competent jurisdiction, (y) in addition to clause (x) above, are related to any claim brought by a Borrower or any of its Subsidiaries against an Indemnitee or a Related Party thereof for breach of such Indemnitee's obligations hereunder or under any other Loan Document, if such Borrower or such Subsidiary has obtained a final and nonappealable judgment in its favor on such claim as determined by a court of competent jurisdiction or (z) result from disputes solely among Indemnitees that do not involve an act or omission by Holdings, the Borrowers or any of their Affiliates except that the Administrative Agent, each Lender, each Issuing Bank, each Lead Arranger and the Advance Agent shall be indemnified in their capacities as such to the extent that none of the exceptions set forth in clause (x) or (y) applies to such Indemnitee at such time.

(c) To the extent that Holdings and the Borrowers fail to pay any amount required to be paid by them to the Administrative Agent, the Issuing Banks or the N.Z. Swingline Lenders under

paragraph (a) or (b) of this Section, each Lender severally agrees to pay to the Administrative Agent, the Issuing Banks or the N.Z. Swingline Lenders, as the case may be, such Lender's pro rata share (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought) of such unpaid amount; *provided* that the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against the Administrative Agent, the applicable Issuing Bank or the applicable N.Z. Swingline Lender in its capacity as such. For purposes hereof, a Lender's "pro rata share" shall be determined based upon its share of the sum of the Aggregate Domestic Revolving Credit Exposure, Aggregate Multicurrency Revolving Credit Exposure, Aggregate U.K. Revolving Credit Exposure, outstanding Term Loans and unused Commitments at the time.

(d) To the extent permitted by applicable law, no party hereto shall assert, and each hereby waives, any claim against any the Indemnitees and each other party hereto, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement or any agreement or instrument contemplated hereby, the Transactions, any Loan or Letter of Credit or the use of the proceeds thereof.

(e) The provisions of this Section 9.05 shall remain operative and in full force and effect regardless of the expiration of the term of this Agreement, the consummation of the transactions contemplated hereby, the repayment of any of the Loans, the expiration of the Commitments, the expiration of any Letter of Credit, the invalidity or unenforceability of any term or provision of this Agreement or any other Loan Document, or any investigation made by or on behalf of the Administrative Agent, any Lender or any Issuing Bank. All amounts due under this Section 9.05 shall be payable within 30 days of written demand therefor.

SECTION 9.06. ***Right of Setoff***. If an Event of Default shall have occurred and be continuing, each Lender is hereby authorized at any time and from time to time, except to the extent prohibited by law, to set off and apply any and all deposits (general or special, time or demand, provisional or final) at any time held and other indebtedness at any time then due and owing by such Lender to or for the credit or the account of any Borrower or Holdings against any of and all the obligations of the Borrowers or Holdings then existing under this Agreement and other Loan Documents (to the extent such obligations of Holdings or the Borrowers are then due and payable (by acceleration or otherwise)) held by such Lender, irrespective of whether or not such Lender shall have made any demand under this Agreement or such other Loan Document and although such obligations may be unmatured. The rights of each Lender under this Section 9.06 are in addition to other rights and remedies (including other rights of setoff) which such Lender may have.

SECTION 9.07. ***Applicable Law***. THIS AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAWS OF THE STATE OF NEW YORK.

SECTION 9.08. ***Waivers; Amendment***. (a) No failure or delay of the Administrative Agent, any Lender or any Issuing Bank in exercising any power or right hereunder or under any other Loan Document shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the Administrative Agent, the Issuing Banks and the Lenders hereunder and under the other Loan Documents are cumulative and are not exclusive of any rights or remedies that they would otherwise have. No waiver of any provision of this Agreement or any other Loan Document or consent to any departure by a Borrower or any other Loan Party therefrom shall in any event be effective unless the same shall be permitted by paragraph (b) below, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice or demand on a Borrower or Holdings in any case shall entitle any Borrower or Holdings to any other or further notice or demand in similar or other circumstances.

(b) Except as otherwise set forth in this Agreement, neither this Agreement, nor any other Loan Document, nor any provision hereof or thereof may be waived, amended or modified except pursuant to an agreement or agreements in writing entered into by the Borrowers, Holdings and the Required Lenders; *provided*, *however*, that no such agreement shall (i) decrease the principal amount of any scheduled principal payment or payment of any interest on any Loan or payment of any Fees accrued hereunder or waive or excuse any such payment or any part thereof without the prior written consent of each Lender directly and adversely affected thereby, (ii) extend any scheduled principal payment date, date for the payment of any interest on any Loan or any date for reimbursement of an L/C Disbursement without the prior written consent of each Lender directly and adversely affected thereby, (iii) decrease the rate of interest on any Loan or L/C Disbursement, without the prior written consent of each Lender directly and adversely affected thereby, (iv) increase or extend the Commitment or decrease or extend the date for payment of any Fees of any Lender without the prior written consent of each Lender directly and adversely affected thereby, (v) amend or modify the pro rata requirements of Section 2.17 without the prior written consent of each Lender directly and adversely affected thereby, (vi) amend or modify the provisions of Section 9.04(k) or the provisions of this Section 9.08 without the prior written consent of each Lender, (vii) modify the protections afforded to an SPC pursuant to the provisions of Section 9.04(j) without the written consent of such SPC, (viii) release all or substantially all the value of the Guarantees, without the prior written consent of each Lender, (ix) modify the definition of "Alternative Currency" without the prior written consent of all Multicurrency Lenders, (x) reduce the percentage contained in the definition of the term "Required Lenders" without the consent of each Lender (it being understood that with the consent of the Required Lenders, additional extensions of credit pursuant to this Agreement may be included in the determination of the Required Lenders on substantially the same basis as the Commitments are included on the date hereof), or (xi) reduce the number or percentage of the Lenders required to consent, approve or otherwise take any action under the Loan Documents without the prior written consent of each Lender affected thereby; *provided further* that (w) no such agreement shall amend, modify or otherwise affect the rights or duties of the Administrative Agent, any Issuing Bank or a N.Z. Swingline Lender hereunder or under any other Loan Document without the prior written consent of the Administrative Agent, such Issuing Bank or such N.Z. Swingline Lender, as the case may be, (x) amendments, waivers or modifications described in clauses (i) through (xi) above shall be subject only to the consent requirements expressly set forth in each such clause, (y) any provision of this Agreement or any other Loan Document may be amended by an agreement in writing entered into by Holdings, the Borrowers and the Administrative Agent to cure any ambiguity, omission, defect or inconsistency (including, without limitation, amendments, supplements or waivers to the Guarantee Agreement or related documents executed by any Loan Party or any other Subsidiary in connection with this Agreement if such amendment, supplement or waiver is delivered in order to cause such Guarantee Agreement or related documents to be consistent with this Agreement and the other Loan Documents) so long as, in each case, the Lenders shall have received at least five Business Days' prior written notice thereof and the Administrative Agent shall not have received, within five Business Days of the date of such notice to the Lenders, a written notice from the Required Lenders stating that the Required Lenders object to such amendment and (z) the consent of the Lenders or the Required Lenders, as the case may be, shall not be required to make any such changes necessary to be made in connection with any borrowing of Incremental Term Loans or the provision of any Incremental Revolving Credit Commitments or other changes otherwise expressly permitted hereunder.

SECTION 9.09. ***Interest Rate Limitation***. Notwithstanding anything herein to the contrary, if at any time the interest rate applicable to any Loan or participation in any L/C Disbursement, together with all fees, charges and other amounts which are treated as interest on such Loan or participation in such L/C Disbursement under applicable law (collectively the "***Charges***"), shall exceed the maximum lawful rate (the "***Maximum Rate***") which may be contracted for, charged, taken, received or reserved by the Lender holding such Loan or participation in accordance with applicable law, the rate of interest payable in respect of such Loan or participation hereunder, together with all Charges payable in respect thereof, shall be limited to the Maximum Rate and, to the extent lawful, the interest and Charges that would have

been payable in respect of such Loan or participation but were not payable as a result of the operation of this Section 9.09 shall be cumulated and the interest and Charges payable to such Lender in respect of other Loans or participations or periods shall be increased (but not above the Maximum Rate therefor) until such cumulated amount, together with interest thereon at the Federal Funds Effective Rate to the date of repayment, shall have been received by such Lender.

SECTION 9.10. ***Entire Agreement***. This Agreement, the Fee Letter dated October 31, 2017, between the U.S. Borrower and the Administrative Agent, and the other Loan Documents constitute the entire contract between the parties relative to the subject matter hereof. Any other previous agreement among the parties with respect to the subject matter hereof is superseded by this Agreement and the other Loan Documents. Nothing in this Agreement or in the other Loan Documents, expressed or implied, is intended to confer upon any person (other than the parties hereto and thereto, their respective successors and assigns permitted hereunder (including any Affiliate of any Issuing Bank that issues any Letter of Credit) and, to the extent expressly contemplated hereby, the Related Parties of each of the Administrative Agent, the Issuing Banks and the Lenders) any rights, remedies, obligations or liabilities under or by reason of this Agreement or the other Loan Documents.

SECTION 9.11. ***WAIVER OF JURY TRIAL***. EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR ANY OF THE OTHER LOAN DOCUMENTS. EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 9.11.

SECTION 9.12. ***Severability***. In the event any one or more of the provisions contained in this Agreement or in any other Loan Document should be held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein and therein shall not in any way be affected or impaired thereby (it being understood that the invalidity of a particular provision in a particular jurisdiction shall not in and of itself affect the validity of such provision in any other jurisdiction). The parties shall endeavor in good-faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions.

SECTION 9.13. ***Counterparts***. This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original but all of which when taken together shall constitute a single contract, and shall become effective as provided in Section 9.03. Delivery of an executed signature page to this Agreement by facsimile or other customary means of electronic transmission (e.g., "pdf") shall be as effective as delivery of a manually signed counterpart of this Agreement.

SECTION 9.14. ***Headings***. Article and Section headings and the Table of Contents used herein are for convenience of reference only, are not part of this Agreement and are not to affect the construction of, or to be taken into consideration in interpreting, this Agreement.

SECTION 9.15. ***Jurisdiction; Consent to Service of Process***. (a) Each of the parties hereto hereby irrevocably and unconditionally submits, for itself and its property, to the exclusive general jurisdiction of any New York State court or Federal court of the United States of America sitting in New York City, and any appellate court from any thereof, in any action or proceeding arising out of or relating to this Agreement or the other Loan Documents, or for recognition or

enforcement of any judgment, and each of the parties hereto hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such New York State or, to the extent permitted by law, in such Federal court. Each of the parties hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

(b) Each of the parties hereto hereby irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection which it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Agreement or the other Loan Documents in any New York State or Federal court. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

(c) Each party to this Agreement irrevocably consents to service of process in the manner provided for notices in Section 9.01. Nothing in this Agreement will affect the right of any party to this Agreement to serve process in any other manner permitted by law.

SECTION 9.16. ***Confidentiality***. Each of the Administrative Agent, the Issuing Banks, and the Lenders agrees to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed (i) to its Affiliates and its and its Affiliates' officers, directors, trustees, employees and agents, including accountants, legal counsel and other advisors (it being understood that the persons to whom such disclosure is made will be informed of the confidential nature of such Information and instructed to keep such Information confidential, are subject to customary confidentiality obligations of professional practice or agree in writing to be bound by the terms of this paragraph (or language substantially similar to this paragraph) (and to the extent a person's compliance is within the control of the Administrative Agent, Issuing Bank or Lender, the Administrative Agent, such Issuing Bank or such Lender will be responsible for such compliance)), (ii) to the extent required or requested by any Governmental Authority or representative thereof or regulatory authority having jurisdiction over it (including any self-regulatory authority or representative thereof) or pursuant to legal process or otherwise as required by applicable law, (iii) in connection with the exercise of any remedy or the enforcement of any right under this Agreement or any other Loan Document in any litigation or arbitration action or proceeding relating thereto, to the extent such disclosure is reasonably necessary in connection with such litigation or arbitration action or proceeding (provided that the Borrower shall be given notice thereof and a reasonable opportunity to seek a protective court order with respect to such Information prior to such disclosure (it being understood that the refusal by a court to grant such a protective order shall not prevent the disclosure of such Information thereafter)), (iv) subject to an agreement containing provisions substantially the same as those of this Section 9.16, to (x) any actual or prospective assignee of or participant in any of its rights or obligations under this Agreement and the other Loan Documents, or (y) any actual or prospective counterparty (or its advisors) to any swap or derivative transaction relating to Holdings or any Subsidiary or any of their respective obligations, (v) with the consent of the U.S. Borrower, (vi) to the extent such Information becomes publicly available from a source that is not subject to the confidentiality provisions of this Section 9.16 (or any language or agreements substantially similar to this paragraph) or (vii) to the extent such information is independently developed by the Administrative Agent, such Lender or such Issuing Bank without the use of confidential information in breach of this Section 9.16. For the purposes of this Section, "***Information***" shall mean all information received from a Borrower or Holdings and related to a Borrower or Holdings or their business, other than any such information that was available to the Administrative Agent, any Issuing Bank or any Lender on a nonconfidential basis prior to its disclosure by a Borrower or Holdings. Any person required to maintain the confidentiality of Information as provided in this Section 9.16 shall be considered to have complied with its obligation to do so if such person has exercised the same degree of care to maintain the confidentiality of such Information as such person would accord its own confidential information.

SECTION 9.17. ***Conversion of Currencies***. (a) If, for the purpose of obtaining judgment in any court, it is necessary to convert a sum owing hereunder in one currency into another currency, each party hereto agrees, to the fullest extent that it may effectively do so, that the rate of exchange used shall be that at which in accordance with normal banking procedures in the relevant jurisdiction the first currency could be purchased with such other currency on the Business Day immediately preceding the day on which final judgment is given.

(b) The obligations of each party in respect of any sum due to any other party hereto or any holder of the obligations owing hereunder (the "***Applicable Creditor***") shall, notwithstanding any judgment in a currency (the " ***Judgment Currency***") other than the currency in which such sum is stated to be due hereunder (the "***Agreement Currency***"), be discharged only to the extent that, on the Business Day following receipt by the Applicable Creditor of any sum adjudged to be so due in the Judgment Currency, the Applicable Creditor may in accordance with normal banking procedures in the relevant jurisdiction purchase the Agreement Currency with the Judgment Currency; if the amount of the Agreement Currency so purchased is less than the sum originally due to the Applicable Creditor in the Agreement Currency, such party agrees, as a separate obligation and notwithstanding any such judgment, to indemnify the Applicable Creditor against such loss. The obligations of the Loan Parties contained in this Section 9.17 shall survive the termination of this Agreement and the payment of all other amounts owing hereunder.

SECTION 9.18. ***Additional Borrowers***. The U.S. Borrower may designate any wholly owned Subsidiary as a Borrower under any of the Commitments; *provided* that (x) the Administrative Agent (and in the case of any Foreign Subsidiary so designated, each applicable Lender) shall be reasonably satisfied that the applicable Lenders may make loans and other extensions of credit to such person in the applicable currency or currencies in such person's jurisdiction in compliance with applicable laws and regulations and without being subject to any unreimbursed or unindemnified Tax or other expense and (y) the Administrative Agent (including on behalf of each applicable Lender) shall have received any and all documentation and other information with respect to such person that it reasonably requests at least five (5) Business Days prior to the effectiveness of such designation in order to comply with its ongoing obligations under applicable U.S. "know your customer" and anti-money laundering rules and regulations, including the USA PATRIOT Act. Upon the receipt by the Administrative Agent of a Borrowing Subsidiary Agreement executed by such a wholly owned Subsidiary, Holdings and the U.S. Borrower, such wholly owned Subsidiary shall be a Borrower and a party to this Agreement. A Subsidiary shall cease to be a Borrower hereunder at such time as no Loans, Fees or any other amounts due in connection therewith pursuant to the terms hereof shall be outstanding by such Subsidiary, no Letters of Credit issued for the account of such Subsidiary shall be outstanding and such Subsidiary and the U.S. Borrower shall have executed and delivered to the Administrative Agent a Borrowing Subsidiary Termination; *provided* that, notwithstanding anything herein to the contrary, no Subsidiary shall cease to be a Borrower solely because it no longer is a wholly owned Subsidiary.

SECTION 9.19. ***[Reserved]***.

SECTION 9.20. ***Loan Modification Offers***. (a) Holdings and the U.S. Borrower may, by written notice to the Administrative Agent from time to time, make one or more offers (each, a "***Loan Modification Offer***") to all the Lenders of one or more Classes of Loans and/or Commitments (each Class subject to such a Loan Modification Offer, an "***Affected Class***") to make one or more Permitted Amendments (as defined in paragraph (c) below) pursuant to procedures reasonably specified by the Administrative Agent and reasonably acceptable to Holdings or the U.S. Borrower, as the case may be. Such notice shall set forth (i) the terms and conditions of the requested Permitted Amendment and (ii) the date on which such Permitted Amendment is requested to become effective (which shall not be less than 10 Business Days nor more than 30 Business Days after the date of such notice, unless otherwise agreed to by the Administrative Agent). Permitted Amendments shall become effective only with respect to the Loans and Commitments of the Lenders of the Affected Class that accept the applicable Loan Modification Offer (such Lenders, the "***Accepting Lenders***") and, in the case of any Accepting

Lender, only with respect to such Lender's Loans and Commitments of such Affected Class as to which such Lender's acceptance has been made.

(b) Holdings, the U.S. Borrower and each Accepting Lender shall execute and deliver to the Administrative Agent a Loan Modification Agreement and such other documentation as the Administrative Agent shall reasonably specify to evidence the acceptance of the Permitted Amendments and the terms and conditions thereof. The Administrative Agent shall promptly notify each Lender as to the effectiveness of each Loan Modification Agreement. Each of the parties hereto hereby agrees that, upon the effectiveness of any Loan Modification Agreement, this Agreement shall be deemed amended to the extent (but only to the extent) necessary to reflect the existence and terms of the Permitted Amendment evidenced thereby and only with respect to the Loans and Commitments of the Accepting Lenders of the Affected Class (including any amendments necessary to treat the Loans and Commitments of the Accepting Lenders of the Affected Class as Other Term Loans, Other Revolving Loans and/or Other Revolving Credit Commitments). Notwithstanding the foregoing, no Permitted Amendment shall become effective under this Section 9.20 unless the Administrative Agent, to the extent so reasonably requested by the Administrative Agent, shall have received legal opinions, board resolutions and/or an officer's certificate consistent with those delivered on the Closing Date under Section 4.02(a) and (b).

(c) "***Permitted Amendments***" shall be (i) an extension of the final maturity date of the applicable Loans and/or Commitments of the Accepting Lenders (*provided* that such extensions may not result in having more than one additional final maturity date under this Agreement in any year without the consent of the Administrative Agent), (ii) a reduction or elimination of the scheduled amortization of the applicable Loans of the Accepting Lenders, (iii) change in the Applicable Percentage with respect to the applicable Loans and/or Commitments of the Accepting Lenders (including by implementation of a "~~LIBOR~~ floor**" or "spread adjustment**") and the payment of additional fees to the Accepting Lenders (any such increase and/or payments to be in the form of cash, Equity Interests or other property to the extent not prohibited by this Agreement) and (iv) the conversion of Revolving Loans to Term Loans or Term Loans to Revolving Loans.

SECTION 9.21. ***[Reserved]***.

SECTION 9.22. ***USA PATRIOT Act Notice*** . Each Lender and the Administrative Agent (for itself and not on behalf of any Lender) hereby notifies Holdings and each Borrower that pursuant to the requirements of the USA PATRIOT Act, it is required to obtain, verify and record information that identifies Holdings and each Borrower, which information includes the name and address of Holdings and each Borrower and other information that will allow such Lender or the Administrative Agent, as applicable, to identify Holdings and each Borrower in accordance with the USA PATRIOT Act.

SECTION 9.23. ***No Advisory or Fiduciary Responsibility***. Holdings and the Borrowers acknowledge and agree, and acknowledge the understanding of the other Loan Parties and the respective Affiliates of each of the foregoing, that (a) the Credit Facilities and any related arranging or other services in connection therewith (including in connection with any amendment, waiver or other modification hereof or of any other Loan Document) constitute an arm's-length commercial transaction between Holdings, the Borrowers, the other Loan Parties and their respective Affiliates, on the one hand, and the Administrative Agent, the Issuing Banks, the Lenders and the Lead Arrangers, on the other hand, and Holdings, each Borrower and each other Loan Party is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the Transactions and the transactions contemplated by the other Loan Documents (including any amendment, waiver or other modification hereof or thereof), (b) in connection with the process leading to the Transactions, each of the Administrative Agent, the Issuing Banks, the Lenders and the Lead Arrangers is and has been acting solely as a principal and is not the financial advisor, agent or fiduciary for Holdings, any Borrower, any other Loan Party or any of their respective Affiliates, stockholders, creditors or employees or any other person, (c) none of the Administrative Agent, any Issuing Banks, the Lenders and the Lead

Arrangers has assumed or will assume an advisory, agency or fiduciary responsibility in favor of Holdings, any Borrower or any other Loan Party with respect to any of the Transactions or the process leading thereto, including with respect to any amendment, waiver or other modification hereof or of any other Loan Document (irrespective of whether the Administrative Agent, any Issuing Bank, any Lender or either Lead Arranger has advised or is currently advising Holdings, any Borrower, any other Loan Party or any of their respective Affiliates on other matters) and none of the Administrative Agent, the Issuing Banks, the Lenders and the Lead Arrangers has any obligation to Holdings, any Borrower, any other Loan Party or any of their respective Affiliates with respect to the Transactions except those obligations expressly set forth herein and in the other Loan Documents, (d) the Administrative Agent, the Issuing Banks, the Lenders and the Lead Arrangers and their respective Affiliates may be engaged in a broad range of transactions that involve interests that differ from those of Holdings, the Borrowers, the other Loan Parties and their respective Affiliates, and none of the Administrative Agent, the Issuing Banks, the Lenders and the Lead Arrangers has any obligation to disclose any such interest by virtue of any advisory, agency or fiduciary relationship and (e) the Administrative Agent, the Issuing Banks, the Lenders and the Lead Arrangers have not provided and will not provide any legal, accounting, regulatory or tax advice with respect to any of the Transactions (including any amendment, waiver or other modification hereof or of any other Loan Document) and each of Holdings, the Borrowers and the other Loan Parties has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate.

SECTION 9.24. ***[Reserved]***.

SECTION 9.25. ***Release of Guarantees***. (a) Notwithstanding any other provision of this Agreement or the Guarantee Agreement, any Guarantees made by any Subsidiary Guarantor under the Guarantee Agreement shall be automatically released on a Business Day specified by Holdings (a "***Guarantee Release Date***"), provided that:

(1) Holdings shall have given written notice to the Administrative Agent at least five Business Days prior to such Guarantee Release Date, specifying the proposed Guarantee Release Date and the Subsidiary Guarantors to be released;

(2) on the Guarantee Release Date, upon the effectiveness of the release of such Subsidiary Guarantor hereunder, such Subsidiary Guarantor shall not Guarantee any Material Indebtedness;

(3) no Default or Event of Default shall have occurred and be continuing as of such Guarantee Release Date; and

(4) on such Guarantee Release Date, the Administrative Agent shall have received a certificate, dated such Guarantee Release Date and executed on behalf of Holdings by a Responsible Officer of Holdings, confirming the satisfaction of the condition set forth in clauses (2) and (3) above.

(b) The Lenders hereby expressly authorize the Administrative Agent to, and the Administrative Agent hereby agrees to, execute and deliver to the Loan Parties all such instruments and documents as the Loan Parties may reasonably request to effectuate, evidence or confirm any release provided for in this Section 9.25, all at the sole cost and expense of the Loan Parties. Any execution and delivery of documents pursuant to this Section 9.25 shall be without recourse to or representation or warranty by the Administrative Agent.

(c) Without limiting the provisions of Section 9.05, Holdings and the Borrowers shall reimburse the Administrative Agent upon demand for all costs and expenses, including fees, disbursements and other charges of counsel, incurred by any of them in connection with any action contemplated by this Section 9.25.

SECTION 9.26. ***Acknowledgment and Consent to Bail-In of EEA Financial Institutions*** . Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among the parties hereto, each party hereto acknowledges that any liability of any of the Lenders, Issuing Banks, Administrative Agent, Advance Agent or Lead Arrangers (collectively, the "Lender Parties") that is an EEA Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of an EEA Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

(a) the application of any Write-Down and Conversion Powers by an EEA Resolution Authority to any such liabilities arising hereunder which may be payable to it by any Lender Party party hereto that is an EEA Financial Institution; and

(b) the effects of any Bail-in Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such EEA Financial Institution, its parent entity, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of any EEA Resolution Authority.

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CBRE Group, Inc.
2019 Equity Incentive Plan
Restricted Stock Units
Grant Notice

CBRE Group, Inc. (the "Company"), pursuant to its 2019 Equity Incentive Plan (the "Plan"), hereby grants to the "Participant" identified below an award (the "Award") of that number of Restricted Stock Units set forth below (the "Units"). In general, each Unit is the right to receive one (1) share of the Company's Class A Common Stock (the "Shares") at the time such Unit vests. This Award is subject to all of the terms and conditions set forth herein and in the Restricted Stock Unit Agreement (the "Agreement") and the Plan (collectively, the "Award Documents"), both of which are attached hereto and incorporated herein in their entirety.

Grant Date:

Vesting Commencement Date:

Number of Units Subject to Award:

Vesting Schedule:	Subject to Section 4 of the Agreement, one-fourth ($1/4^{th}$) of the Units subject to the Award shall vest on each anniversary of the Vesting Commencement Date over a period of four (4) years.
Consideration:	No payment is required for the Shares, although payment may be required for the amount of any withholding taxes due as a result of the delivery of the Shares as described in greater detail in the Agreement.

Additional Terms/Acknowledgements: The undersigned Participant acknowledges receipt of the Award Documents and the Plan's Prospectus, and understands and agrees to the terms set forth in the Award Documents. Participant acknowledges that he or she is accepting the Award by electronic means and that such electronic acceptance constitutes Participant's agreement to be bound by all of the terms and conditions of the Award Documents. By accepting the Award, Participant consents to receive any documents related to participation in the Plan and the Award by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company. Participant also acknowledges that this Grant Notice must be returned to the Company (including through electronic means). Participant further acknowledges that as of the Grant Date, the Award Documents set forth the entire understanding between Participant and the Company regarding the acquisition of Units and Shares and supersede all prior oral and written agreements on that subject with the exception of (i) Awards previously granted and delivered to Participant under the Plan, and (ii) the following agreements only, if any:

Other Agreements: _____

_____

Attachments:
I. Restricted Stock Unit Agreement
II. CBRE Group, Inc. 2019 Equity Incentive Plan

CBRE Group, Inc.
2019 Equity Incentive Plan
Restricted Stock Unit Agreement

Pursuant to the provisions of the Company's 2019 Equity Incentive Plan ("Plan"), the terms of the Grant Notice to which this Restricted Stock Unit Agreement is attached ("Grant Notice") and this Restricted Stock Unit Agreement (the "Agreement"), CBRE Group, Inc. (the "Company") grants you that number of Restricted Stock Units (the "Units") as set forth in the Grant Notice as of the date specified in the Grant Notice ("Grant Date"). Defined terms not explicitly defined in this Agreement or in the Grant Notice but defined in the Plan shall have the same definitions as in the Plan.

The details of your Award are as follows:

1. The Award. The Company hereby awards to you the aggregate number of Units specified in your Grant Notice. Each Unit is the right to receive one (1) share of the Company's Class A Common Stock (the "Shares") on the Vesting Date (as defined below). The Units and the Shares are awarded to you in consideration for your continued service to the Company or its Subsidiaries and Affiliates (the "Company Group").

2. Documentation. As a condition to the award of the Units and the Shares, you agree to execute the Grant Notice and to deliver the same to the Company (including through electronic means), along with such additional documents as the Committee may require, within the time period prescribed by the Company or else this Award shall be forfeited without consideration. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and the Award by electronic means or request your consent to participate in the Plan by electronic means. By accepting the Award, you consent to receive such documents by electronic delivery and agree to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company.

3. Consideration For The Award. No cash payment is required for the Units or the Shares, although you may be required to tender payment in cash or other acceptable form of consideration for the amount of any withholding taxes due as a result of delivery of the Shares.

4. Vesting. Except as otherwise specified in this Agreement and the Plan, the Units will vest as provided in the Grant Notice (the "Vesting Date"). Any Units which have not vested as of the date of your termination of Continuous Service shall thereupon be forfeited immediately and without any further action by the Company, except as otherwise directed by the Committee; *provided,* that:

(a) If your Continuous Service terminates due to your death or Disability after the Vesting Commencement Date, the following number of unvested Units automatically will become vested:

(i) If such termination occurs within twelve (12) months following the Vesting Commencement Date, the number of unvested Units that will become vested will be equal to (x) the number of days that have elapsed from the Vesting Commencement Date through the date of your termination of Continuous Service divided by three hundred sixty-five (365), multiplied by (y) the number of Units subject to your Award, rounded down to the nearest whole Unit, and such vesting will occur as of the date of your termination of Continuous Service (and such date will be deemed to be the "Vesting Date" for purposes of such Units); or

Grant Date:

(ii) If such termination occurs more than twelve (12) months following the Vesting Commencement Date, the number of unvested Units that will become vested will be equal to all of the unvested Units subject to your Award, and such vesting will occur as of the date of your termination of Continuous Service (and such date will be deemed to be the "Vesting Date" for purposes of such Units).

The Award will immediately terminate following such vesting and the issuance of Shares pursuant to Section 6 below.

(b) If, after the Vesting Commencement Date, your Continuous Service terminates due to your Retirement (as defined below), and (x) after such termination through the applicable Vesting Date you have at all times satisfied certain noncompetition, nonsolicitation and confidentiality conditions imposed by the Company (in its sole discretion) upon or promptly following such termination and (y) you provide the Company with a certification (in a form acceptable to the Company) that you have satisfied all such conditions during such period, the following number of unvested Units will continue to vest as provided in the Grant Notice:

(i) If such termination occurs on or following December 31 of the calendar year in which the Vesting Commencement Date occurs, the number of unvested Units that will continue to vest as provided in the Grant Notice will be equal to the number of unvested Units subject to your Award; provided, that, if you die following the date of such termination, all of the then unvested Units subject to your Award will automatically become vested on the date of your death; or

(ii) If such termination occurs prior to December 31 of the calendar year in which the Vesting Commencement Date occurs, any Units which have not vested as of the date of such termination shall thereupon be forfeited immediately and without any further action by the Company, except as otherwise directed by the Committee.

(c) For purposes of the Award, "Retirement" means your voluntary termination following:

(i) completion of at least ten (10) years of Continuous Service, and

(ii) (A) for U.S. Participants, your attainment of age sixty-two (62), or (B) for non-U.S. Participants, your attainment of age sixty-two (62) or such earlier age at which you are required to retire from Continuous Service under applicable law or an applicable retirement plan or policy. If you are eligible to qualify for Retirement under this subsection, you must provide evidence to that effect to the Company (in a form acceptable to the Company) on or before your termination date.

With respect to the vesting of this Award, the provisions of this Section 4 shall apply and supersede the terms of any other plan, program or arrangement maintained by the Company or the Company Group or any other agreement between you and the Company or the Company Group.

5. Number of Shares and Purchase Price. The number of Shares subject to your Award may be adjusted from time to time pursuant to the provisions of Section 12 of the Plan.

6. Issuance and Certificates; Code Section 409A. The Company will deliver to you a number of Shares equal to the number of vested Units subject to your Award, including any additional Units received pursuant to Section 5 above that relate to such vested Units, as soon as reasonably practicable after the applicable Vesting Date, but in no event later than December 31 of the calendar year in which the applicable Vesting Date occurs. However, if a scheduled delivery date falls on a date that is not a business day, such delivery date shall instead fall on the next business day. Notwithstanding the foregoing, in the event that (i) you are subject to the Company's policy permitting officers and directors to sell Shares only during certain "window periods," as in effect from time to time (the "Policy"), or you are otherwise prohibited from selling Shares in the open market, and any Shares subject to your Award are scheduled to be delivered on a day (the "Original Distribution Date") that does not occur during an open "window period" applicable to you or a day on which you are permitted to sell Shares pursuant to a written plan that meets the requirements of Rule 10b5-1 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as determined by the Company in accordance with the Policy, or does not occur on a date when you are otherwise permitted to sell Shares in the open market, and (ii) the Company elects not to satisfy its tax withholding obligations by withholding Shares from your distribution, then such Shares shall not be delivered on such Original Distribution Date and shall instead be delivered on the first business day of the next occurring open "window period" applicable to you pursuant to the Policy (regardless of whether you are still providing Continuous Service at such time) or the next business day when you are not prohibited from selling Shares in the open market, but in no event later than December 31 of the calendar year in which the applicable Vesting Date occurs.

There are no certificates evidencing the Units. Certificates evidencing the Shares to be delivered pursuant to this Agreement may be issued by the Company and registered in your name.

7. Transfer Restrictions. The Units are non-transferable. Shares that are received under your Award are subject to the transfer restrictions set forth in the Plan and any transfer restrictions that may be described in the Company's bylaws or charter or insider trading policies in effect at the time of the contemplated transfer.

8. No Rights as a Stockholder; Dividend Equivalents. A Unit (i) does not represent an equity interest in the Company, and (ii) carries no voting rights. You will not have an equity interest in the Company or any shareholder rights, unless and until the Shares are delivered to you in accordance with this Agreement. Units, whether or not vested, shall be credited with dividend equivalents as and when dividends are paid on the Company's actual Shares, with such dividend equivalents deemed to be invested in additional Units subject to this Agreement as of the corresponding dividend payment date (which additional Units shall vest upon the vesting of the underlying Units to which they are attributable). No dividend equivalents shall be credited with respect to any fractional Unit.

9. Securities Laws. Upon the delivery of the Shares, you will make or enter into such written representations, warranties and agreements as the Committee may reasonably request in order to comply with applicable securities laws or with this Agreement. Notwithstanding any other provision of the Plan or this Agreement to the contrary, unless there is an available exemption from such registration, qualification or other legal requirements, Units may not be converted into Shares prior to the completion of any registration or qualification of the Units or the Shares that is required to comply with applicable state and federal securities or any ruling or regulation of any governmental body or national securities exchange or compliance with any other applicable federal, state or foreign law that the Committee shall in its sole discretion determine in good faith to be necessary or advisable.

10. Legends on Certificates. The certificates representing the Shares delivered to you as contemplated by this Agreement shall be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the Plan or the rules, regulations, and other requirements of the Securities and Exchange Commission, any stock exchange upon which such Shares are listed, and any applicable Federal or state laws, and the Committee may cause a legend or legends to be put on any such certificates to make appropriate reference to such restrictions.

11. Award Not A Service Contract and No Entitlement to Future Grants. Your Award is not an employment or service contract, and nothing in your Award shall be deemed to create in any way whatsoever any obligation or right to continued employment or service with or to the Company Group. In addition, nothing in your Award shall obligate the Company, its stockholders, its Board or employees to continue any relationship that you might have as a member of the Board, as an employee or as any other type of service provider for the Company. You acknowledge and agree that this Award was granted in the Committee's discretion and that neither the grant of this Award nor the issuance of any Shares pursuant to this Award creates any entitlement to or expectation of any future grant of Units or any future benefits in lieu of Units.

12. Tax Consequences. You are responsible for any taxes due in connection with your receipt of this Award, including the vesting of such Award and delivery of Shares, and for declaring the Award to the relevant tax authority to which you are subject, if required.

13. Withholding Obligations.

(a) At the time your Award is made, or at any time thereafter as requested by the Company, you hereby authorize the Company to satisfy its withholding obligations, if any, from payroll and any other amounts payable to you (or, in the Company's discretion, from Shares that become deliverable upon vesting under this Award), and otherwise agree to make adequate provision for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company, if any, which arise in connection with the grant of or vesting of your Award or the delivery of Shares under the Award. Notwithstanding the foregoing, if you are a Section 16 officer of the Company under the Exchange Act, the Company will satisfy its withholding obligations, if any, by withholding a number of Shares that become deliverable upon vesting under this Award.

(b) Unless the tax withholding obligations of the Company, if any, are satisfied, the Company shall have no obligation to issue a certificate for such Shares or release such Shares.

14. Notices. Any notices provided for in your Award or the Plan shall be given in writing and shall be delivered by hand or sent by overnight courier, certified or registered mail, return receipt requested, postage prepaid, or electronic mail and shall be deemed effectively given upon receipt or, in the case of notices delivered by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company.

15. Miscellaneous.

(a) You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Committee to carry out the purposes or intent of this Award.

(b) You acknowledge and agree that you have reviewed your Award in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your Award and fully understand all provisions of your Award.

(c) The waiver by either party of compliance with any provision of the Award by the other party shall not operate or be construed as a waiver of any other provision of the Award, or of any subsequent breach by such party of a provision of the Award.

16. Governing Plan Document. Your Award is subject to all interpretations, amendments, rules and regulations that may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the provisions of the Plan and any other document, the provisions of the Plan shall control.

17. Data Privacy Notification. ***You are hereby notified of the collection, use and transfer, in electronic or other form, of your personal data as described in this Agreement, any other Award materials and the Company's Employee Personal Information Privacy Notice or Employee Privacy Notice and Consent Form, as applicable (the "Privacy Notice"), which is viewable on the GDPO Intranet Site at https://cbre.sharepoint.com/sites/intra-EthicsCompliance/SitePages/Data-Privacy---Policies.aspx. Such personal data may be collected, used and transferred by and among, as applicable, the Company, the Company Group and any third parties assisting (presently or in the future) with the implementation, administration and management of the Plan, such as Fidelity Stock Plan Services, or its successor, for the exclusive purpose of implementing, administering and managing your participation in the Plan. The Company's basis for the processing and transfer of the data is described in the Company's Privacy Notice. Where required under applicable law, personal data also may be disclosed to certain securities or other regulatory authorities where the Company's shares are listed or traded or regulatory filings are made, or to certain tax authorities for compliance with the Company's, the Employer's and/or your tax obligations. You understand that the collection, use and transfer of your personal data is mandatory for compliance with applicable law and necessary for the performance of the Plan and that your refusal to provide such personal data would make it impossible for the Company to perform its contractual obligations and may affect your ability to participate in the Plan.***

18. Appendices. Notwithstanding any provisions in this Agreement, if you reside in a country outside the United States or are otherwise subject to the laws of a country other than the United States, the Award shall be subject to the additional terms and conditions set forth in Appendix A to this Agreement and to any special terms and provisions (if any) as set forth in Appendix B for your country. Moreover, if you relocate outside the U.S., the special terms and conditions in Appendix A (applicable to all non-U.S. countries) and in Appendix B (applicable to your specific country) will apply to you, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. Appendix A and Appendix B constitute part of this Agreement.

19. Imposition of Other Requirements. The Company reserves the right to impose other requirements on your participation in the Plan, on the Award and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

Appendix A

to

Restricted Stock Unit Agreement

Provisions Applicable to Non-U.S. Countries

This Appendix A includes additional terms and conditions that govern the Award and any dividend equivalents granted to you under the Plan if you are a Participant and reside and/or work in a country outside the United States of America (or later relocate to such a country). Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Plan and/or the Agreement to which this Appendix A is attached.

***

Nature of Grant. In accepting the grant of the Award (including any dividend equivalents), you acknowledge, understand and agree that:

a. the Plan is established voluntarily by the Company, it is discretionary in nature, and may be amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;

b. the grant of the Award and dividend equivalents is exceptional, voluntary and occasional;

c. all decisions with respect to future Units, dividend equivalents or other grants, if any, will be at the sole discretion of the Company;

d. you are voluntarily participating in the Plan;

e. the Award, dividend equivalents and any Shares subject to the Award, and the income and value of same, are not intended to replace any pension rights or compensation;

f. unless otherwise expressly agreed in a writing by you with the Company, the Award, dividend equivalents and the Shares subject to the Award, and the income and value of same, are not granted as consideration for, or in connection with, the service you may provide as a director of a Subsidiary or Affiliate;

g. the Award, dividend equivalents and any Shares subject to the Award, and the income and value of same, are not part of normal or expected compensation for any purpose, including, without limitation, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, holiday pay, bonuses, long-service awards, pension or retirement or welfare benefits or similar mandatory payments;

h. the future value of the Shares underlying the Award is unknown, indeterminable, and cannot be predicted with certainty;

i. no claim or entitlement to compensation or damages, including pro-rated compensation or damages, shall arise from forfeiture of the Award and dividend equivalents resulting from the termination of your Continuous Service as provided for in the Plan or in the Agreement;

j. for purposes of the Award and dividend equivalents, and unless otherwise expressly provided in the Plan, the Agreement or determined by the Company, your Continuous Service will be considered terminated as of the date you are no longer actively providing services to the Company or any Parent, Subsidiary or Affiliate (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any), and unless otherwise expressly provided in the Plan, the Agreement or determined by the Company, your right to vest in the Award under the Plan, if any, will terminate as of such date and will not be extended by any notice period (*e.g.*, your period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any); the Committee shall have the exclusive discretion to determine when you are no longer actively providing services for purposes of your Award and the dividend equivalents (including whether you may still be considered to be providing services while on a leave of absence);

k. unless otherwise provided in the Plan or by the Company in its discretion, the Award, the dividend equivalents and the benefits evidenced by the Agreement do not create any entitlement to have the Award or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company; and

l. neither the Company nor any Parent, Subsidiary or Affiliate shall be liable for any foreign exchange rate fluctuation between your local currency and the United States Dollar that may affect the value of the Award, the dividend equivalents or of any amounts due to you pursuant to the settlement of the Award or the subsequent sale of any Shares acquired upon settlement.

Responsibility for Taxes. The following provisions supplement Section 13 of the Agreement:

You acknowledge that, regardless of any action taken by the Company or, if different, your employer (the "Employer"), the ultimate liability for all income tax, social insurance contributions, payroll tax, fringe benefits tax, payment on account or other tax-related items related to your participation in the Plan and legally applicable or deemed applicable to you ("Tax-Related Items") is and remains your responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. You further acknowledge that the Company and the Employer (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Award or the underlying Shares, including, but not limited to, the grant, vesting or settlement of the Award and the subsequent sale of Shares acquired pursuant to such settlement and the receipt of any dividends or dividend equivalents, and (b) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Award or any dividend equivalents to reduce or eliminate your liability for Tax-Related Items or achieve any particular tax result. Further, if you are subject to Tax-Related Items in more than one jurisdiction, you acknowledge that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any applicable taxable or tax withholding event, you authorize the Company and/or the Employer, or their respective agents, at their discretion, to satisfy the obligations with regard to all Tax-Related Items by any of the methods referred to in Section 13(a) of the Agreement. In addition, you authorize withholding from proceeds of the sale of Shares acquired upon settlement of the Award and any dividend equivalents either through a voluntary sale, through a mandatory sale, through a "withhold to cover" program or any other scheme or program, in each case, arranged by the Company (on your behalf pursuant to this authorization without further consent by you).

The Company may withhold Shares otherwise deliverable under the Award or any dividend equivalents for Tax-Related Items solely by considering applicable minimum statutory withholding amounts. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, you are deemed to have been issued the full number of Shares subject to the vested Award or any dividend equivalents, notwithstanding that a number of the Shares are held back solely for the purpose of paying the Tax-Related Items.

Finally, if requested by the Company, you agree to pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of your participation in the Plan that cannot be satisfied by the means previously described.

Language. You acknowledge that you are proficient in the English language and understand, or have consulted with an advisor who is proficient in the English language so as to enable you to understand, the provisions of the Agreement and the Plan. If you have received the Agreement or any other document related to the Plan translated into a language other than English, and if the meaning of the translated version is different than the English version, the English version will control.

Grant Date:

Appendix B

to

Restricted Stock Unit Agreement

Country-Specific Provisions

This Appendix B includes additional terms and conditions that govern the Award and dividend equivalents granted to you under the Plan if you are a Participant and reside and/or work in one of the countries listed herein. If you are a citizen or resident of a country other than the one in which you currently are working and/or residing (or if you are considered as such for local law purposes), or if you transfer or relocate employment or residence to another country after the Grant Date, the Company, in its discretion, will determine the extent to which the terms and conditions herein will be applicable to you.

This Appendix B also includes information regarding securities and other laws of which you should be aware with respect to your participation in the Plan. The information is based on laws in effect in the respective countries as of January 2022. Such laws are often complex and change frequently. As a result, you should not rely on the information noted herein as the only source of information relating to the consequences of your participation in the Plan because the information may be out of date by the time you vest in the Award and any dividend equivalents or sell the Shares acquired under the Plan. In addition, the information noted herein is general in nature and may not apply to your particular situation, and the Company is not in a position to assure you of any particular result. Accordingly, you should seek appropriate professional advice as to how the applicable laws may apply to your situation. That is your responsibility, and not the Company's.

If you are a citizen or resident of a country other than the one in which you currently are working and/or residing (or if you are considered as such for local law purposes), or if you transfer employment or residence to another country after the Grant Date, the information noted herein may not be applicable to you in the same manner.

Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Plan, the Agreement and/or the Appendix A which this Appendix B follows.

***

Australia

Australian Offer Document. This Award is intended to comply with the provisions of the Corporations Act 2001, ASIC Regulatory Guide 49 and ASIC Class Order CO 14/1000. Additional details are set forth in the Australian Offer Document, which you acknowledge has been provided to you with this Agreement.

Tax Information. Subdivision 83A-C of the Income Tax Assessment Act, 1997, applies to Awards granted under the Plan, such that the Award is intended to be subject to deferred taxation.

Austria

No country-specific provisions.

Belgium

No country-specific provisions.

Canada

Form of Settlement. Notwithstanding any discretion contained in Sections 10(d) and 10(f) of the Plan or anything to the contrary in the Agreement, the Award and any dividend equivalents shall be settled in Shares only.

Labor Law Acknowledgement. The following provision replaces Section j. of the Nature of Grant section in Appendix A:

j. for purposes of the Award and dividend equivalents, and unless otherwise expressly provided in the Plan, the Agreement or determined by the Company, your Continuous Service will terminate, and your right (if any) to earn, seek damages in lieu of, or otherwise be paid any portion of the Units pursuant to the Agreement, will be measured by the date that is the earliest of (i) the date your employment with the Employer is terminated, whether by you or by the Company or the Employer; and (ii) the date you receive written notice of termination from to the Company or the Employer, in either case, regardless of any period during which notice, pay in lieu of notice or related payments or damages are provided or required to be provided under local law. For greater certainty, you will not earn or be entitled to any pro-rated vesting for that portion of time before the date on which your right to vest terminates, nor will you be entitled to any compensation for lost vesting. Notwithstanding the foregoing, if applicable employment standards legislation explicitly requires continued vesting during a statutory notice period, your right to vest in the Units, if any, will terminate effective upon the expiry of your minimum statutory notice period, but you will not earn or be entitled to pro-rated vesting if the Vesting Date falls after the end of your statutory notice period, nor will you be entitled to any compensation for lost vesting.

Securities Law Notice. You are permitted to sell Shares acquired upon the vesting and settlement of the Award and any dividend equivalents through the designated broker appointed under the Plan, if any, provided the resale of Shares acquired under the Plan takes place outside of Canada through the facilities of a stock exchange on which the Shares are listed. The Shares are currently listed on the New York Stock Exchange ("NYSE").

The following provisions apply if you are a resident of Quebec:

Language Consent. The parties acknowledge that it is their express wish that the Agreement, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir exigé la rédaction en anglais de la Convention, ainsi que de tous documents exécutés, avis donnés et procédures judiciaires intentées, directement ou indirectement, relativement à ou suite à la présente convention.

China

The following provisions apply to Participants that are subject to the exchange control restrictions and regulations in the People's Republic of China ("China"), including the requirements imposed by the State Administration of Foreign Exchange ("SAFE"), as determined by the Company in its sole discretion.

Satisfaction of Regulatory Obligations. The settlement of the Awards and any dividend equivalents upon vesting is conditioned upon the Company securing and maintaining all necessary approvals from SAFE and any other applicable government entities in China to permit the operation of the Plan in China, as determined by the Company it its sole discretion. If or to the extent the Company is unable to complete the registration or maintain the registration, no Shares shall be issued under the Plan. In this case, the Company retains the discretion to settle any Awards in cash paid through local payroll in an amount equal to the Fair Market Value of the Shares subject to the Awards and any dividend equivalents less any Tax-Related Items.

Mandatory Sale Restriction. To facilitate compliance with local regulatory requirements, you agree to the sale of any Shares to be issued to you under the Plan, including by the Company on your behalf if the Company so determines. The sale will occur, at the Company's election: (i) immediately upon vesting, (ii) following your termination of Continuous Service, or (iii) within any other time frame as the Company determines to be necessary to comply with local regulatory requirements. You further agree that the Company is authorized to instruct its designated broker to assist with the mandatory sale of such shares (on your behalf pursuant to this authorization) and you expressly authorize the Company's designated broker to complete the sale of such shares. You acknowledge that the designated broker is under no obligation to arrange for the sale of the Shares at any particular price. Upon the sale of the Shares, the Company agrees to pay you the cash proceeds from the sale, less any brokerage fees or commissions and subject to any obligation to satisfy Tax-Related Items. You agree that the payment of the cash proceeds will be subject to the repatriation requirements described below.

You further agree that any Shares to be issued to you shall be deposited directly into an account with the designated broker. The deposited Shares shall not be transferable (either electronically or in certificate form) from the brokerage account. This limitation shall apply both to transfers to different accounts with the same broker and to transfers to other brokerage firms. The limitation shall apply to all Shares issued to you under the Plan, whether or not you continue to be employed by the Company Group. If you sell Shares that you acquire under the Plan, the repatriation requirements described below shall apply.

Exchange Control Restrictions. By participating in the Plan, you understand and agree that, if you are subject to exchange control laws in China, you will be required to immediately repatriate to China the proceeds from the sale of any Shares acquired under the Plan. You further understand that such repatriation of the proceeds may need to be effected through a special exchange control account established by the Company, the Employer or a Subsidiary or Affiliate, and you hereby consent and agree that the proceeds from the sale of Shares acquired under the Plan may be transferred to such account by the Company (or its designated broker) on your behalf prior to being delivered to you. You also agree to sign any agreements, forms and/or consents that may be reasonably requested by the Company (or its designated broker) to effectuate such transfers.

Czech Republic

No country-specific provisions.

Denmark

Labor Law Acknowledgment. The following provision supplements the Nature of Grant section in Appendix A:

By accepting the Award and any dividend equivalents, you acknowledge that you understand and agree that the Award and any dividend equivalents relate to future services to be performed and is not a bonus or compensation for past services.

Finland

No country-specific provisions.

France

Tax Information. The Units granted pursuant to the Award are not intended to be French tax-qualified restricted stock units granted under Sections L. 225-197-1 to L. 225-197-5 and Sections L. 22-10-59 to L. 22-10-60 of the French Commercial Code, as amended.

Language Consent. By accepting the grant, you confirm having read and understood the Plan and Agreement which were provided in the English language. You accept the terms of those documents accordingly.

En acceptant l'attribution, vous confirmez avoir lu et compris le Plan et l'Accord, qui ont été fournis en langue anglaise. Vous acceptez les termes de ces documents en connaissance de cause.

Germany

No country-specific provisions.

Hong Kong

Sale Restriction. Shares received at vesting and any dividend equivalents are accepted as a personal investment. In the event that the Award and any dividend equivalents vest and Shares are issued to you (or your heirs) within six (6) months of the Grant Date, you (or your heirs) agree that the Shares acquired pursuant to the Award and any dividend equivalents will not be offered to the public or otherwise disposed of prior to the six (6)-month anniversary of the Grant Date.

Securities Law Notice. *WARNING:* The contents of this document have not been reviewed by any regulatory authority in Hong Kong. You should exercise caution in relation to the offer. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice. Neither the grant of the Award (including any dividend equivalents) nor the issuance of Shares upon vesting and settlement of the Award constitutes a public offering of securities under Hong Kong law and are available only to Participants. The Agreement, the Plan and other incidental communication materials distributed in connection with the Award (i) have not been prepared in accordance with and are not intended to constitute a "prospectus" for a public offering of securities under the applicable securities legislation in Hong Kong and (ii) are intended only for the personal use of each Participant and may not be distributed to any other person.

India

No country-specific provisions.

Ireland

No country-specific provisions.

Italy

Acknowledgement of Terms. You acknowledge that by accepting this Award and any dividend equivalents, you have been given access to the Plan document, have reviewed the Plan and this Agreement in their entirety, and fully understand and accept all provisions of the Plan and this Agreement. Further you specifically and expressly approve the following sections of this Agreement: (i) Section 4 – Vesting; (ii) Section 6 – Issuance and Certificates; (iii) Section 8 – No Rights as a Stockholder; Dividend Equivalents; (iv) Section 11 – Award Not a Service Contract and No Entitlement to Future Grants; (v) Section 13 – Withholding Obligations (including the Responsibility for Taxes section in Appendix A which supplements Section 13); (vi) Section 16 – Governing Plan Document; and (vii) the Nature of Grant section in Appendix A.

Japan

No country-specific provisions.

Mexico

Acknowledgement of the Agreement. By accepting the Award and any dividend equivalents, you acknowledge that you have received a copy of the Plan, have reviewed the Plan and the Agreement, including this Appendix B, in their entirety and fully understand and accept all provisions of the Plan and the Agreement, including this Appendix B. You further acknowledge that you have read and specifically and expressly approve the terms and conditions of the Nature of Grant section in Appendix A, in which the following is clearly described and established:

(1) Your participation in the Plan does not constitute an acquired right.

(2) The Plan and your participation in the Plan are offered by the Company on a wholly discretionary basis.

(3) Your participation in the Plan is voluntary.

(4) The Company and its Subsidiaries and Affiliates are not responsible for any decrease in the value of the Units granted and/or Shares issued under the Plan.

Labor Law Acknowledgement and Policy Statement. By accepting the Award and any dividend equivalents, you expressly recognize that the Company, with registered offices at 2100 McKinney Avenue, Suite 1250, Dallas, Texas 75201, U.S., is solely responsible for the administration of the Plan and that your participation in the Plan and any payment you may receive pursuant to the Award and any dividend equivalent does not constitute an employment relationship between you and the Company since you are participating in the Plan on a wholly commercial basis and your sole employer is CBRE Inmobiliario, S. de R.L. de C.V., CBRE GCS, S. de R.L. de C.V., CBRE GWS Management Mexico, S. de R.L. de C.V., CBRE Services Mexico S. de R.L. de C.V., CBRE Servicios S.A. de C.V., CBRE, S.A. de C.V., as applicable. Based on the foregoing, you expressly recognize that the Plan and the benefits that you may derive from participating in the Plan do not establish any rights between you and your employer and do not form part of the employment conditions and/or benefits provided by your employer and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of your employment.

You further understand that your participation in the Plan is as a result of a unilateral and discretionary decision of the Company; therefore, the Company reserves the absolute right to amend and/or discontinue your participation at any time without any liability to you.

Finally, you hereby declare that you do not reserve to yourself any action or right to bring any claim against the Company for any compensation or damages regarding any provision of the Plan or the benefits derived under the Plan, and you therefore grant a full and broad release to the Company, its Subsidiaries, Affiliates, branches, representation offices, its shareholders, officers, agents or legal representatives with respect to any claim that may arise.

Reconocimiento del Otorgamiento. *Al aceptar el Otorgamiento y cualesquiera equivalentes a dividendos, Usted reconoce que ha recibido una copia del Plan, que ha revisado el mismo en su totalidad, así como también el Acuerdo, incluyendo este Apéndice B, además que comprende y está de acuerdo con todas las disposiciones tanto del Plan y del Otorgamiento, incluyendo este Apéndice B. Asimismo, Usted reconoce que ha leído y manifiesta específicamente y expresamente la conformidad con los términos y condiciones establecidos en la sección Nature of Grant del Apéndice A, en los que se establece y describe claramente que:*

(1) Su participación en el Plan de ninguna manera constituye un derecho adquirido.

(2) El Plan y su participación en el mismo son ofrecidos por la Compañía de forma completamente discrecional.

(3) Su participación en el Plan es voluntaria.

(4) La Compañía y sus Subsidiarias y sus Afiliados no son responsables de ninguna disminución en el valor de Unidades o de las Acciones Comunes emitidas mediante el Plan.

Reconocimiento de Ausencia de Relación Laboral y Declaración de la Política. Al aceptar el Otorgamiento y cualesquiera equivalentes a dividendos, usted reconoce que la Compañía y sus oficinas registradas en 2100 McKinney Avenue, Suite 1250, Dallas, Texas 75201, U.S., es el único responsable de la administración del Plan y que su participación en el mismo y cualquier pago que reciba como parte el programa del Otorgamiento y cualesquiera equivalentes a dividendos, no constituye de ninguna manera una relación laboral entre Usted y la Compañía, toda vez que su participación en el Plan deriva únicamente de una relación comercial con la Compañía, reconociendo expresamente que su único empleador es CBRE Inmobiliario, S. de R.L. de C.V., CBRE GCS, S. de R.L. de C.V., CBRE GWS Management Mexico, S. de R.L. de C.V., CBRE Services Mexico S. de R.L. de C.V., CBRE Servicios S.A. de C.V., CBRE, S.A. de C.V, en caso de ser aplicable. Derivado de lo anterior, Usted expresamente reconoce que el Plan y los beneficios que pudieran derivar del mismo no establecen ningún derecho entre Usted y su empleador, y no forman parte de las condiciones laborales y/o prestaciones otorgadas por su empleador y expresamente Usted reconoce que cualquier modificación del Plan o la terminación del mismo de manera alguna podrá ser interpretada como una modificación de sus condiciones de trabajo.

Asimismo, Usted entiende que su participación en el Plan es el resultado de una decisión unilateral y discrecional de la Compañía, por lo tanto, la Compañía se reserva el derecho absoluto de modificar y/o terminar su participación en cualquier momento, sin ninguna responsabilidad hacia Usted.

Finalmente, Usted manifiesta que no se reserva ninguna acción o derecho que origine una demanda en contra de la Compañía, por cualquier compensación o daño en relación con cualquier disposición del Plan o de los beneficios derivados del mismo, y en consecuencia Usted otorga un amplio y total finiquito a la Compañía, sus Subsidiarias, Afiliadas, sucursales, oficinas de representación, accionistas, directores, agentes y representantes legales con respecto a cualquier demanda que pudiera surgir.

Securities Law Notice. The Units and Shares offered under the Plan have not been registered with the National Register of Securities maintained by the Mexican National Banking and Securities Commission and cannot be offered or sold publicly in Mexico. In addition, the Plan, the Agreement and any other document relating to the Award and the dividend equivalents may not be publicly distributed in Mexico. These materials are addressed to you only because of your existing relationship with the Company and the Employer and these materials should not be reproduced or copied in any form. The offer contained in these materials does not constitute a public offering of securities but rather constitutes a private placement of securities addressed specifically to individuals who are present employees of CBRE Inmobiliario, S. de R.L. de C.V., CBRE GCS, S. de R.L. de C.V., CBRE GWS Management Mexico, S. de R.L. de C.V., CBRE Services Mexico S. de R.L. de C.V., CBRE Servicios S.A. de C.V., CBRE, S.A. de C.V., as applicable, made in accordance with the provisions of the Mexican Securities Market Law, and any rights under such offering shall not be assigned or transferred.

Netherlands

No country-specific provisions.

New Zealand

Securities Law Notice.

Warning

This is an offer of rights to receive Shares underlying the Award and dividend equivalents. Shares give you a stake in the ownership of the Company. Shares are quoted on the NYSE. This means you may be able to sell them on the NYSE if there are interested buyers. You may get less than you invested. The price will depend on the demand for the Shares.

If the Company runs into financial difficulties and is wound up, you will be paid only after all creditors have been paid. You may lose some or all of your investment.

New Zealand law normally requires people who offer financial products to give information to investors before they invest. This information is designed to help investors to make an informed decision. The usual rules do not apply to this offer because it is made under an employee share scheme. As a result, you may not be given all the information usually required. You also will have fewer other legal protections for this investment.

In compliance with applicable New Zealand securities laws, you are entitled to receive, in electronic or other form and free of cost, copies of the Company's latest annual report, relevant financial statements and the auditor's report on said financial statements (if any).

You should ask questions, read all documents carefully, and seek independent financial advice before committing yourself.

Norway

No country-specific provisions.

Poland

No country-specific provisions.

Portugal

Language Consent. You hereby expressly declare that you have full knowledge of the English language and have read, understood and fully accepted and agreed with the terms and conditions established in the Plan and the Agreement.

Conhecimento da Lingua. *Você expressamente declara ter pleno conhecimento do idioma inglês e ter lido, entendido e totalmente aceito e concordou com os termos e condições estabelecidas no plano e no acordo.*

Puerto Rico

No country-specific provisions.

Romania

No country-specific provisions.

Russia

U.S. Transaction and Sale Restrictions. You understand that your acceptance of the Award and any dividend equivalents results in a contract between you and the Company that is completed in the United States and that the Plan is governed by the laws of the State of Delaware, without regard to its conflict of law provisions. Further, any Shares to be issued to you upon vesting and settlement of the Award and any dividend equivalents shall be delivered to you through a bank or brokerage account in the United States. You are not permitted to sell or otherwise transfer the Shares directly to individuals or legal entities in Russia, nor are you permitted to bring any certificates representing the Shares into Russia.

Securities Law Notice. This Agreement, the Plan and all other materials you may receive regarding participation in the Plan do not constitute advertising or an offering of securities in Russia. Absent any requirement under local law, the issuance of securities pursuant to the Plan has not and will not be registered in Russia; hence, the securities described in any Plan-related documents may not be used for offering or public circulation in Russia.

Singapore

Sale Restriction. You agree that any Shares issued to you upon vesting and settlement of the Award and any dividend equivalents will not be offered for sale or sold in Singapore prior to the six (6)-month anniversary of the Grant Date, unless such sale or offer is made pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the Singapore Securities and Futures Act (Chapter 289, 2006 Ed.) ("SFA") or pursuant to, and in accordance with the conditions of, any other applicable provision(s) of the SFA.

Securities Law Notice. The Award is being made to you in reliance on the "Qualifying Person" exemption under section 273(1)(f) of the SFA and is not being made with the view to the underlying Shares being subsequently offered for sale to any other party. The Plan has not been nor will it be lodged or registered as a prospectus with the Monetary Authority of Singapore.

Director Notification Obligation. If you are the director (including an alternate, substitute, or shadow director) of the Company's Singapore Subsidiary or Affiliate, you are subject to certain notification requirements under the Singapore Companies Act. Among these requirements is an obligation to notify the Company's Singapore Subsidiary or Affiliate in writing when you receive an interest (*e.g.*, an Award or Shares) in the Company or any Parent, Subsidiary or

Affiliate. In addition, you must notify the Company's Singapore Subsidiary or Affiliate when you sell Shares or shares of any Parent, Subsidiary or Affiliate (including when you sell Shares issued upon vesting and settlement of the Award). These notifications must be made within a prescribed period of time from acquiring or disposing of any interest in the Company or any Parent, Subsidiary or Affiliate. In addition, a notification of your interests in the Company or any Parent, Subsidiary or Affiliate must be made within a prescribed period of time from becoming a director. If you are the chief executive officer ("CEO") of the Company's Singapore Subsidiary or Affiliate and the above notification requirements are determined to apply to the CEO of a Singapore subsidiary or affiliate, the above notification requirements also may apply.

Slovakia

No country-specific provisions.

South Korea

No country-specific provisions.

Spain

Labor Law Acknowledgement. The following provision supplements the Nature of Grant section in Appendix A:

By accepting the Award and any dividend equivalents, you acknowledge that you understand and agree that you consent to participation in the Plan and that you have received a copy of the Plan.

You further understand that the Company has unilaterally, gratuitously and in its sole discretion decided to grant Awards under the Plan to employees of the Company or any Parent, Subsidiary or Affiliate throughout the world. The decision to grant the Awards and dividend equivalents is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Company or any Parent, Subsidiary or Affiliate on an ongoing basis other than as set forth in this Agreement. Consequently, you understand that any grant is given on the assumption and condition that it shall not become a part of any employment contract (either with the Company or any Parent, Subsidiary or Affiliate) and shall not be considered a mandatory benefit, salary for any purpose (including severance compensation) or any other right whatsoever. Further, you understand and freely accept that there is no guarantee that any benefit shall arise from any gratuitous and discretionary grant since the future value of the Shares is unknown and unpredictable.

Additionally, you understand that the vesting and settlement of the Award and any dividend equivalents is expressly conditioned on your continued and active rendering of service to the Employer such that if your Continuous Service terminates for any reason other than as expressly provided in Section 4 of the Agreement, your Award and dividend equivalents will cease vesting immediately effective as of the date of termination of your Continuous Service. This will be the case, for example, even if (1) you are considered to be unfairly dismissed without good cause (*i.e.*, subject to a "*despido improcedente*"); (2) you are dismissed for disciplinary or objective reasons or due to a collective dismissal; (3) you terminate Continuous Service due to a change of work location, duties or any other employment or contractual condition; (4) you terminate Continuous Service due to the Company's or any Parent's, Subsidiary's or Affiliate's unilateral breach of contract; or (5) your Continuous Service terminates for any other reason whatsoever, in each case other than as expressly provided in Section 4 of the Agreement. Consequently, upon termination of your Continuous Service for any of the above reasons, you will automatically lose any rights to Awards and any dividend equivalents granted to you that were unvested on the date of termination of your Continuous Service, as described in the Agreement.

Finally, you understand that this grant would not be made to you but for the assumptions and conditions referred to herein; thus, you acknowledge and freely accept that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then any grant of an Award and any dividend equivalents shall be null and void.

Securities Law Notice. No "offer of securities to the public," as defined under Spanish law, has taken place or will take place in the Spanish territory in connection with the offer of the Award and dividend equivalents. The Agreement has not been nor will it be registered with the *Comisión Nacional del Mercado de Valores*, and does not constitute a public offering prospectus.

Sweden

Tax Acknowledgement. The following provisions supplement Section 13 of the Agreement as further supplemented by the Responsibility for Taxes section in Appendix A:

Without limiting the Company's or the Employer's authority to satisfy their withholding obligations for Tax-Related Items as set forth in Section 13 of the Agreement as further supplemented by the Responsibility for Taxes section in Appendix A, by accepting the Award and any dividend equivalents, you authorize the Company and/or the Employer to withhold Shares or to sell Shares otherwise deliverable to you upon vesting/settlement to satisfy Tax-Related Items, regardless of whether the Company and/or the Employer have an obligation to withhold such Tax-Related Items.

Switzerland

Securities Law Notice. Neither this document nor any other materials relating to the Award and any dividend equivalents (a) constitutes a prospectus according to articles 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), (b) may be publicly distributed or otherwise made publicly available in Switzerland or (c) has been or will be filed with, approved by or supervised by any Swiss reviewing body according to article 51 of FinSA or any Swiss regulatory authority (*e.g.*, the Swiss Financial Market Supervisory Authority).

Taiwan

Securities Law Notice. The Award, dividend equivalents and the Shares to be issued pursuant to the Plan are available only for Participants. The Award is not a public offer of securities by a Taiwanese company.

United Arab Emirates

Securities Law Notice. The Plan is being offered to employees and is in the nature of providing equity incentives to employees of the Company or any Parent, Subsidiary or Affiliate in the United Arab Emirates. Any documents related to the Award and the dividend equivalents, including the Plan, the Agreement, and other grant documents ("Plan Documents"), are intended for distribution only to such employees and must not be delivered to, or relied on by any other person. Prospective purchasers of the securities offered (*i.e.*, the Units) should conduct their own due diligence on the securities. The Emirates Securities and Commodities Authority has no responsibility for reviewing or verifying any Plan Documents nor has it taken steps to verify the information set out in them, and thus, is not responsible for such documents. Further, neither the Ministry of Economy nor the Dubai Department of Economic Development has approved this statement nor taken steps to verify the information set out in it, and has no responsibility for it. If you do not understand the contents of the Plan Documents, you should consult an authorized financial advisor.

United Kingdom

Tax Acknowledgement. The following provisions supplement Section 13 of the Agreement as further supplemented by the Responsibility for Taxes section in Appendix A:

Without limitation to Section 13 of the Agreement and the Responsibility for Taxes section in Appendix A, you agree that you are liable for all Tax-Related Items and hereby covenant to pay all such Tax-Related Items as and when requested by the Company or the Employer or by Her Majesty's Revenue and Customs ("HMRC") (or any other tax or other relevant authority). You also agree to indemnify and keep indemnified the Company and the Employer against any taxes or other amounts that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax or other relevant authority) on your behalf.

Notwithstanding the foregoing, if you are a director or an executive officer (as within the meaning of Section 13(k) of the Exchange Act), the terms of the immediately foregoing provision will not apply. In such case, if the amount of any income tax due is not collected from or paid by you within ninety (90) days of the end of the U.K. tax year (April 6 - April 5) in which an event giving rise to the indemnification described above occurs, the amount of any uncollected income tax may constitute a benefit to you on which additional income tax and national insurance contributions ("NICs") may be payable. You understand and agree that you will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for paying the Company or the Employer (as applicable) for the value of any employee NICs due on this additional benefit, which the Company or the Employer may obtain from you by any of the means referred to in the Plan or the Agreement.

Grant Date:

CBRE Group, Inc.
2019 Equity Incentive Plan
Restricted Stock Units
Grant Notice

CBRE Group, Inc. (the "Company"), pursuant to its 2019 Equity Incentive Plan (the "Plan"), hereby grants to the "Participant" identified below an award (the "Award") of that number of Restricted Stock Units set forth below (the "Units"). In general, each Unit is the right to receive one (1) share of the Company's Class A Common Stock (the "Shares") at the time such Unit vests. This Award is subject to all of the terms and conditions set forth herein and in the Restricted Stock Unit Agreement (the "Agreement") and the Plan (collectively, the "Award Documents"), both of which are attached hereto and incorporated herein in their entirety.

Grant Date:

Vesting Commencement Date:

Target Number of Units Subject to Award ("Target Award"):

Maximum Number of Units Subject to Award ("Maximum Award"): [____]% of Target Award

Actual Award:

The actual number of Units subject to the Award (the "Actual Award") will be determined by the Compensation Committee of the Company's Board of Directors (the "Compensation Committee") based on Core Adjusted EPS (as defined below) measured on a cumulative basis (the "Cumulative Core Adjusted EPS") for fiscal years [_____] (the "Performance Period"), as follows:

(i) if the Cumulative Core Adjusted EPS is less than $[____], the Actual Award will be zero;
(ii) if the Cumulative Core Adjusted EPS is $[____], the Actual Award will be equal to [____]% of the Target Award;
(iii) if the Cumulative Core Adjusted EPS is more than $[____] but less than $[____], the Actual Award will be equal to an amount linearly interpolated between [____]% of the Target Award and the Target Award;
(iv) if the Cumulative Core Adjusted EPS is $[____], the Actual Award will be equal to the Target Award;
(v) if the Cumulative Core Adjusted EPS is more than $[____] but less than $[____], the Actual Award will be equal to an amount linearly interpolated between the Target Award and the Maximum Award; and
(vi) if the Cumulative Core Adjusted EPS is $[____] or more, the Actual Award will be equal to the Maximum Award.

Such determination will be made by the Compensation Committee following the end of the Performance Period, but by no later than the third (3rd) anniversary of the Vesting Commencement Date. If the Cumulative Core Adjusted EPS is less than $[____], the Award will terminate on the date of such determination and Participant will have no further right, title or interest in or to the Award or the Units or underlying Shares subject to the Award. The Company and Participant acknowledge that each of the EPS thresholds set forth above may be equitably adjusted by the Compensation Committee for any of the adjustments factors set forth in Section 12(a) of the Plan and as otherwise determined by the Compensation Committee in its reasonable discretion to be necessary to prevent enlargement or diminution of the benefits or potential benefits intended to be provided pursuant to the Award.

For purposes of the Award, Core Adjusted EPS is defined as the Company's earnings per share, as equitably adjusted by the Compensation Committee for any of the adjustments factors set forth in Section 12(a) of the Plan and as otherwise determined by the Compensation Committee in its reasonable discretion to be necessary to prevent enlargement or diminution of the benefits or potential benefits intended to be provided pursuant to the Award.

Vesting Schedule:	Subject to Section 4 of the Agreement, one hundred percent (100%) of the Units subject to the Actual Award shall vest on the third (3rd) anniversary of the Vesting Commencement Date.
Consideration:	No payment is required for the Shares, although payment may be required for the amount of any withholding taxes due as a result of the delivery of the Shares as described in greater detail in the Agreement.

Additional Terms/Acknowledgements: The undersigned Participant acknowledges receipt of the Award Documents and the Plan's Prospectus, and understands and agrees to the terms set forth in the Award Documents. Participant acknowledges that he or she is accepting the Award by electronic means and that such electronic acceptance constitutes Participant's agreement to be bound by all of the terms and conditions of the Award Documents. By accepting the Award, Participant consents to receive any documents related to participation in the Plan and the Award by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company. Participant also acknowledges that this Grant Notice must be returned to the Company (including through electronic means). Participant further acknowledges that as of the Grant Date, the Award Documents set forth the entire understanding between Participant and the Company regarding the acquisition of Units and Shares and supersede all prior oral and written agreements on that subject with the exception of (i) Awards previously granted and delivered to Participant under the Plan, and (ii) the following agreements only, if any:

Other Agreements: _____

_____

Attachments:
I. Restricted Stock Unit Agreement
II. CBRE Group, Inc. 2019 Equity Incentive Plan

CBRE Group, Inc.
2019 Equity Incentive Plan
Restricted Stock Unit Agreement

Pursuant to the provisions of the Company's 2019 Equity Incentive Plan ("Plan"), the terms of the Grant Notice to which this Restricted Stock Unit Agreement is attached ("Grant Notice") and this Restricted Stock Unit Agreement (the "Agreement"), CBRE Group, Inc. (the "Company") grants you that number of Restricted Stock Units (the "Units") as set forth in the Grant Notice as of the date specified in the Grant Notice ("Grant Date"). Defined terms not explicitly defined in this Agreement or in the Grant Notice but defined in the Plan shall have the same definitions as in the Plan.

The details of your Award are as follows:

1. The Award. The Company hereby awards to you the aggregate number of Units specified in your Grant Notice. Each Unit is the right to receive one (1) share of the Company's Class A Common Stock (the "Shares") on the Vesting Date (as defined below). The Units and the Shares are awarded to you in consideration for your continued service to the Company or its Subsidiaries and Affiliates (the "Company Group").

2. Documentation. As a condition to the award of the Units, you agree to execute the Grant Notice and to deliver the same to the Company (including through electronic means), along with such additional documents as the Committee may require, within the time period prescribed by the Company or else this Award shall be forfeited without consideration. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and the Award by electronic means or request your consent to participate in the Plan by electronic means. By accepting the Award, you consent to receive such documents by electronic delivery and agree to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company.

3. Consideration For The Award. No cash payment is required for the Units or the Shares, although you may be required to tender payment in cash or other acceptable form of consideration for the amount of any withholding taxes due as a result of delivery of the Shares.

4. Vesting. Except as otherwise specified in this Agreement and the Plan, the Units will vest as provided in the Grant Notice (the "Vesting Date"). Any Units which have not vested as of the date of your termination of Continuous Service shall thereupon be forfeited immediately and without any further action by the Company, except as otherwise directed by the Committee; *provided*, that:

(a) If, after the Vesting Commencement Date, your Continuous Service terminates due to your death or Disability, the following number of unvested Units will continue to vest as provided in the Grant Notice:

(i) If such termination occurs within twelve (12) months following the Vesting Commencement Date, the number of unvested Units that will continue to vest as provided in the Grant Notice will be equal to (x) the number of days that have elapsed from the Vesting Commencement Date through the date of your termination of Continuous Service divided by three hundred sixty-five (365), multiplied by (y) the number of Units subject to your Actual Award, rounded down to the nearest whole Unit; or

(ii) If such termination occurs more than twelve (12) months following the Vesting Commencement Date, the number of unvested Units that will continue to vest as

provided in the Grant Notice will be equal to all of the unvested Units subject to your Actual Award.

(b) If, after the Vesting Commencement Date, your Continuous Service terminates due to your Retirement (as defined below), and (x) after such termination through the applicable Vesting Date you have at all times satisfied certain noncompetition, nonsolicitation and confidentiality conditions imposed by the Company (in its sole discretion) upon or promptly following such termination and (y) you provide the Company with a certification (in a form acceptable to the Company) that you have satisfied all such conditions during such period, the following number of unvested Units will continue to vest as provided in the Grant Notice:

(i) If such termination occurs on or following December 31 of the calendar year in which the Vesting Commencement Date occurs, the number of unvested Units that will continue to vest as provided in the Grant Notice will be equal to the number of unvested Units subject to your Actual Award; or

(ii) If such termination occurs prior to December 31 of the calendar year in which the Vesting Commencement Date occurs, any Units which have not vested as of the date of such termination shall thereupon be forfeited immediately and without any further action by the Company, except as otherwise directed by the Committee.

(c) For purposes of this Award: "Retirement" means your voluntary termination following: (x) completion of at least ten (10) years of Continuous Service, and (y) (A) for U.S. Participants, your attainment of age sixty-two (62), or (B) for non-U.S. Participants, your attainment of age sixty-two (62) or such earlier age at which you are required to retire from Continuous Service under applicable law or an applicable retirement plan or policy. If you are eligible to qualify for Retirement under this subsection, you must provide evidence to that effect to the Company (in a form acceptable to the Company) on or before your termination date.

With respect to the vesting of this Award, the provisions of this Section 4 shall apply and supersede the terms of any other plan, program or arrangement maintained by the Company or the Company Group or any other agreement between you and the Company or the Company Group.

5. Number of Shares and Purchase Price. The number of Shares subject to your Award may be adjusted from time to time pursuant to the provisions of Section 12 of the Plan.

6. Issuance and Certificates. The Company will deliver to you a number of Shares equal to the number of vested Units subject to your Award, including any additional Units received pursuant to Section 5 above that relate to such vested Units, as soon as reasonably practicable after the applicable Vesting Date, but in no event later than December 31 of the calendar year in which the applicable Vesting Date occurs. However, if a scheduled delivery date falls on a date that is not a business day, such delivery date shall instead fall on the next business day. Notwithstanding the foregoing, in the event that (i) you are subject to the Company's policy permitting officers and directors to sell Shares only during certain "window periods," as in effect from time to time (the "Policy"), or you are otherwise prohibited from selling Shares in the open market, and any Shares subject to your Award are scheduled to be delivered on a day (the "Original Distribution Date") that does not occur during an open "window period" applicable to you or a day on which you are permitted to sell Shares pursuant to a written plan that meets the requirements of Rule 10b5-1 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as determined by the Company in accordance with the Policy, or does not occur on a date when you are otherwise permitted to sell Shares in the open market, and (ii) the Company elects not to satisfy its tax withholding obligations by withholding Shares from your distribution, then such Shares shall not be delivered on such

Original Distribution Date and shall instead be delivered on the first business day of the next occurring open "window period" applicable to you pursuant to the Policy (regardless of whether you are still providing Continuous Service at such time) or the next business day when you are not prohibited from selling Shares in the open market, but in no event later than December 31 of the calendar year in which the applicable Vesting Date occurs.

There are no certificates evidencing the Units. Certificates evidencing the Shares to be delivered pursuant to this Agreement may be issued by the Company and registered in your name.

7. Transfer Restrictions. The Units are non-transferable. Shares that are received under your Award are subject to the transfer restrictions set forth in the Plan and any transfer restrictions that may be described in the Company's bylaws or charter or insider trading policies in effect at the time of the contemplated transfer.

8. No Rights as a Stockholder; Dividend Equivalents. A Unit (i) does not represent an equity interest in the Company, and (ii) carries no voting rights. You will not have an equity interest in the Company or any shareholder rights, unless and until the Shares are delivered to you in accordance with this Agreement. Units, whether or not vested, shall be credited with dividend equivalents as and when dividends are paid on the Company's actual Shares, with such dividend equivalents deemed to be invested in additional Units subject to this Agreement as of the corresponding dividend payment date (which additional Units shall vest upon the vesting of the underlying Units to which they are attributable). No dividend equivalents shall be credited with respect to any fractional Unit.

9. Securities Laws. Upon the delivery of the Shares, you will make or enter into such written representations, warranties and agreements as the Committee may reasonably request in order to comply with applicable securities laws or with this Agreement. Notwithstanding any other provision of the Plan or this Agreement to the contrary, unless there is an available exemption from such registration, qualification or other legal requirements, Units may not be converted into Shares prior to the completion of any registration or qualification of the Units or the Shares that is required to comply with applicable state and federal securities or any ruling or regulation of any governmental body or national securities exchange or compliance with any other applicable federal, state or foreign law that the Committee shall in its sole discretion determine in good faith to be necessary or advisable.

10. Legends on Certificates. The certificates representing the Shares delivered to you as contemplated by this Agreement shall be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the Plan or the rules, regulations, and other requirements of the Securities and Exchange Commission, any stock exchange upon which such Shares are listed, and any applicable Federal or state laws, and the Committee may cause a legend or legends to be put on any such certificates to make appropriate reference to such restrictions.

11. Award Not A Service Contract and No Entitlement to Future Grants. Your Award is not an employment or service contract, and nothing in your Award shall be deemed to create in any way whatsoever any obligation or right to continued employment or service with or to the Company Group. In addition, nothing in your Award shall obligate the Company, its stockholders, its Board or employees to continue any relationship that you might have as a member of the Board, as an employee or as any other type of service provider for the Company. You acknowledge and agree that this Award was granted in the Committee's discretion and that neither the grant of this Award nor the issuance of any Shares pursuant to this Award creates any entitlement to or expectation of any future grant of Units or any future benefits in lieu of Units.

12. Tax Consequences. You are responsible for any taxes due in connection with your receipt of this Award, including the vesting of such Award and delivery of Shares, and for declaring the Award to the relevant tax authority to which you are subject, if required.

13. Withholding Obligations.

(a) At the time your Award is made, or at any time thereafter as requested by the Company, you hereby authorize the Company to satisfy its withholding obligations, if any, from payroll and any other amounts payable to you (or, in the Company's discretion, from Shares that become deliverable upon vesting under this Award), and otherwise agree to make adequate provision for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company, if any, which arise in connection with the grant of or vesting of your Award or the delivery of Shares under the Award. Notwithstanding the foregoing, if you are a Section 16 officer of the Company under the Exchange Act, the Company will satisfy its withholding obligations, if any, by withholding a number of Shares that become deliverable upon vesting under this Award.

(b) Unless the tax withholding obligations of the Company, if any, are satisfied, the Company shall have no obligation to issue a certificate for such Shares or release such Shares.

14. Notices. Any notices provided for in your Award or the Plan shall be given in writing and shall be delivered by hand or sent by overnight courier, certified or registered mail, return receipt requested, postage prepaid, or electronic mail and shall be deemed effectively given upon receipt or, in the case of notices delivered by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company.

15. Miscellaneous.

(a) You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Committee to carry out the purposes or intent of this Award.

(b) You acknowledge and agree that you have reviewed your Award in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your Award and fully understand all provisions of your Award.

(c) The waiver by either party of compliance with any provision of the Award by the other party shall not operate or be construed as a waiver of any other provision of the Award, or of any subsequent breach by such party of a provision of the Award.

16. Governing Plan Document. Your Award is subject to all interpretations, amendments, rules and regulations that may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the provisions of the Plan and any other document, the provisions of the Plan shall control.

17. Data Privacy Notification. ***You are hereby notified of the collection, use and transfer, in electronic or other form, of your personal data as described in this Agreement, any other Award materials and the Company's Employee Personal Information Privacy Notice or Employee Privacy Notice and Consent Form, as applicable (the "Privacy Notice"), which is viewable on the GDPO Intranet Site at https://cbre.sharepoint.com/sites/intra-EthicsCompliance/SitePages/Data-Privacy---Policies.aspx. Such personal data may be collected, used and transferred by and among, as applicable, the Company, the Company Group and any third parties assisting (presently or in the future) with the implementation, administration and management of the Plan, such as Fidelity Stock Plan Services, or its successor, for the exclusive purpose of implementing, administering and managing your participation in the Plan. The Company's basis for the processing and transfer of the data is described in the Company's Privacy Notice. Where required under applicable law, personal data also may be disclosed to certain securities or other regulatory authorities where the Company's shares are listed or traded or regulatory filings are made, or to certain tax authorities for compliance with the Company's, the Employer's and/or your tax obligations. You understand that the collection, use and transfer of your personal data is mandatory for compliance with applicable law and necessary for the performance of the Plan and that your refusal to provide such personal data would make it impossible for the Company to perform its contractual obligations and may affect your ability to participate in the Plan.***

18. Appendices. Notwithstanding any provisions in this Agreement, if you reside in a country outside the United States or are otherwise subject to the laws of a country other than the United States, the Award shall be subject to the additional terms and conditions set forth in Appendix A to this Agreement and to any special terms and provisions (if any) as set forth in Appendix B for your country. Moreover, if you relocate outside the U.S., the special terms and conditions in Appendix A (applicable to all non-U.S. countries) and in Appendix B (applicable to your specific country) will apply to you, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. Appendix A and Appendix B constitute part of this Agreement.

19. Imposition of Other Requirements. The Company reserves the right to impose other requirements on your participation in the Plan, on the Award and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

Appendix A

to

Restricted Stock Unit Agreement

Provisions Applicable to Non-U.S. Countries

This Appendix A includes additional terms and conditions that govern the Award and any dividend equivalents granted to you under the Plan if you are a Participant and reside and/or work in a country outside the United States of America (or later relocate to such a country). Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Plan and/or the Agreement to which this Appendix A is attached.

***

Nature of Grant. In accepting the grant of the Award (including any dividend equivalents), you acknowledge, understand and agree that:

a. the Plan is established voluntarily by the Company, it is discretionary in nature, and may be amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;

b. the grant of the Award and dividend equivalents is exceptional, voluntary and occasional;

c. all decisions with respect to future Units, dividend equivalents or other grants, if any, will be at the sole discretion of the Company;

d. you are voluntarily participating in the Plan;

e. the Award, dividend equivalents and any Shares subject to the Award, and the income and value of same, are not intended to replace any pension rights or compensation;

f. unless otherwise expressly agreed in a writing by you with the Company, the Award, dividend equivalents and the Shares subject to the Award, and the income and value of same, are not granted as consideration for, or in connection with, the service you may provide as a director of a Subsidiary or Affiliate;

g. the Award, dividend equivalents and any Shares subject to the Award, and the income and value of same, are not part of normal or expected compensation for any purpose, including, without limitation, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, holiday pay, bonuses, long-service awards, pension or retirement or welfare benefits or similar mandatory payments;

h. the future value of the Shares underlying the Award is unknown, indeterminable, and cannot be predicted with certainty;

i. no claim or entitlement to compensation or damages, including pro-rated compensation or damages, shall arise from forfeiture of the Award and dividend equivalents resulting from the termination of your Continuous Service as provided for in the Plan or in the Agreement;

j. for purposes of the Award and dividend equivalents, and unless otherwise expressly provided in the Plan, the Agreement or determined by the Company, your Continuous Service will be considered terminated as of the date you are no longer actively providing services to the Company or any Parent, Subsidiary or Affiliate (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any), and unless otherwise expressly provided in the Plan, the Agreement or determined by the Company, your right to vest in the Award under the Plan, if any, will terminate as of such date and will not be extended by any notice period (*e.g.*, your period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any); the Committee shall have the exclusive discretion to determine when you are no longer actively providing services for purposes of your Award and the dividend equivalents (including whether you may still be considered to be providing services while on a leave of absence);

k. unless otherwise provided in the Plan or by the Company in its discretion, the Award, the dividend equivalents and the benefits evidenced by the Agreement do not create any entitlement to have the Award or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company; and

l. neither the Company nor any Parent, Subsidiary or Affiliate shall be liable for any foreign exchange rate fluctuation between your local currency and the United States Dollar that may affect the value of the Award, the dividend equivalents or of any amounts due to you pursuant to the settlement of the Award or the subsequent sale of any Shares acquired upon settlement.

Responsibility for Taxes. The following provisions supplement Section 13 of the Agreement:

You acknowledge that, regardless of any action taken by the Company or, if different, your employer (the "Employer"), the ultimate liability for all income tax, social insurance contributions, payroll tax, fringe benefits tax, payment on account or other tax-related items related to your participation in the Plan and legally applicable or deemed applicable to you ("Tax-Related Items") is and remains your responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. You further acknowledge that the Company and the Employer (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Award or the underlying Shares, including, but not limited to, the grant, vesting or settlement of the Award and the subsequent sale of Shares acquired pursuant to such settlement and the receipt of any dividends or dividend equivalents, and (b) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Award or any dividend equivalents to reduce or eliminate your liability for Tax-Related Items or achieve any particular tax result. Further, if you are subject to Tax-Related Items in more than one jurisdiction, you acknowledge that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any applicable taxable or tax withholding event, you authorize the Company and/or the Employer, or their respective agents, at their discretion, to satisfy the obligations with regard to all Tax-Related Items by any of the methods referred to in Section 13(a) of the Agreement. In addition, you authorize withholding from proceeds of the sale of Shares acquired upon settlement of the Award and any dividend equivalents either through a voluntary sale, through a mandatory sale, through a "withhold to cover" program or any other scheme or program, in each case, arranged by the Company (on your behalf pursuant to this authorization without further consent by you).

The Company may withhold Shares otherwise deliverable under the Award or any dividend equivalents for Tax-Related Items solely by considering applicable minimum statutory withholding amounts. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, you are deemed to have been issued the full number of Shares subject to the vested Award or any dividend equivalents, notwithstanding that a number of the Shares are held back solely for the purpose of paying the Tax-Related Items.

Finally, if requested by the Company, you agree to pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of your participation in the Plan that cannot be satisfied by the means previously described.

Language. You acknowledge that you are proficient in the English language and understand, or have consulted with an advisor who is proficient in the English language so as to enable you to understand, the provisions of the Agreement and the Plan. If you have received the Agreement or any other document related to the Plan translated into a language other than English, and if the meaning of the translated version is different than the English version, the English version will control.

Appendix B

to

Restricted Stock Unit Agreement

Country-Specific Provisions

This Appendix B includes additional terms and conditions that govern the Award and dividend equivalents granted to you under the Plan if you are a Participant and reside and/or work in one of the countries listed herein. If you are a citizen or resident of a country other than the one in which you currently are working and/or residing (or if you are considered as such for local law purposes), or if you transfer or relocate employment or residence to another country after the Grant Date, the Company, in its discretion, will determine the extent to which the terms and conditions herein will be applicable to you.

This Appendix B also includes information regarding securities and other laws of which you should be aware with respect to your participation in the Plan. The information is based on laws in effect in the respective countries as of January 2022. Such laws are often complex and change frequently. As a result, you should not rely on the information noted herein as the only source of information relating to the consequences of your participation in the Plan because the information may be out of date by the time you vest in the Award and any dividend equivalents or sell the Shares acquired under the Plan. In addition, the information noted herein is general in nature and may not apply to your particular situation, and the Company is not in a position to assure you of any particular result. Accordingly, you should seek appropriate professional advice as to how the applicable laws may apply to your situation. That is your responsibility, and not the Company's.

If you are a citizen or resident of a country other than the one in which you currently are working and/or residing (or if you are considered as such for local law purposes), or if you transfer employment or residence to another country after the Grant Date, the information noted herein may not be applicable to you in the same manner.

Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Plan, the Agreement and/or the Appendix A which this Appendix B follows.

***

Australia

Australian Offer Document. This Award is intended to comply with the provisions of the Corporations Act 2001, ASIC Regulatory Guide 49 and ASIC Class Order CO 14/1000. Additional details are set forth in the Australian Offer Document, which you acknowledge has been provided to you with this Agreement.

Tax Information. Subdivision 83A-C of the Income Tax Assessment Act, 1997, applies to Awards granted under the Plan, such that the Award is intended to be subject to deferred taxation.

Austria

No country-specific provisions.

Belgium

No country-specific provisions.

Canada

Form of Settlement. Notwithstanding any discretion contained in Sections 10(d) and 10(f) of the Plan or anything to the contrary in the Agreement, the Award and any dividend equivalents shall be settled in Shares only.

Labor Law Acknowledgement. The following provision replaces Section j. of the Nature of Grant section in Appendix A:

j. for purposes of the Award and dividend equivalents, and unless otherwise expressly provided in the Plan, the Agreement or determined by the Company, your Continuous Service will terminate, and your right (if any) to earn, seek damages in lieu of, or otherwise be paid any portion of the Units pursuant to the Agreement, will be measured by the date that is the earliest of (i) the date your employment with the Employer is terminated, whether by you or by the Company or the Employer; and (ii) the date you receive written notice of termination from to the Company or the Employer, in either case, regardless of any period during which notice, pay in lieu of notice or related payments or damages are provided or required to be provided under local law. For greater certainty, you will not earn or be entitled to any pro-rated vesting for that portion of time before the date on which your right to vest terminates, nor will you be entitled to any compensation for lost vesting. Notwithstanding the foregoing, if applicable employment standards legislation explicitly requires continued vesting during a statutory notice period, your right to vest in the Units, if any, will terminate effective upon the expiry of your minimum statutory notice period, but you will not earn or be entitled to pro-rated vesting if the Vesting Date falls after the end of your statutory notice period, nor will you be entitled to any compensation for lost vesting.

Securities Law Notice. You are permitted to sell Shares acquired upon the vesting and settlement of the Award and any dividend equivalents through the designated broker appointed under the Plan, if any, provided the resale of Shares acquired under the Plan takes place outside of Canada through the facilities of a stock exchange on which the Shares are listed. The Shares are currently listed on the New York Stock Exchange ("NYSE").

The following provisions apply if you are a resident of Quebec:

Language Consent. The parties acknowledge that it is their express wish that the Agreement, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir exigé la rédaction en anglais de la Convention, ainsi que de tous documents exécutés, avis donnés et procédures judiciaires intentées, directement ou indirectement, relativement à ou suite à la présente convention.

China

The following provisions apply to Participants that are subject to the exchange control restrictions and regulations in the People's Republic of China ("China"), including the requirements imposed by the State Administration of Foreign Exchange ("SAFE"), as determined by the Company in its sole discretion.

Satisfaction of Regulatory Obligations. The settlement of the Awards and any dividend equivalents upon vesting is conditioned upon the Company securing and maintaining all necessary approvals from SAFE and any other applicable government entities in China to permit

the operation of the Plan in China, as determined by the Company it its sole discretion. If or to the extent the Company is unable to complete the registration or maintain the registration, no Shares shall be issued under the Plan. In this case, the Company retains the discretion to settle any Awards in cash paid through local payroll in an amount equal to the Fair Market Value of the Shares subject to the Awards and any dividend equivalents less any Tax-Related Items.

Mandatory Sale Restriction. To facilitate compliance with local regulatory requirements, you agree to the sale of any Shares to be issued to you under the Plan, including by the Company on your behalf if the Company so determines. The sale will occur, at the Company's election: (i) immediately upon vesting, (ii) following your termination of Continuous Service, or (iii) within any other time frame as the Company determines to be necessary to comply with local regulatory requirements. You further agree that the Company is authorized to instruct its designated broker to assist with the mandatory sale of such shares (on your behalf pursuant to this authorization) and you expressly authorize the Company's designated broker to complete the sale of such shares. You acknowledge that the designated broker is under no obligation to arrange for the sale of the Shares at any particular price. Upon the sale of the Shares, the Company agrees to pay you the cash proceeds from the sale, less any brokerage fees or commissions and subject to any obligation to satisfy Tax-Related Items. You agree that the payment of the cash proceeds will be subject to the repatriation requirements described below.

You further agree that any Shares to be issued to you shall be deposited directly into an account with the designated broker. The deposited Shares shall not be transferable (either electronically or in certificate form) from the brokerage account. This limitation shall apply both to transfers to different accounts with the same broker and to transfers to other brokerage firms. The limitation shall apply to all Shares issued to you under the Plan, whether or not you continue to be employed by the Company Group. If you sell Shares that you acquire under the Plan, the repatriation requirements described below shall apply.

Exchange Control Restrictions. By participating in the Plan, you understand and agree that, if you are subject to exchange control laws in China, you will be required to immediately repatriate to China the proceeds from the sale of any Shares acquired under the Plan. You further understand that such repatriation of the proceeds may need to be effected through a special exchange control account established by the Company, the Employer or a Subsidiary or Affiliate, and you hereby consent and agree that the proceeds from the sale of Shares acquired under the Plan may be transferred to such account by the Company (or its designated broker) on your behalf prior to being delivered to you. You also agree to sign any agreements, forms and/or consents that may be reasonably requested by the Company (or its designated broker) to effectuate such transfers.

Czech Republic

No country-specific provisions.

Denmark

Labor Law Acknowledgment. The following provision supplements the Nature of Grant section in Appendix A:

By accepting the Award and any dividend equivalents, you acknowledge that you understand and agree that the Award and any dividend equivalents relate to future services to be performed and is not a bonus or compensation for past services.

Finland

No country-specific provisions.

France

Tax Information. The Units granted pursuant to the Award are not intended to be French tax-qualified restricted stock units granted under Sections L. 225-197-1 to L. 225-197-5 and Sections L. 22-10-59 to L. 22-10-60 of the French Commercial Code, as amended.

Language Consent. By accepting the grant, you confirm having read and understood the Plan and Agreement which were provided in the English language. You accept the terms of those documents accordingly.

En acceptant l'attribution, vous confirmez avoir lu et compris le Plan et l'Accord, qui ont été fournis en langue anglaise. Vous acceptez les termes de ces documents en connaissance de cause.

Germany

No country-specific provisions.

Hong Kong

Sale Restriction. Shares received at vesting and any dividend equivalents are accepted as a personal investment. In the event that the Award and any dividend equivalents vest and Shares are issued to you (or your heirs) within six (6) months of the Grant Date, you (or your heirs) agree that the Shares acquired pursuant to the Award and any dividend equivalents will not be offered to the public or otherwise disposed of prior to the six (6)-month anniversary of the Grant Date.

Securities Law Notice. *WARNING:* The contents of this document have not been reviewed by any regulatory authority in Hong Kong. You should exercise caution in relation to the offer. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice. Neither the grant of the Award (including any dividend equivalents) nor the issuance of Shares upon vesting and settlement of the Award constitutes a public offering of securities under Hong Kong law and are available only to Participants. The Agreement, the Plan and other incidental communication materials distributed in connection with the Award (i) have not been prepared in accordance with and are not intended to constitute a "prospectus" for a public offering of securities under the applicable securities legislation in Hong Kong and (ii) are intended only for the personal use of each Participant and may not be distributed to any other person.

India

No country-specific provisions.

Ireland

No country-specific provisions.

Italy

Acknowledgement of Terms. You acknowledge that by accepting this Award and any dividend equivalents, you have been given access to the Plan document, have reviewed the Plan and this Agreement in their entirety, and fully understand and accept all provisions of the Plan and this

Agreement. Further you specifically and expressly approve the following sections of this Agreement: (i) Section 4 – Vesting; (ii) Section 6 – Issuance and Certificates; (iii) Section 8 – No Rights as a Stockholder; Dividend Equivalents; (iv) Section 11 – Award Not a Service Contract and No Entitlement to Future Grants; (v) Section 13 – Withholding Obligations (including the Responsibility for Taxes section in Appendix A which supplements Section 13); (vi) Section 16 – Governing Plan Document; and (vii) the Nature of Grant section in Appendix A.

Japan

No country-specific provisions.

Mexico

Acknowledgement of the Agreement. By accepting the Award and any dividend equivalents, you acknowledge that you have received a copy of the Plan, have reviewed the Plan and the Agreement, including this Appendix B, in their entirety and fully understand and accept all provisions of the Plan and the Agreement, including this Appendix B. You further acknowledge that you have read and specifically and expressly approve the terms and conditions of the Nature of Grant section in Appendix A, in which the following is clearly described and established:

(1) Your participation in the Plan does not constitute an acquired right.

(2) The Plan and your participation in the Plan are offered by the Company on a wholly discretionary basis.

(3) Your participation in the Plan is voluntary.

(4) The Company and its Subsidiaries and Affiliates are not responsible for any decrease in the value of the Units granted and/or Shares issued under the Plan.

Labor Law Acknowledgement and Policy Statement. By accepting the Award and any dividend equivalents, you expressly recognize that the Company, with registered offices at 2100 McKinney Avenue, Suite 1250, Dallas, Texas 75201, U.S., is solely responsible for the administration of the Plan and that your participation in the Plan and any payment you may receive pursuant to the Award and any dividend equivalent does not constitute an employment relationship between you and the Company since you are participating in the Plan on a wholly commercial basis and your sole employer is CBRE Inmobiliario, S. de R.L. de C.V., CBRE GCS, S. de R.L. de C.V., CBRE GWS Management Mexico, S. de R.L. de C.V., CBRE Services Mexico S. de R.L. de C.V., CBRE Servicios S.A. de C.V., CBRE, S.A. de C.V., as applicable. Based on the foregoing, you expressly recognize that the Plan and the benefits that you may derive from participating in the Plan do not establish any rights between you and your employer and do not form part of the employment conditions and/or benefits provided by your employer and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of your employment.

You further understand that your participation in the Plan is as a result of a unilateral and discretionary decision of the Company; therefore, the Company reserves the absolute right to amend and/or discontinue your participation at any time without any liability to you.

Finally, you hereby declare that you do not reserve to yourself any action or right to bring any claim against the Company for any compensation or damages regarding any provision of the Plan or the benefits derived under the Plan, and you therefore grant a full and broad release to the Company, its Subsidiaries, Affiliates, branches, representation offices, its shareholders, officers, agents or legal representatives with respect to any claim that may arise.

Reconocimiento del Otorgamiento. *Al aceptar el Otorgamiento y cualesquiera equivalentes a dividendos, Usted reconoce que ha recibido una copia del Plan, que ha revisado el mismo en su totalidad, así como también el Acuerdo, incluyendo este Apéndice B, además que comprende y está de acuerdo con todas las disposiciones tanto del Plan y del Otorgamiento, incluyendo este Apéndice B. Asimismo, Usted reconoce que ha leído y manifiesta específicamente y expresamente la conformidad con los términos y condiciones establecidos en la sección Nature of Grant del Apéndice A, en los que se establece y describe claramente que:*

(1) Su participación en el Plan de ninguna manera constituye un derecho adquirido.

(2) El Plan y su participación en el mismo son ofrecidos por la Compañía de forma completamente discrecional.

(3) Su participación en el Plan es voluntaria.

(4) La Compañía y sus Subsidiarias y sus Afiliados no son responsables de ninguna disminución en el valor de Unidades o de las Acciones Comunes emitidas mediante el Plan.

Reconocimiento de Ausencia de Relación Laboral y Declaración de la Política. Al aceptar el Otorgamiento y cualesquiera equivalentes a dividendos, usted reconoce que la Compañía y sus oficinas registradas en 2100 McKinney Avenue, Suite 1250, Dallas, Texas 75201, U.S., es el único responsable de la administración del Plan y que su participación en el mismo y cualquier pago que reciba como parte el programa del Otorgamiento y cualesquiera equivalentes a dividendos, no constituye de ninguna manera una relación laboral entre Usted y la Compañía, toda vez que su participación en el Plan deriva únicamente de una relación comercial con la Compañía, reconociendo expresamente que su único empleador es CBRE Inmobiliario, S. de R.L. de C.V., CBRE GCS, S. de R.L. de C.V., CBRE GWS Management Mexico, S. de R.L. de C.V., CBRE Services Mexico S. de R.L. de C.V., CBRE Servicios S.A. de C.V., CBRE, S.A. de C.V, en caso de ser aplicable. Derivado de lo anterior, Usted expresamente reconoce que el Plan y los beneficios que pudieran derivar del mismo no establecen ningún derecho entre Usted y su empleador, y no forman parte de las condiciones laborales y/o prestaciones otorgadas por su empleador y expresamente Usted reconoce que cualquier modificación del Plan o la terminación del mismo de manera alguna podrá ser interpretada como una modificación de sus condiciones de trabajo.

Asimismo, Usted entiende que su participación en el Plan es el resultado de una decisión unilateral y discrecional de la Compañía, por lo tanto, la Compañía se reserva el derecho absoluto de modificar y/o terminar su participación en cualquier momento, sin ninguna responsabilidad hacia Usted.

Finalmente, Usted manifiesta que no se reserva ninguna acción o derecho que origine una demanda en contra de la Compañía, por cualquier compensación o daño en relación con cualquier disposición del Plan o de los beneficios derivados del mismo, y en consecuencia Usted otorga un amplio y total finiquito a la Compañía, sus Subsidiarias, Afiliadas, sucursales, oficinas de representación, accionistas, directores, agentes y representantes legales con respecto a cualquier demanda que pudiera surgir.

Securities Law Notice. The Units and Shares offered under the Plan have not been registered with the National Register of Securities maintained by the Mexican National Banking and Securities Commission and cannot be offered or sold publicly in Mexico. In addition, the Plan, the Agreement and any other document relating to the Award and the dividend equivalents may not be publicly distributed in Mexico. These materials are addressed to you only because of your existing relationship with the Company and the Employer and these materials should not be

reproduced or copied in any form. The offer contained in these materials does not constitute a public offering of securities but rather constitutes a private placement of securities addressed specifically to individuals who are present employees of CBRE Inmobiliario, S. de R.L. de C.V., CBRE GCS, S. de R.L. de C.V., CBRE GWS Management Mexico, S. de R.L. de C.V., CBRE Services Mexico S. de R.L. de C.V., CBRE Servicios S.A. de C.V., CBRE, S.A. de C.V., as applicable, made in accordance with the provisions of the Mexican Securities Market Law, and any rights under such offering shall not be assigned or transferred.

Netherlands

No country-specific provisions.

New Zealand

Securities Law Notice.

Warning

This is an offer of rights to receive Shares underlying the Award and dividend equivalents. Shares give you a stake in the ownership of the Company. Shares are quoted on the NYSE. This means you may be able to sell them on the NYSE if there are interested buyers. You may get less than you invested. The price will depend on the demand for the Shares.

If the Company runs into financial difficulties and is wound up, you will be paid only after all creditors have been paid. You may lose some or all of your investment.

New Zealand law normally requires people who offer financial products to give information to investors before they invest. This information is designed to help investors to make an informed decision. The usual rules do not apply to this offer because it is made under an employee share scheme. As a result, you may not be given all the information usually required. You also will have fewer other legal protections for this investment.

In compliance with applicable New Zealand securities laws, you are entitled to receive, in electronic or other form and free of cost, copies of the Company's latest annual report, relevant financial statements and the auditor's report on said financial statements (if any).

You should ask questions, read all documents carefully, and seek independent financial advice before committing yourself.

Norway

No country-specific provisions.

Poland

No country-specific provisions.

Portugal

Language Consent. You hereby expressly declare that you have full knowledge of the English language and have read, understood and fully accepted and agreed with the terms and conditions established in the Plan and the Agreement.

Conhecimento da Lingua. *Você expressamente declara ter pleno conhecimento do idioma inglês e ter lido, entendido e totalmente aceito e concordou com os termos e condições estabelecidas no plano e no acordo.*

Puerto Rico

No country-specific provisions.

Romania

No country-specific provisions.

Russia

U.S. Transaction and Sale Restrictions. You understand that your acceptance of the Award and any dividend equivalents results in a contract between you and the Company that is completed in the United States and that the Plan is governed by the laws of the State of Delaware, without regard to its conflict of law provisions. Further, any Shares to be issued to you upon vesting and settlement of the Award and any dividend equivalents shall be delivered to you through a bank or brokerage account in the United States. You are not permitted to sell or otherwise transfer the Shares directly to individuals or legal entities in Russia, nor are you permitted to bring any certificates representing the Shares into Russia.

Securities Law Notice. This Agreement, the Plan and all other materials you may receive regarding participation in the Plan do not constitute advertising or an offering of securities in Russia. Absent any requirement under local law, the issuance of securities pursuant to the Plan has not and will not be registered in Russia; hence, the securities described in any Plan-related documents may not be used for offering or public circulation in Russia.

Singapore

Sale Restriction. You agree that any Shares issued to you upon vesting and settlement of the Award and any dividend equivalents will not be offered for sale or sold in Singapore prior to the six (6)-month anniversary of the Grant Date, unless such sale or offer is made pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the Singapore Securities and Futures Act (Chapter 289, 2006 Ed.) ("SFA") or pursuant to, and in accordance with the conditions of, any other applicable provision(s) of the SFA.

Securities Law Notice. The Award is being made to you in reliance on the "Qualifying Person" exemption under section 273(1)(f) of the SFA and is not being made with the view to the underlying Shares being subsequently offered for sale to any other party. The Plan has not been nor will it be lodged or registered as a prospectus with the Monetary Authority of Singapore.

Director Notification Obligation. If you are the director (including an alternate, substitute, or shadow director) of the Company's Singapore Subsidiary or Affiliate, you are subject to certain notification requirements under the Singapore Companies Act. Among these requirements is an obligation to notify the Company's Singapore Subsidiary or Affiliate in writing when you receive an interest (*e.g.*, an Award or Shares) in the Company or any Parent, Subsidiary or Affiliate. In addition, you must notify the Company's Singapore Subsidiary or Affiliate when you sell Shares or shares of any Parent, Subsidiary or Affiliate (including when you sell Shares issued upon vesting and settlement of the Award). These notifications must be made within a prescribed period of time from acquiring or disposing of any interest in the Company or any Parent, Subsidiary or Affiliate. In addition, a notification of your interests in the Company or any Parent, Subsidiary or Affiliate must be made within a prescribed period of time from

becoming a director. If you are the chief executive officer ("CEO") of the Company's Singapore Subsidiary or Affiliate and the above notification requirements are determined to apply to the CEO of a Singapore subsidiary or affiliate, the above notification requirements also may apply.

Slovakia

No country-specific provisions.

South Korea

No country-specific provisions.

Spain

Labor Law Acknowledgement. The following provision supplements the Nature of Grant section in Appendix A:

By accepting the Award and any dividend equivalents, you acknowledge that you understand and agree that you consent to participation in the Plan and that you have received a copy of the Plan.

You further understand that the Company has unilaterally, gratuitously and in its sole discretion decided to grant Awards under the Plan to employees of the Company or any Parent, Subsidiary or Affiliate throughout the world. The decision to grant the Awards and dividend equivalents is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Company or any Parent, Subsidiary or Affiliate on an ongoing basis other than as set forth in this Agreement. Consequently, you understand that any grant is given on the assumption and condition that it shall not become a part of any employment contract (either with the Company or any Parent, Subsidiary or Affiliate) and shall not be considered a mandatory benefit, salary for any purpose (including severance compensation) or any other right whatsoever. Further, you understand and freely accept that there is no guarantee that any benefit shall arise from any gratuitous and discretionary grant since the future value of the Shares is unknown and unpredictable.

Additionally, you understand that the vesting and settlement of the Award and any dividend equivalents is expressly conditioned on your continued and active rendering of service to the Employer such that if your Continuous Service terminates for any reason other than as expressly provided in Section 4 of the Agreement, your Award and dividend equivalents will cease vesting immediately effective as of the date of termination of your Continuous Service. This will be the case, for example, even if (1) you are considered to be unfairly dismissed without good cause (*i.e.*, subject to a "*despido improcedente*"); (2) you are dismissed for disciplinary or objective reasons or due to a collective dismissal; (3) you terminate Continuous Service due to a change of work location, duties or any other employment or contractual condition; (4) you terminate Continuous Service due to the Company's or any Parent's, Subsidiary's or Affiliate's unilateral breach of contract; or (5) your Continuous Service terminates for any other reason whatsoever, in each case other than as expressly provided in Section 4 of the Agreement. Consequently, upon termination of your Continuous Service for any of the above reasons, you will automatically lose any rights to Awards and any dividend equivalents granted to you that were unvested on the date of termination of your Continuous Service, as described in the Agreement.

Finally, you understand that this grant would not be made to you but for the assumptions and conditions referred to herein; thus, you acknowledge and freely accept that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then any grant of an Award and any dividend equivalents shall be null and void.

Securities Law Notice. No "offer of securities to the public," as defined under Spanish law, has taken place or will take place in the Spanish territory in connection with the offer of the Award and dividend equivalents. The Agreement has not been nor will it be registered with the *Comisión Nacional del Mercado de Valores*, and does not constitute a public offering prospectus.

Sweden

Tax Acknowledgement. The following provisions supplement Section 13 of the Agreement as further supplemented by the Responsibility for Taxes section in Appendix A:

Without limiting the Company's or the Employer's authority to satisfy their withholding obligations for Tax-Related Items as set forth in Section 13 of the Agreement as further supplemented by the Responsibility for Taxes section in Appendix A, by accepting the Award and any dividend equivalents, you authorize the Company and/or the Employer to withhold Shares or to sell Shares otherwise deliverable to you upon vesting/settlement to satisfy Tax-Related Items, regardless of whether the Company and/or the Employer have an obligation to withhold such Tax-Related Items.

Switzerland

Securities Law Notice. Neither this document nor any other materials relating to the Award and any dividend equivalents (a) constitutes a prospectus according to articles 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), (b) may be publicly distributed or otherwise made publicly available in Switzerland or (c) has been or will be filed with, approved by or supervised by any Swiss reviewing body according to article 51 of FinSA or any Swiss regulatory authority (*e.g.*, the Swiss Financial Market Supervisory Authority).

Taiwan

Securities Law Notice. The Award, dividend equivalents and the Shares to be issued pursuant to the Plan are available only for Participants. The Award is not a public offer of securities by a Taiwanese company.

United Arab Emirates

Securities Law Notice. The Plan is being offered to employees and is in the nature of providing equity incentives to employees of the Company or any Parent, Subsidiary or Affiliate in the United Arab Emirates. Any documents related to the Award and the dividend equivalents, including the Plan, the Agreement, and other grant documents ("Plan Documents"), are intended for distribution only to such employees and must not be delivered to, or relied on by any other person. Prospective purchasers of the securities offered (*i.e.*, the Units) should conduct their own due diligence on the securities. The Emirates Securities and Commodities Authority has no responsibility for reviewing or verifying any Plan Documents nor has it taken steps to verify the information set out in them, and thus, is not responsible for such documents. Further, neither the Ministry of Economy nor the Dubai Department of Economic Development has approved this statement nor taken steps to verify the information set out in it, and has no responsibility for it. If you do not understand the contents of the Plan Documents, you should consult an authorized financial advisor.

United Kingdom

Tax Acknowledgement. The following provisions supplement Section 13 of the Agreement as further supplemented by the Responsibility for Taxes section in Appendix A:

Without limitation to Section 13 of the Agreement and the Responsibility for Taxes section in Appendix A, you agree that you are liable for all Tax-Related Items and hereby covenant to pay all such Tax-Related Items as and when requested by the Company or the Employer or by Her Majesty's Revenue and Customs ("HMRC") (or any other tax or other relevant authority). You also agree to indemnify and keep indemnified the Company and the Employer against any taxes or other amounts that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax or other relevant authority) on your behalf.

Notwithstanding the foregoing, if you are a director or an executive officer (as within the meaning of Section 13(k) of the Exchange Act), the terms of the immediately foregoing provision will not apply. In such case, if the amount of any income tax due is not collected from or paid by you within ninety (90) days of the end of the U.K. tax year (April 6 - April 5) in which an event giving rise to the indemnification described above occurs, the amount of any uncollected income tax may constitute a benefit to you on which additional income tax and national insurance contributions ("NICs") may be payable. You understand and agree that you will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for paying the Company or the Employer (as applicable) for the value of any employee NICs due on this additional benefit, which the Company or the Employer may obtain from you by any of the means referred to in the Plan or the Agreement.

Grant Date:

CBRE Group, Inc.
2019 Equity Incentive Plan
Restricted Stock Units
Grant Notice

CBRE Group, Inc. (the "Company"), pursuant to its 2019 Equity Incentive Plan (the "Plan"), hereby grants to the "Participant" identified below an award (the "Award") of that number of Restricted Stock Units set forth below (the "Units"). In general, each Unit is the right to receive one (1) share of the Company's Class A Common Stock (the "Shares") at the time such Unit vests. This Award is subject to all of the terms and conditions set forth herein and in the Restricted Stock Unit Agreement (the "Agreement") and the Plan (collectively, the "Award Documents"), both of which are attached hereto and incorporated herein in their entirety.

Participant:	
Grant Date:	
Number of Units:	
Fair Market Value on Grant Date (Per Share):	

Vesting Schedule:	Subject to Section 4 of the Agreement, the Units subject to the Award shall vest in full on the earlier of the one (1)-year anniversary of the Grant Date or the next annual meeting of stockholders.
Consideration:	No payment is required for the Shares, although payment may be required for the amount of any withholding taxes due as a result of the delivery of the Shares as described in greater detail in the Agreement.

Additional Terms/Acknowledgements: The undersigned Participant acknowledges receipt of the Award Documents and the Plan's Prospectus, and understands and agrees to terms set forth in the Award Documents. Participant acknowledges that he or she is accepting the Award by electronic means and that such electronic acceptance constitutes Participant's agreement to be bound by all of the terms and conditions of the Award Documents. By accepting the Award, Participant consents to receive any documents related to participation in the Plan and the Award by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company. Participant also acknowledges that this Grant Notice must be returned to the Company (including through electronic means). Participant further acknowledges that as of the Grant Date, the Award Documents set forth the entire understanding between Participant and the Company regarding the acquisition of Units and Shares and supersede all prior oral and written agreements on that subject with the exception of (i) Awards previously granted and delivered to Participant under the Plan, and (ii) the following agreements only, if any:

Other Agreements: **None.**

CBRE Group, Inc.	**Participant:**
By: _____	X _____
Signature	Signature
Title: _____	Date: _____
Date: _____	

Attachments:
I. Restricted Stock Unit Agreement
II. CBRE Group, Inc. 2019 Equity Incentive Plan

CBRE Group, Inc.
2019 Equity Incentive Plan
Restricted Stock Unit Agreement

Pursuant to the provisions of the Company's 2019 Equity Incentive Plan ("Plan"), the terms of the Grant Notice to which this Restricted Stock Unit Agreement is attached ("Grant Notice") and this Restricted Stock Unit Agreement (the "Agreement"), CBRE Group, Inc. (the "Company") grants you that number of Restricted Stock Units (the "Units") as set forth in the Grant Notice as of the date specified in the Grant Notice ("Grant Date"). Defined terms not explicitly defined in this Agreement or in the Grant Notice but defined in the Plan shall have the same definitions as in the Plan.

The details of your Award are as follows:

1. The Award. The Company hereby awards to you the aggregate number of Units specified in your Grant Notice. Each Unit is the right to receive one (1) share of the Company's Class A Common Stock (the "Shares") on the Vesting Date (as defined below). The Units and the Shares are awarded to you in consideration for your continued service to the Company or its Subsidiaries and Affiliates (the "Company Group").

2. Documentation. As a condition to the award of the Units, you agree to execute the Grant Notice and to deliver the same to the Company (including through electronic means), along with such additional documents as the Committee may require, within the time period prescribed by the Company or else this Award shall be forfeited without consideration. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and the Award by electronic means or request your consent to participate in the Plan by electronic means. By accepting the Award, you consent to receive such documents by electronic delivery and agree to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company.

3. Consideration For The Award. No cash payment is required for the Units or the Shares, although you may be required to tender payment in cash or other acceptable form of consideration for the amount of any withholding taxes due as a result of delivery of the Shares.

4. Vesting. Except as otherwise specified in this Agreement and the Plan, the Units will vest as provided in the Grant Notice (the "Vesting Date"). Any Units which have not vested as of the date of your termination of Continuous Service shall thereupon be forfeited immediately and without any further action by the Company, except as otherwise directed by the Committee.

5. Number of Shares and Purchase Price. The number of Shares subject to your Award may be adjusted from time to time pursuant to the provisions of Section 12 of the Plan.

6. Issuance and Certificates. The Company will deliver to you a number of Shares equal to the number of vested Units subject to your Award, including any additional Units received pursuant to Section 5 above that relate to such vested Units, as soon as reasonably practicable after the applicable Vesting Date, but in no event later than December 31 of the calendar year in which the applicable Vesting Date occurs. However, if a scheduled delivery date falls on a date that is not a business day, such delivery date shall instead fall on the next following business day. Notwithstanding the foregoing, in the event that (i) you are subject to the Company's policy permitting officers and directors to sell Shares only during certain "window periods," as in effect from time to time (the "Policy"), or you are otherwise prohibited from selling Shares in the open market, and any Shares subject to your Award are scheduled to

be delivered on a day (the "Original Distribution Date") that does not occur during an open "window period" applicable to you or a day on which you are permitted to sell Shares pursuant to a written plan that meets the requirements of Rule 10b5-1 under the Exchange Act, as determined by the Company in accordance with the Policy, or does not occur on a date when you are otherwise permitted to sell Shares in the open market, and (ii) the Company elects not to satisfy its tax withholding obligations by withholding Shares from your distribution, then such Shares shall not be delivered on such Original Distribution Date and shall instead be delivered on the first business day of the next occurring open "window period" applicable to you pursuant to the Policy (regardless of whether you are still providing Continuous Service at such time) or the next business day when you are not prohibited from selling Shares in the open market, but in no event later than December 31 of the calendar year in which the applicable Vesting Date occurs.

There are no certificates evidencing the Units. Certificates evidencing the Shares to be delivered pursuant to this Agreement shall be issued by the Company and shall be registered in your name as soon as reasonably practicable after the date on which the Shares are delivered pursuant to this Agreement. However, the Company shall not be liable to the Participant for damages relating to any delays in issuing the certificates to him/her, any loss of the certificates, or any mistakes or errors in the issuance of the certificates or in the certificates themselves.

7. Transfer Restrictions. The Units are non-transferable. Shares that are received under your Award are subject to the transfer restrictions set forth in the Plan and any transfer restrictions that may be described in the Company's bylaws or charter or insider trading policies in effect at the time of the contemplated transfer.

8. No Rights as a Stockholder; Dividend Equivalents. A Unit (i) does not represent an equity interest in the Company, and (ii) carries no voting rights. You will not have an equity interest in the Company or any shareholder rights, unless and until the Shares are delivered to you in accordance with this Agreement. Units, whether or not vested, shall be credited with dividend equivalents as and when dividends are paid on the Company's actual Shares, with such dividend equivalents deemed to be invested in additional Units subject to this Agreement as of the corresponding dividend payment date (which additional Units shall vest upon the vesting of the underlying Units to which they are attributable). No dividend equivalents shall be credited with respect to any fractional Unit.

9. Securities Laws. Upon the delivery of the Shares, you will make or enter into such written representations, warranties and agreements as the Committee may reasonably request in order to comply with applicable securities laws or with this Agreement. Notwithstanding any other provision of the Plan or this Agreement to the contrary, unless there is an available exemption from such registration, qualification or other legal requirements, Units may not be converted into Shares prior to the completion of any registration or qualification of the Units or the Shares that is required to comply with applicable state and federal securities or any ruling or regulation of any governmental body or national securities exchange or compliance with any other applicable federal, state or foreign law that the Committee shall in its sole discretion determine in good faith to be necessary or advisable.

10. Legends on Certificates. The certificates representing the Shares delivered to you as contemplated by this Agreement shall be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the Plan or the rules, regulations, and other requirements of the Securities and Exchange Commission, any stock exchange upon which such Shares are listed, and any applicable Federal or state laws, and the Committee may cause a legend or legends to be put on any such certificates to make appropriate reference to such restrictions.

11. Award not A Service Contract. Your Award is not an employment or service contract, and nothing in your Award shall be deemed to create in any way whatsoever any obligation or right to continued employment or service with or to the Company Group. In addition, nothing in your Award shall obligate the Company, its stockholders, its Board or employees to continue any relationship that you might have as a member of the Board, as an employee or as any other type of service provider for the Company.

12. Tax Consequences. You are responsible for any taxes due in connection with your receipt of this Award, including the vesting of such Award and delivery of Shares, and for declaring the Award to the relevant tax authority to which you are subject, if required.

13. Withholding Obligations.

(a) At the time your Award is made, or at any time thereafter as requested by the Company, you hereby authorize the Company to satisfy its withholding obligations, if any, from payroll and any other amounts payable to you (or, in the Company's discretion, from Shares that become deliverable upon vesting under this Award), and otherwise agree to make adequate provision for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company, if any, which arise in connection with the grant of or vesting of your Award or the delivery of Shares under the Award.

(b) Unless the tax withholding obligations of the Company, if any, are satisfied, the Company shall have no obligation to issue a certificate for such Shares or release such Shares.

14. Notices. Any notices provided for in your Award or the Plan shall be given in writing and shall be delivered by hand or sent by overnight courier, certified or registered mail, return receipt requested, postage prepaid, or electronic mail and shall be deemed effectively given upon receipt or, in the case of notices delivered by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company.

15. Miscellaneous.

(a) You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Committee to carry out the purposes or intent of this Award.

(b) You acknowledge and agree that you have reviewed your Award in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your Award and fully understand all provisions of your Award.

(c) The waiver by either party of compliance with any provision of the Award by the other party shall not operate or be construed as a waiver of any other provision of the Award, or of any subsequent breach by such party of a provision of the Award.

16. Governing Plan Document. Your Award is subject to all interpretations, amendments, rules and regulations that may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the provisions of the Plan and any other document, the provisions of the Plan shall control.

Grant Date:

17. Data Privacy Notification. ***You are hereby notified of the collection, use and transfer, in electronic or other form, of your personal data as described in this Agreement, any other Award materials and the Company's Employee Personal Information Privacy Notice or Employee Privacy Notice and Consent Form, as applicable (the "Privacy Notice"), which is viewable on the GDPO Intranet Site at https://cbre.sharepoint.com/sites/intra-EthicsCompliance/SitePages/Data-Privacy---Policies.aspx. Such personal data may be collected, used and transferred by and among, as applicable, the Company, the Company Group and any third parties assisting (presently or in the future) with the implementation, administration and management of the Plan, such as Fidelity Stock Plan Services, or its successor, for the exclusive purpose of implementing, administering and managing your participation in the Plan. The Company's basis for the processing and transfer of the data is described in the Company's Privacy Notice. Where required under applicable law, personal data also may be disclosed to certain securities or other regulatory authorities where the Company's shares are listed or traded or regulatory filings are made, or to certain tax authorities for compliance with the Company's, the Employer's and/or your tax obligations. You understand that the collection, use and transfer of your personal data is mandatory for compliance with applicable law and necessary for the performance of the Plan and that your refusal to provide such personal data would make it impossible for the Company to perform its contractual obligations and may affect your ability to participate in the Plan.***

Grant Date:

COMMERCIAL REAL ESTATE SERVICES

M E M O

Corporate Human Resources
2100 Ross Ave
Suite 1600
Dallas, TX 75201
www.cbre.com

Date: February 23, 2022

To: Chandra Dhandapani

From: Bob Sulentic

Subject: Internal Letter – Chief Transformation Officer and Global Chief Operating Officer, GWS

This memo serves to confirm certain terms of your employment and supersedes any prior discussions relating to the terms contained herein. This memo along with the Restrictive Covenants Agreement (defined below) comprise the complete terms of your employment with CBRE.

Position:
Chief Transformation Officer and Global Chief Operating Officer, GWS

Effective Date
February 18, 2022

Location:
Dallas, Texas

Reports To:
Bob Sulentic, Chief Executive Officer, CBRE Group, Inc.

Base Salary:
As approved by the company's Compensation Committee on February 18, 2022, effective April 1, 2022, you will have an annual salary of $750,000, paid bi-weekly.

Annual Bonus Eligibility:
You will be eligible for a discretionary annual bonus award under the terms of the Company's Executive Bonus Plan ("EBP"), a copy of which has been provided to you. As approved by the Compensation Committee on February 18, 2022, for the 2022 performance year, you will have a target annual bonus of $1,100,000. Actual awards under the EBP may range from 0% to 200% of target, depending on Company and individual performance, and in all cases are paid at the sole discretion of the Company. As stated in the EBP, an express condition of earning or vesting in this bonus is your continued employment through the date bonuses are paid. Should your employment terminate prior to the date on which bonuses are paid, no bonus will have been earned or vested and none will be payable, except as may be provided in the EBP. The bonus payment date is normally on or before March 15 of the succeeding year, but the Company reserves the right to change this date as it deems appropriate.

Equity:
You will continue to be eligible for CBRE's broad-based equity incentive program in the same manner and under the same conditions set by CBRE for other similarly situated executives. All grants are subject to the approval of the Compensation Committee of CBRE's Board of Directors each year prior to making the grant. The specific form of the grant (restricted stock, options, etc.), the number of units and vesting period/conditions are determined at the sole discretion of CBRE at the time of the grant and are subject to the terms of the Company's Equity Incentive Plan. As approved by the Company's Compensation Committee on February 18, 2022, for 2022, you will be granted an equity award with an approximate grant date value of $2,650,000.

HCE Benefits
As outlined by Company policy, salaried exempt employees earning a base salary of $100,000.00 or more are considered to be participants of our "Highly Compensated Employee" (HCE) program. As a participant, you are eligible to take unlimited Paid Time Off (PTO) subject to prior authorization of your manager and so long as you are performing satisfactorily and meeting your performance priorities. In addition to the HCE PTO benefit, employees within the HCE Program are entitled to severance and enhanced Leave of Absence benefits.

Severance:
As approved by the Compensation Committee on August 4, 2019, and communicated to you in the letter from CBRE's Chief People Officer dated August 23, 2019 you will remain a Tier II Participant in the CBRE Group, Inc., Change-in-Control and Severance Plan for Senior Management and eligible for the severance benefits as described thereunder, and accordingly, you will not be eligible for severance under CBRE's Severance Policy for HCEs or any other severance plan or program.

Confidentiality
The protection of confidential information and trade secrets is essential for CBRE, its companies and employees' future security. To protect such information, you may not disclose any Trade Secrets or Confidential Information (defined further in CBRE's policies). You are subject to the Company's Confidentiality Policy even after employment with the Company terminates. Under the federal Defend Trade Secrets Act of 2016, you shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that is made: (a) (i) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; (b) to your attorney in relation to a lawsuit for retaliation against you for reporting a suspected violation of law; or (c) in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

Restrictive Covenants
You will continue to be subject to the restrictions set forth in the Amended and Restated Restrictive Covenants Agreement entered into between you and CBRE as of May 17, 2019.

In order to further preserve the confidentiality of any Trade Secrets or Confidential Information, and to protect CBRE's proprietary interest in its trade secrets, you agree that for a period of one year following the termination of employment with CBRE, (i) you will not solicit, on your own behalf or on behalf of any other person, firm, company or corporation, any of CBRE's clients or prospective or potential clients whom you dealt or became acquainted while you were employed with CBRE, and (ii) you will not solicit for employment, on your own behalf or on behalf of any other person, firm, company or corporation, any of CBRE's salespeople or employees whom you became acquainted with while you were employed by CBRE.

Work Product
CBRE will exclusively own all work product that is made by you solely or jointly with others within the scope of your employment with CBRE, and you hereby irrevocably and unconditionally assign to CBRE all right, title, and interest worldwide in and to such work product. You understand and agree that you have no right to publish on, submit for publishing, or use for any publication any work product protected by this paragraph, except as necessary to perform services for CBRE.

Mutual Arbitration:
In the event of any dispute, claim, or controversy that could otherwise be raised in court ("Claims") between you and the Company (including all of its current or former officers; directors; members; employees; vendors; clients; agents; parent, subsidiary, and affiliated entities; benefit plans; benefit plans' sponsors; fiduciaries; administrators; and all successors and assigns of any of them), we jointly agree to submit all such Claims to binding arbitration and waive any right to a jury trial in court.

The Claims subject to arbitration include all claims arising from or related to your employment or the termination of your employment including, but not limited to, claims for wages or other compensation due; claims for breach of any contract or covenant (express or implied); tort claims; claims for misappropriation of trade secrets or unfair competition; claims for wrongful termination or unjustified dismissal; claims for discrimination, harassment or retaliation (including, but not limited to, race, sex, religion, national origin, age, marital status, or medical condition or disability, such as for example, under the Massachusetts Fair Employment Practices Act and similar state and federal anti-discrimination statutes); claims for benefits (except where an employee benefit or pension plan specifies that its claims procedure shall culminate in an arbitration procedure different from this one); and claims for violation of any federal, state, or governmental law, statute, regulation, or ordinance. Claims not covered by this arbitration provision are: claims for workers' compensation or unemployment benefits (except in Puerto Rico, this exclusion does not include claims for violation of employment reserve or claims for non-reinstatement, which are covered by this Agreement); petitions or charges filed with the National Labor Relations Board, Equal Employment Opportunity Commission, or a similar government agency; and claims which are not subject to arbitration or pre-dispute arbitration agreements pursuant to federal law. Moreover, any party may seek provisional relief from a court upon the ground that the award to which the party may be entitled may be rendered ineffectual without provisional relief.

All Claims subject to arbitration must be brought in the party's individual capacity, and not as a plaintiff or class member in any class, collective, or representative action. Any disputes concerning the validity of this multi-plaintiff, class, collective and representative action waiver will be decided by a court of competent jurisdiction, not by the arbitrator. In the event a court determines this waiver is unenforceable with respect to any Claim, then this waiver shall not apply to that Claim, and that Claim may only proceed in court.

The arbitration (i) shall be conducted pursuant to the JAMS Employment Arbitration Rules & Procedures to the extent they do not conflict with this provision, which are incorporated by reference and may be accessed at https://www.jamsadr.com or by calling JAMS at (800) 352-5267; (ii) shall be heard before a retired State or Federal judge in the county containing the CBRE office in which you were last employed, unless the parties agree otherwise; and (iii) must be initiated within the time period required under the applicable statute of limitations. Each party shall have the right to conduct discovery adequate to fully and fairly present the claims and defenses consistent with the streamlined nature of arbitration.

The arbitrator shall apply the substantive law relating to all claims and defenses to be arbitrated the same as if the matter had been heard in court, including the award of any remedy or relief on an individual basis. The arbitrator's award shall be in writing, with factual findings, reasons given, and evidence cited to support the award. The arbitrator's decision or award shall be final and binding and may be filed in any court of competent jurisdiction so that judgment may be entered upon it or it may be corrected, modified, or vacated on any ground permitted by applicable law.

The Company shall pay for all fees and costs of the Arbitrator, including any fees and costs that would not be incurred in a court proceeding. Each party shall pay for its own costs and attorneys' fees, if any, except as otherwise required by law.

The Federal Arbitration Act (9 U.S.C. Sections 1, et seq.) shall govern this arbitration provision and State arbitration statutes (such as, for example, N.H. Rev. Stat. Ann. § 542, et seq.) shall apply only to the extent they are not preempted. If any part of this arbitration provision is held to be invalid, void, or unenforceable, it shall be interpreted in a manner or modified to make it enforceable. If that is not possible, it shall be severed and the remaining terms shall remain in full force and effect.

At Will Employer:
CBRE is an "at will" employer which means that either you or CBRE may terminate your employment at any time with or without notice or cause.

Sincerely,

/s/ Alison Caplan

Alison Caplan
Chief People Officer

AGREED AND ACCEPTED:

By signing this agreement, I hereby accept each and all of its terms. I certify that I have read and considered this entire agreement and have asked questions about anything herein that I do not understand.

Signature: /s/ Chandra Dhandapani **Date:** 2/23/2022
Chandra Dhandapani

EXHIBIT 21

SUBSIDIARIES OF CBRE GROUP, INC.

AT DECEMBER 31, 2021

The following is a list of subsidiaries of CBRE Group, Inc. (the "Company") as of December 31, 2021, omitting subsidiaries which, considered in the aggregate as if they were a single subsidiary, would not constitute a significant subsidiary.

Name	State (or Country) of Incorporation
CBRE Services, Inc.	Delaware
CB/TCC, LLC	Delaware
CBRE, Inc.	Delaware
CBRE Holdco, Inc.	Delaware
CBRE Holdings, LLC	Delaware
CBRE Partner, Inc.	Delaware
CBRE Capital Markets, Inc.	Texas
CB/TCC Global Holdings Limited	United Kingdom
CBRE Holdings Limited	United Kingdom
CBRE Limited	United Kingdom
CBRE Global Holdings	Luxembourg
CBRE Luxembourg Holdings	Luxembourg
CBRE Global Acquisition Company	Luxembourg
Relam Amsterdam Holdings B.V.	The Netherlands

EXHIBIT 22.1

SUBSIDIARY ISSUERS AND GUARANTORS OF CBRE GROUP, INC.'S REGISTERED DEBT

AT DECEMBER 31, 2021

CBRE Services, Inc., a subsidiary of CBRE Group, Inc., is the issuer of the 4.875% and 2.500% senior notes (as defined in CBRE Group, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2021), which are guaranteed by CBRE Group, Inc.

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors
CBRE Group, Inc.:

We consent to the incorporation by reference in the registration statements (Nos. 333-116398, 333-181235, 333-218113 and 333-231572 on Form S-8 and No. 333-251514 on Form S-3) of our reports dated February 28, 2022, with respect to the consolidated financial statements and financial statement schedule II of CBRE Group, Inc. and the effectiveness of internal control over financial reporting.

/s/ KPMG LLP

Los Angeles, California

February 28, 2022

EXHIBIT 31.1

Certification of Chief Executive Officer Pursuant to
Rule 13a-14(a) Under the Securities Exchange Act of 1934, as Amended

I, Robert E. Sulentic, certify that:

1) I have reviewed this Annual Report on Form 10-K of CBRE Group, Inc.;

2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3) Based on my knowledge, the financial statements and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2022

/s/ ROBERT E. SULENTIC
Robert E. Sulentic
President and Chief Executive Officer

EXHIBIT 31.2

Certification of Chief Financial Officer Pursuant to
Rule 13a-14(a) Under the Securities Exchange Act of 1934, as Amended

I, Emma E. Giamartino, certify that:

1) I have reviewed this Annual Report on Form 10-K of CBRE Group, Inc.;

2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3) Based on my knowledge, the financial statements and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2022

/s/ Emma E. Giamartino

Emma E. Giamartino

Global Group President, Chief Financial Officer and Chief Investment Officer

EXHIBIT 32

Certifications of Chief Executive Officer and Chief Financial Officer
Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act Of 2002

The undersigned, Robert E. Sulentic, Chief Executive Officer, and Emma E. Giamartino, Chief Financial Officer of CBRE Group, Inc. (the "Company"), hereby certify as of the date hereof, solely for the purposes of 18 U.S.C. §1350, that:

(i) the Annual Report on Form 10-K for the period ended December 31, 2021, of the Company (the "Report") fully complies with the requirements of Section 13(a) and 15(d), as applicable, of the Securities Exchange Act of 1934; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods indicated.

Date: February 28, 2022

/s/ ROBERT E. SULENTIC
Robert E. Sulentic
President and Chief Executive Officer

Date: February 28, 2022

/s/ EMMA E. GIAMARTINO
Emma E. Giamartino
Global Group President, Chief Financial Officer and Chief Investment Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.