

Guide for Sustainable Projects

AIA Document D503™-2020

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Introduction

Architects are positioned to be leaders for an expanded view of health, safety, and welfare. As an Institute we must provide the access to knowledge, research, and professional collaborations that are critical to ensure our members become more informed and better prepared to lead. The American Institute of Architects ("AIA") will advance, disseminate, and advocate—to the profession, the building industry, the academy, and the public—design practices that integrate built and natural systems and enhance both the design quality and environmental performance of the built environment.

The AIA publishes information about sustainability resources, initiatives, and programs on its website at aia.org.

Purpose of this Guide

Sustainability is an important area in design and construction. Codes, such as the International Green Construction Code (IgCC), and certification systems, such as LEED® and Green Globes™, create roles, responsibilities, and risks for Owners, Architects, and Contractors. To protect each party's interest, it is important to develop contracts that are specifically tailored to address these roles, responsibilities, and risks.

In 2007, the AIA recognized the impact of sustainability in the design and construction fields and adopted a position advocating for the sustainable use of Earth's resources. In support of this position, AIA Contract Documents® implemented basic sustainability references and requirements in some agreements that required the Architect to discuss environmentally responsible design approaches with the Owner. Since 2007, "green" certification programs, building codes, and other legislative initiatives have become mainstream.

In 2011, AIA released D503™-2011 Guide for Sustainable Projects (referred to herein as the "Guide"). The Guide identified and discussed many legal and contractual issues associated with sustainable design and construction practices as they developed in the industry. The 2011 Guide also provided model language that could be incorporated into existing AIA Contract Documents.

Then, in 2012, AIA reinforced its commitment to leadership in sustainable design and construction by releasing "sustainable projects" (SP) versions of key AIA Contract Documents, such as the Standard Form of Agreement Between Owner and Contractor, the General Conditions of the Contract for Construction, the Standard Form of Agreement Between Owner and Architect, the Standard Form of Agreement Between Contractor and Subcontractor, and the Standard Form of Agreement Between Architect and Consultant.

These SP versions incorporated model language developed for D503–201l into the Conventional design-bid-build (A201) family of AIA Contract Documents while maintaining the underlying contractual relationships and language of the core agreements. Additionally, AIA Document B214™–2012 Standard Form of Architects Services: LEED® Certification, originally published in 2007, was updated in 2012 to incorporate new concepts developed in the Sustainable Projects documents. (B214–2012 is being retired as of May 2020 because its content is addressed in more recent sustainability exhibits discussed below).

By the end of 2013, AIA had released fully coordinated SP versions for each of the key contracts in the A201, Construction Manager as Constructor (CMc), and Construction Manager as Advisor (CMa) families. That same year, the Guide was updated from a focus on suggesting model language to a detailed discussion of each new provision in the SP documents.

As part of the 2014 Design-Build family updates, AIA published its first standalone Sustainability Exhibit, Al4l™-2014 Exhibit C, for use specifically with the design-build documents. That Exhibit was developed for projects where the Owner intends to pursue one or more sustainability goals. It addresses the specific sustainability responsibilities of the Owner and Design-Builder and extends those responsibilities to their sub-tier agreements when incorporated.

With the 2017 documents release, AIA discontinued updates to the individual SP agreements and moved those sustainability requirements into one document for the A201 family: E204™-2017 Sustainable Projects Exhibit. As of October 31, 2018, the individual SP agreements were retired, except for the CMc and CMa families. The SP versions of the CM agreements were replaced in 2019 with new Sustainable Projects Exhibits E235™-2019 Sustainable Projects Exhibit, Construction Manager as Adviser Edition and E234™-2019 Sustainable Projects Exhibit, Construction Manager as Constructor Edition.

By placing all sustainability project requirements in one exhibit, project participants can see the entire set of coordinated responsibilities in one document instead of having to read and piece together sustainability provisions from multiple SP documents. Another advantage of the exhibit is that a project may begin without a sustainable objective, but later include one. The exhibit allows the additional duties, responsibilities, and risks to supplement the original agreement without having to renegotiate.

E204 is not a stand-alone document but must be attached to executed Owner-Architect and Owner-Contractor Agreements that contain a Sustainable Objective. It is then incorporated into each party's other Project-related agreements. Like the SP documents, E204 establishes a comprehensive process for identifying, developing, and assigning responsibility for the Project's sustainable design and construction elements. E204 includes the same LEED® Certification Services as B214-2012 and can be used in place of B214.

In May 2020, the AIA released the C204-2020 Consultant's Services: Sustainable Project Services, to be used in situations where an Owner hires a Consultant who specializes in sustainability. Chapter 3 addresses this new document in detail.

This Guide is meant to provide general background information on certain topics of interest to those pursuing sustainable projects and an explanation of, and the reasoning behind, new provisions of AIA's Sustainable Projects Exhibit. It offers general guidance and does not provide legal advice. Laws regarding the use and enforceability of the information included in this Guide may vary among jurisdictions. Users of this Guide are encouraged to familiarize themselves with the laws and regulations applicable in the jurisdiction where the Project is located and to consult an experienced attorney.

AIA Committee on the Environment (COTE) Top Ten Measures Climate change is a critically urgent topic for society, and architects are well positioned to influence and impact change. In September 2019, the AIA adopted the AIA Framework for Design Excellence, formally known as the COTE Top Ten Measures. The Framework provides direction and resources to design for holistic performance on every project. The AIA will continue to broaden the Framework to organize thinking, facilitate conversations with clients and communities, and set meaningful goals and targeted outcomes.

AIA Framework for Design Excellence

Ml Design for Integration

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What is the big idea behind this project and how did the approach towards sustainability inform the design concept? Describe the project, program, and any unique challenges and opportunities. Specifically explain how the design is shaped around the project's goals and performance criteria, providing utility, beauty, and delight. How does the project engage all the senses for all its users and connect people to place? What makes this building one that people will fight to preserve? Give examples of how individual design strategies provide multiple benefits across the full triple bottom line of social, economic, and environmental value.

M2 Design for Equitable Community



Sustainability is inextricably tied to the wellness of communities. Describe specifically how community members, inside and outside the building, benefit from the project. How does this project contribute to creating a walkable, human-scaled community inside and outside the property lines? How were community members engaged during the design and development process? How does the project promote social equity at local, regional, and global scales? Because transportation-related emissions negatively affect public health, and because CO2 emissions associated with how these reach a building are frequently comparable to the CO2 emissions associated with operating the building.

M3 Design for Ecology



Sustainable design protects and benefits natural ecosystems and habitat in the presence of human development. Describe the larger or regional ecosystem (climate, soils, plant and animal systems) in which the project is sited. In what ways does the design respond to the ecology of this place? How does the design help users become more aware or connected with this place and their regional ecosystems? How does the design minimize negative impacts on birds or other animals (e.g. design to prevent bird collisions, dark-sky complaint lighting)? How does the project contribute to biodiversity and the preservation or restoration of habitats and ecosystem services?

M4 Design for Water



Sustainable design conserves and improves the quality of water as a precious resource. Illustrate how various water streams flow through the building and site, including major water conservation and storm water management strategies. How does the project relate to the regional watershed? Describe strategies to reduce reliance on municipal water sources. Does the project recapture or re-use water?

M5 Design for Economy



Providing abundance while living within our means is a fundamental challenge of sustainability. How does the project provide "more with less"? Possibilities include "right sizing" the program, cost-effective design decisions, economic performance analysis, economic equity strategies, notable return-on-investment outcomes, contributing to local and disadvantaged economies, etc. Provide examples of how first cost and life cycle cost information influenced design choices. Identify any additional

first-cost investments and how they are anticipated to improve life-cycle costs and longer-term economic performance.

M6 Design for Energy



The burning of fossil fuels to provide energy for buildings is a major component of global greenhouse gas emissions, driving climate change. Sustainable design conserves energy while improving building performance, function, comfort, and enjoyment. How did analysis of local climate inform the design challenges and opportunities? Describe any energy challenges associated with the building type, intensity of use, or hours of operation, and how the design responds to these challenges. Describe energy-efficient design intent, including passive design strategies and active systems and technologies. How are these strategies evident in the design, not just the systems?

M7 Design for Wellness



Sustainable design supports comfort, health, and wellness for the people who inhabit or visit buildings. Describe strategies for optimizing daylight, indoor air quality, connections to the outdoors, and thermal, visual, and acoustical comfort for occupants and others inside and outside the building. How does the design promote the health of the occupants? Describe design elements intended to promote activity or exercise, access to healthy food choices, etc. Outline any material health strategies, including any materials selection criteria based on third-party frameworks such as Health Product Declarations (HPDs), Living Building Challenge Red List, EPA chemicals of concern, etc. Include key results on occupant comfort from occupant satisfaction surveys.

M8 Design for Resources



Sustainable design includes the informed selection of materials and products to reduce product-cycle environmental impacts while enhancing building performance. Describe efforts to optimize the amount of material used on the project. Outline materials selection criteria and considerations, such as enhancing durability and maintenance and reducing the environmental impacts of extraction, manufacturing, and transportation. Identify any special steps taken during design to make disassembly or re-use easier at the building's end of life. What other factors helped drive decision-making around material selection on this project?

M9 Design for Change



Reuse, adaptability, and resilience are essential to sustainable design, which seeks to maintain and enhance usability, functionality, and value over time. Describe how the project is designed to facilitate adaptation for other uses and/or how an existing building was repurposed. What other uses could this building easily accommodate in 50-100 years? In what ways did the design process take into account climate change over the life of the building? Describe the project's resilience measures: How does the design anticipate restoring or adapting function in the face of stress or shock, such as natural disasters, blackouts, etc.? How does the project address passive survivability (providing habitable conditions in case of loss of utility power)?

M10 Design for Discovery



Sustainable design strategies and best practices evolve over time through

documented performance and shared knowledge of lessons learned. What lessons for better design have been learned through the process of project design, construction, and occupancy, and how have these been incorporated in subsequent projects? Describe ways the lessons have been shared with a larger audience (publications, lectures, etc.) and any ways the project may have influenced industry practices. Describe the processes used to maintain a long-term relationship between the design team and those occupying and operating the building and identify how both the users and designers benefited.

Materials Transparency and Optimization

Materials transparency addresses the hidden impacts and related concerns associated with materials used in construction, such as embodied carbon emissions, human health effects of toxic ingredients or byproducts, ecological degradation, resource efficiency, and social responsibility in the supply chain. Materials optimization is the removal of detrimental elements such as replacing a toxic ingredient with a healthier alternative. While this Guide does not address materials transparency and optimization directly, the topics are components of various certification systems, such as LEED and WELL, and programs through the Living Future Institute such as the Living Building Challenge and Declare label. Explanatory text and model language for practitioners involved with product content transparency can be found in AIA Document B503™-2017 Guide for Amendments to AIA Owner-Architect Agreements, Section A-5. AIA also published a White Paper that discusses materials transparency and risk for architects. In addition, the AIA Materials Knowledge Working Group is continually developing education and practice tools to help architects optimize their approach to materials transparency. For more information, see AIA's webpages on Materials Transparency and Materials Matter.

Resilience and Adaptation

Resilience is commonly defined as the ability to plan for, withstand, overcome, and adapt to adverse events. AIA's Resilience and Adaptation Initiative defines adverse events as acute and chronic threats posed by natural and human-caused hazards, climate change, the degradation of natural resources, and population growth. The average service life of a building is 80 years, but hazard events are occurring with such frequency and severity that this lifespan can be shortened. Building codes include environmental data based on historical events, not future conditions. Building codes provide for life, safety, and welfare of occupants – they may not ensure that a building can be reoccupied after a disaster. Designing for resilience is a business continuity strategy or one that allows communities to more quickly recover. While this Guide does not address resilience, additional information about resilience is available on AIA's website:

- Overview of resiliency articles »
- A framework for resilience »
- Strategies to drive adoption of disaster-resistant codes »
- What architects need to know about hazard and climate risk »
- Hazard mitigation design resources »
- Climate change adaptation design resources »

- Qualities of resilience »
- AIA's building industry statement on resilience »
- Community resilience design resources »
- AIA's resilience and adaptation initiative »
- AIAU online resilience courses and certificate »
- How to integrate resilience into your practice »

Revisions to this Guide

This Guide allows the AIA to address new topics in sustainable design and construction as they develop. It will be updated in response to feedback from industry participants and to reflect changing industry standards and practices. Subsequent revisions will be indicated by a change to the year in the document title and footer. Please check periodically to confirm that you are using the latest version of this Guide.

How to Use this Guide

This Guide discusses sustainable design and construction issues in the context of AIA's A201, Design Build, CMc, and CMa families of documents. However, the concepts and suggestions discussed in this Guide, with careful review and coordination, may easily form the basis for modifications to non-AIA documents.

This Guide covers four main topics: general background information about considerations for sustainable projects (Chapter I); a detailed examination of the language in the Sustainable Projects Exhibit (Chapter 2); sustainability considerations in AIA Agreements (Chapters 3–8); and a discussion of an example of a Sustainability Plan (Chapter 9).

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Chapter 1. Background

Sustainable Design and Construction

While sustainable design and construction practices have existed for decades, environmental product labels and certifications, Sustainability Certification Systems, and sustainable building codes have increased focus on the sustainably built environment. This focus has increased attention on the roles, responsibilities, and risks that participants encounter on sustainable projects, prompting a need for specific contract provisions to clarify those roles and responsibilities, and to fairly allocate the risks.

Below is a brief overview of environmental product labels and certifications, certifications systems, and jurisdictional requirements related to design and construction of sustainable projects. This overview demonstrates the complex options and requirements that may be present on sustainable projects. It is this complexity, and lack of a single standard, that necessitates the use of a document specifically written for sustainable projects.

Environmental Product Labels and Certifications

There are many programs that identify sustainably designed, built, or sourced products. These programs may focus on several key aspects of the product including energy efficiency, emissions of volatile organic compounds, or recycled content.

Many programs have developed an "eco-label" that is affixed to products to identify compliance with the requirements of a rating system. One prevalent example is the Energy Star label affixed to household products. Even if a product carries an eco-label or product certification, the Architect (or the party specifying the product) must research and understand the product and the method for receiving endorsement. The specifier must also consider whether the product will perform as intended under the project's operating conditions.

One key challenge the specifier may face when examining environmental product labels and certifications is understanding the degree of oversight or evaluation provided prior to endorsement. A first-party endorsement is self-endorsement. This means that an independent, outside source has not reviewed and tested the manufacturer's claims. Many environmental product certifications may be described as second or third-party certification. Second-party certification involves a consultant or trade organization that may have an interest in the entity seeking product certification. Third-party certification generally involves a certifier that is wholly independent of the party seeking certification. Many consider third-party certification to be the most reliable type of certification.

In addition to carefully scrutinizing environmental product labels and certifications, the specifier should be aware of the practice of improperly applying sustainable attributes to products or practices with the primary goal of increasing profits or market share, sometimes referred to as "green washing." While these products or services may be promoted to have certain sustainable attributes, the specifier should carefully investigate these products and services to ascertain their true sustainable value. The Federal Trade Commission (FTC) has issued Guides for the Use of Environmental Marketing Claims, known as the Green Guides, to help marketers ensure that claims about the environmental attributes of their products and services are truthful and non-deceptive. While the Green Guides are voluntary guidelines, the FTC does have the authority to prosecute false or misleading claims.

The specifier researching whether product data conforms to requirements of a certification system should consider adding model language about

certifications from AIA Document B503-2017 Guide for Amendments to its Owner-Architect Agreement. B503 also contains model language concerning the Architect's limited or unlimited certification.

Sustainability Certification Systems

In recent years, the number of certification systems that Owners may pursue on sustainable projects has grown. Many certification systems provide diverse options that can be tailored to a specific project, budget, and sustainable objective. The certification systems have increased focus on sustainable design and construction and the measurable benefits of sustainable practices.

In addition to environmental benefits associated with design and construction that conform with these systems, certifications offer brand name recognition when leasing or selling space in a new project. However, many benefits of sustainable design and construction, including the potential for reduced energy costs, reduced environmental impact, and increased building life cycle, may be enjoyed without pursuing a specific certification system.

When considering certification systems or sustainable design elements, it may be necessary to distinguish between certification and building performance. A building that has achieved a specific certification will not necessarily realize enhanced performance, and therefore, may not meet an Owner's performance expectations. Conversely, a building that meets the Owner's performance expectations or incorporates sustainable design and construction elements may not qualify for a particular certification because it may not meet all certification requirements. Clearly defining the Owner's voluntary performance and certification goals, as well as any limitations to attaining those goals, is critical in setting expectations and realizing a successful sustainable project.

The AIA does not endorse any one sustainability certification system. However, there are numerous certification systems available. In selecting one, the Owner and Architect should consider the options available and the cost of third-party certification, the cost of documentation, the cost of design and construction, and the life-cycle cost for each. The time and effort required for sustainable design and construction, as well as the certification process and requirements, will vary by project and be affected by the local climate, site conditions, preferred architectural form, massing, project type, and jurisdictional requirements.

Following is a basic summary of some common sustainability certification systems. The requirements of each certification system vary, and many may have programs unique to specific project types or outcomes. A more detailed explanation of each certification system is available at the respective certifying authorities' website.

BOMA 360. The BOMA 360 Performance Program, sponsored by the Building Owners and Managers Association International® (BOMA International®), evaluates buildings against industry best practices in six major areas: building operations and management; life safety, security, and risk management; training and education; energy; environmental/sustainability; and tenant relations/community involvement. Individual buildings that satisfy the requirements in all six areas are awarded the BOMA 360 designation.

BREEAM. Building Research Establishment Environmental Assessment Method (BREEAM®) is an international program that provides independent

third-party certification to assess the sustainability performance of individual buildings, communities, and infrastructure projects. Assessment and certification of many environmental factors can take place at any stage from design and construction through operation and refurbishment. BREEAM uses a six star rating system (Acceptable [In-Use program only]), Pass, Good, Very Good, Excellent, and Outstanding) for certification.

BREEAM originated in England and is used in at least 79 countries. In the U.S., BREEAM focuses on the assessment and certification of existing buildings in-use. The BREEAM In-Use program helps building owners and managers reduce operational costs and improve environmental performance of their buildings. It is applicable to any existing commercial building, regardless of its size, age, or condition. BREEAM has also released the BREEAM USA New Construction Standard.

ENERGY STAR. ENERGY STAR® is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy. The program focuses on energy performance of products and new and existing buildings. To qualify for ENERGY STAR, a building must earn a score of 75 or higher on the EPA's 1–100 energy performance scale, indicating that the facility performs better than at least 75% of similar buildings nationwide.

FITWEL. In 2011, the General Services Administration (GSA) partnered with the City of New York and the Centers for Disease Control (CDC) to develop a low cost, building health and wellness rating system. FITWEL® recognizes that the built environment can positively impact employee health and productivity. It assesses workplace features, design, practices, and policies which impact occupant health and wellness to support healthier building environments.

Administered by the Center for Active Design, FITWEL relies on evidence-based, scientific data and is based on a point system where projects earn one, two, or three stars. Documentation can be completed online, and all points are voluntary (no prerequisites). Points are earned in 12 categories related to building operations and staff well-being: Location, Building Access, Outdoor Spaces, Entrances & Ground Floor, Stairwells, Indoor Environment, Workspaces, Water Supply, Cafeterias & Prepared Food Retail, Shared Space, Vending Machines & Snack Bars, and Emergency Procedures.

Green Globes. Green Globes[™] is a web-based program for green building guidance and certification. The program includes an onsite assessment by a third party. Ratings are represented as a quantity of "Globes" ranging from one to four Globes based on the percentage of points achieved. The Green Building Initiative administers Green Globes in the United States.

Green Globes for Existing Buildings (EB) is a web-based application that aids building owners and property managers in the evaluation, documentation, and improvement of the environmental performance of their buildings. Using this tool enables building teams to focus on sustainability, gives them options when considering capital improvements or implementation of best practices, and allows them to benchmark and rate the benefits of various building attributes and procedures.

Green Globes Sustainable Interiors (SI) focuses on healthier and more productive spaces utilizing either life-cycle assessment (LCA) or environmental product declarations (EPDs).

LEED. The U.S. Green Building Council (USGBC) promotes sustainability and wellness in building design, construction, and operation. Leadership in Energy and Environmental Design (LEED®) has different levels of

certification (Certified, Silver, Gold, and Platinum) and different requirements based on project type. LEED considers multiple aspects of design and construction for the whole building and provides a framework to create healthy, highly efficient, and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement. Green Business Certification Inc. (GBCI) administers the LEED program. LEED offers the following certifications:

BD+C Building Design and Construction – Applies to buildings that are being newly constructed or going through a major renovation; includes New Construction, Core and Shell, Schools, Retail, Hospitality, Data Centers, Warehouses and Distribution Centers, and Healthcare.

ID+C Interior Design and Construction – Applies to projects that are a complete interior fit-out; includes Commercial Interiors, Retail, and Hospitality.

O+M Building Operations and Maintenance – Applies to existing buildings that are undergoing improvement work or little to no construction; includes Existing Buildings, Schools, Retail, Hospitality, Data Centers, and Warehouses and Distribution Centers.

ND Neighborhood Development – Applies to new land development projects or redevelopment projects containing residential uses, nonresidential uses, or a mix. Projects can be at any stage of the development process from conceptual planning to construction; includes Planned and Built projects.

Homes – Applies to single family homes, low-rise multi-family, or midrise multi-family housing.

Cities and Communities – Applies to entire cities and subsections of a city. Using the Arc performance platform, LEED for Cities projects can measure and manage a city's water consumption, energy use, waste, transportation, and human experience.

The International Living Futures Institute. Through their programs, the International Living Futures Institute[™] addresses a variety of aspects of the built environment. The Living Building Challenge focuses on building renovations and new construction. This program is based entirely on building performance and requires that a building be operational for a period of 12 consecutive months prior to certification (although a conditional assessment is available prior to conclusion of the 12-month operational period). Net Zero Energy Building Certification targets buildings that have proven zero net energy consumption and zero carbon emissions. In addition to buildings, the Institute offers two other programs: the Living Community Challenge, which provides a framework for master planning, design, and construction, and the Living Products Challenge, which addresses sustainable products. These programs are organized into performance areas (Petals), and each performance area has several more detailed requirements (Imperatives). The Living Futures Institute also provides sustainable product labeling, social justice, and sustainability communication tools through the Declare, JUST, and Reveal platforms.

Passive House. The Passive House standard combines sustainable strategies in a system for designing and building cost effective, comfortable, energy efficient buildings. The major components are a super-insulated envelope, ultra-high-performance windows, airtight construction, elimination or reduction of thermal bridging, heat recovery ventilation, and the use of

minimal space conditioning systems. Its applicability ranges from single-family homes to large commercial and institutional structures designed for such uses as multi-family, office, and education.

Based upon the European Passivhaus performance standard, the Passive House Institute US (PHIUS) has developed the PHIUS+ passive building standard that accounts for the broad range of climate conditions, market conditions, and other variables encountered in North American climate zones. The Passive House Certification program is based upon this standard, which combines a passive house design verification protocol with a quality assurance and quality control program performed onsite by specialized raters. The system also provides a database and manufacturer verification programs for high performance building components.

STARS. Sustainability Tracking, Assessment & Rating System (STARS®) was developed by the Association for the Advancement of Sustainability in Higher Education (AASHE®). This certification system is for colleges and universities. STARS provides a self-reporting framework for colleges and universities to measure their performance.

WELL. Launched in 2014, the WELL Building Standard[™] was developed by the International WELL Building Institute[™] (IWBI[™]) and measures and validates features in the built environment that support and advance human health and wellness. WELL[™] integrates scientific and medical research and literature on environmental health, behavioral factors, health outcomes, and demographic risk factors that affect health with leading practices in building design and management. It references existing standards and best practice guidelines set by governmental and professional organizations, such as LEED.

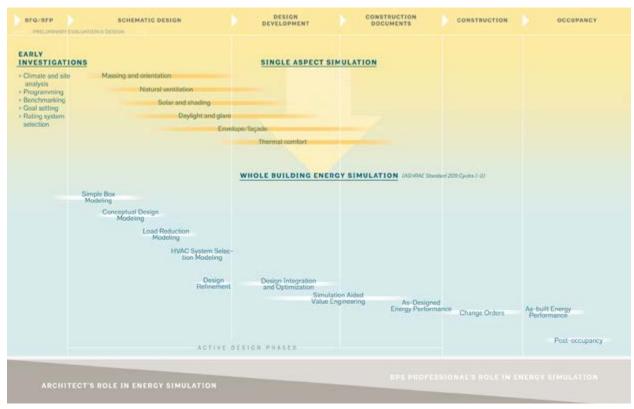
Like LEED, WELL is also third-party administered through Green Business Certification Inc. (GBCI). WELL buildings and communities are focused on ten concepts. These include Air, Water, Nourishment, Light, Movement, Thermal Comfort, Sound, Materials, Mind, and Community and earn points in each category to achieve one of three levels of certification: Silver, Gold or Platinum.

Jurisdictional Requirements

In addition to existing certification systems, many jurisdictions have developed their own standards for sustainable design and construction or adopted a certification system through regulations or codes. With more and more state and local governments requiring that projects achieve specific sustainability requirements, sustainable design and construction will become increasingly prevalent in the industry. Often, these new laws are unclear as to the exact penalty for failure to achieve or comply with the law's requirements. They may also require bonds or other obligations not readily available in the market. Some of the major codes and other jurisdictional requirements are summarized below:

ASHRAE Standard 209-2018. Officially known as Energy Simulation Aided Design for Buildings Except Low Rise Residential Buildings, Standard 209 applies to new buildings and existing buildings undergoing major renovations or additions. More specifically, it explains the process for integrating whole building performance (BPS) simulation, or energy modeling, during design. Standard 209 requires a certified BPS professional to perform simulations in terms of seven cycles that correspond to design phases. Only Cycle 3, Load Reduction, and one additional design phase cycle are required for compliance with Standard 209. While the architect performs a single aspect simulation to establish massing, orientation, daylight, shading, envelope, and other related

characteristics, the BPS professional performs a whole building simulation pursuant to Standard 209. Standard 209 can be voluntarily applied to a project but is not mandatory unless adopted as code in the jurisdiction where the project is located. It can also be adopted by organizations that provide high-performance building certifications and by utilities and other agencies that incentivize using building performance simulation to optimize energy performance in building design.



Reprinted from the AIA Building Performance Simulation Guide.

Standard 189.1. To establish minimum sustainable criteria for incorporation into building codes, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) in conjunction with the Illuminating Engineering Society (IES) and USGBC developed ANSI/ASHRAE/USGBC/IES Standard 189.1, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (Standard 189.1). Standard 189.1 is applicable to all buildings, except low-rise residential buildings, and covers site sustainability, water use efficiency, energy efficiency, indoor environmental quality, and the building's impact on the atmosphere or natural resources. The 2018 version of the IgCC incorporated Standard 189.1, which resulted in the International Code Council (ICC) maintaining the Scope and Administration Chapter and ASHRAE developing all technical provisions of the IgCC.

IECC (International Energy Conservation Code). The IECC is a comprehensive energy conservation code that establishes minimum regulations for energy-efficient buildings using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new energy-efficient designs. Because of AIA's critical commitment to exponentially accelerating the decarbonization of buildings and the built environment, the Institute submitted the "Zero Code Renewable Energy Appendix" to become part of the 2021 IECC. This

appendix to the model energy code allows for a multiple-pathway approach to achieve better energy efficiency and carbon reduction outcomes for the built environment. The Appendix would allow local jurisdictions to voluntarily adopt a zero-net-carbon building code.

IgCC. The International green Construction Code (IgCC), developed by the International Code Council (ICC), adds "green" provisions to existing codes, such as the International Building Code (IBC), International Energy Conservation Code (IECC), and the other "I-Codes." It covers natural resources, water and energy conservation, operations and maintenance for new and existing buildings, building sites, building materials, and building components (including equipment and systems). Like other ICC codes, it is updated and released on a three-year cycle.

When adopted by a jurisdiction, the IgCC will likely affect the design team's scope of services. Its provisions may also impose new requirements on Owners. These new requirements may result in the need for new consultants or an increase in the level of services required of the design team. These nuances can only be discovered by thoroughly reading the code and understanding what each provision's impact will be.

In jurisdictions where it has not been adopted, Owners may seek to incorporate provisions of the IgCC through their design and construction contracts, which, again, will affect the design team's scope of services and the applicable standard of care. Incorporating the code by contract will present a number of challenges, and the parties to such a contract will need to be extremely careful. Among other things, the IgCC allows for the selection of jurisdiction–specific requirements and project–specific electives. Care must be taken to ensure that a contract, seeking to adopt the IgCC by reference, addresses those provisions normally dealt with as part of the code adoption and enforcement process. Failure to address such details, and any other issues required to be addressed as part of the code adoption process, may lead to contract ambiguity and dispute.

Because the Sustainable Projects Exhibits have been drafted with these issues in mind, they are the best place to begin when the IgCC applies to your project. These Exhibits have been drafted to allocate duties and risks to the party that is best able to manage them and provide a framework for the Architect to develop a Sustainability Plan that efficiently allocates the requirements of the IgCC to the appropriate party.

Local Codes. Many jurisdictions have developed their own standards for sustainable design and construction or adopted one of the existing certification systems through regulations or codes. The CALGreen Code is an example of a comprehensive code drafted by a jurisdiction. The D.C. Green Building Act is an example of the adoption of an existing certification system. It is important that each project participant understand the codes and requirements applicable in the jurisdiction where the project is located.

Jurisdictional Incentives. In addition to jurisdictional or governmental requirements that create additional sustainable criteria for projects, many jurisdictions and the federal government offer incentives for projects that incorporate sustainable design and construction measures. Incentives may include expedited permitting; tax rebates, deductions, and credits; or other financial or project incentives. Some incentives are available exclusively to the Owner while others are available directly to the Architect or Contractor. These incentives, while beneficial to the project or the party receiving the incentive,

may create the potential for damage claims on the project if a requirement for receiving the incentive is not achieved.

Other Governmental Requirements. Although not technically jurisdictional requirements, some governmental entities, in their role as Owners, have specific sustainability requirements. For example, the U.S. General Services Administration (GSA), an independent agency of the United States government and one of the largest landowners and managers in the nation, has required that all of its new construction and major modernization projects achieve LEED certification. One of the GSA's key roles is the design, construction, operation and maintenance of federal facilities, including courthouses, office buildings, land ports of entry, and research facilities.

Conclusion

As stated previously, continued development in sustainable design and construction can create a diverse and often confusing set of competing certifications, standards, and codes. To establish a clear understanding of what is, and what is not, required on a sustainable project, project participants can rely on contracts that address these issues. Sustainable projects require contract documents that are specifically tailored to sustainable projects and that provide a clear process for establishing the sustainability requirements for the project. The AIA E204-2017 Sustainable Projects Exhibit, outlined below, allows the parties to establish the Owner's sustainability goal for the project and establish clear lines of responsibility for achieving that goal.

Chapter 2. E204-2017, Sustainable Projects Exhibit

This Guide explains the roles and responsibilities of the Owner, Architect, and Contractor and establishes reasonable expectations regarding sustainable design early in the Project. The language in this Guide recognizes the Architect will design the building with the intention of having the Project meet the specified Sustainable Objective. However, this Guide recognizes that the construction, operation and maintenance of the building, as well as interpretations by the Certifying Authority or authorities having jurisdiction over the Project, are outside the Architect's and Contractor's control.

The following sections are coordinated with the article and section numbers found in AIA Document E2O4™-2017 Sustainable Projects Exhibit. The Sustainable Projects Exhibit replaced the Sustainable Projects agreements in the Conventional (A2O1) family of Contract Documents. E2O4 applies to a wide variety of sustainable projects, including those in which the Sustainable Objective includes obtaining a Sustainable Certification, such as LEED, or those in which the Sustainable Objective is based on incorporation of performance-based sustainable design or construction elements. The LEED Certifications Services contained in B2I4-20I2 (being retired in Spring 2020) are fully covered in E2O4. The information in this Chapter generally applies to AIA's other Sustainable Projects Exhibits:

- Al41™-2014 (Owner and Design-Builder Agreement) Exhibit C Sustainable Projects
- E234[™]-2019 Sustainable Projects Exhibit, Construction Manager as Constructor Edition
- E235™-2019 Sustainable Projects Exhibit, Construction Manager as Adviser Edition

Article 1 -General Provisions

In AIA Document Bl01–2017, Section l.l.6, the Owner and Architect are to state the Owner's Sustainable Objective, if any, for the Project. If a Sustainable Objective is provided, the parties proceed to Subsection l.l.6.l where they agree to complete E204 and incorporate it into their Agreement. E204 defines the terms, conditions, and services related to the Owner's Sustainable Objective. By incorporating the completed E204 into Bl0l, the Owner and Architect agree to incorporate it into their agreements with consultants and contractors who perform services or Work associated with the Sustainable Objective.

As used in this Guide the term "sustainable" is construed as a common industry term to describe, in general, projects that incorporate design, construction, and operational practices that are intended to offer benefits to the environment, enhance the health and well-being of building occupants, or increase energy efficiency. In this Guide, "sustainable" is synonymous with other nomenclature used to describe environmentally responsible design and construction, such as "green design and construction" or "high performance building," and applies to projects seeking certification, projects where sustainable features are jurisdictionally mandated, and projects that incorporate the Owner's sustainability goals.

Once a Sustainable Objective is identified, E2O4 sets forth a process by which the parties identify various measures to be taken and develop a plan to achieve the Sustainable Objective. E2O4 requires the Architect to hold a Sustainability Workshop with the Owner to discuss sustainable design features of the Project. After that Workshop, the Architect develops a Sustainability Plan that outlines the Sustainable Measures necessary to achieve the Sustainable Objective. The Sustainability Plan allocates responsibility for each Sustainable

Measure to the Project participant in the best position to perform that Measure. Additionally, the Sustainability Plan includes other critical information such as testing and implementation strategies to achieve the Sustainable Objective. The requirements of the Sustainability Plan are further developed as the design progresses and, as appropriate, are incorporated into the Construction Documents. The Sustainability Plan becomes a Contract Document; therefore, it is important that all Project participants review the Sustainability Plan and understand its requirements.

The E204 also addresses several issues unique to sustainable design and construction. Examples include requirements for proposed materials or equipment substitutions; requirements for construction waste management; Project registration with, and submissions to, the Certifying Authority; certain types of claims to be included in the waiver of consequential damages; and the relationship between achievement of the Sustainable Objective and Substantial and Final Completion. The E204 alters some of the traditional concepts and requirements in the AIA Contract Documents, and so, it is important that all Project participants review the E204 and understand its requirements.

Definitions

The Sustainability Plan is specifically identified as a Contract Document. This is important to the Contractor and other Project participants who are responsible for performing those Sustainable Measures assigned to them. E204 is intended for use as an exhibit to any agreement for design services or construction included in the A201 family of AIA Contract Documents.

ARTICLE 1 GENERAL PROVISIONS

§ 1.2 Definitions

§ 1.2.1 Sustainable Objective

The Sustainable Objective is the Owner's goal of incorporating Sustainable Measures into the design, construction, maintenance and operations of the Project to achieve a Sustainability Certification or other benefit to the environment, to enhance the health and well-being of building occupants, or to improve energy efficiency. The Sustainable Objective is identified in the Sustainability Plan.

§ 1.2.2 Sustainable Measure

A Sustainable Measure is a specific design or construction element, or post occupancy use, operation, maintenance or monitoring requirement that must be completed in order to achieve the Sustainable Objective. The Owner, Architect and Contractor shall each have responsibility for the Sustainable Measure(s) allocated to each of them in the Sustainability Plan.

§ 1.2.3 Sustainability Plan

The Sustainability Plan is a Contract Document that identifies and describes: the Sustainable Objective; the targeted Sustainable Measures; implementation strategies selected to achieve the Sustainable Measures; the Owner's, Architect's and Contractor's roles and responsibilities associated with achieving the Sustainable Measures; the specific details about design reviews, testing or metrics to verify achievement of each Sustainable Measure; and the Sustainability Documentation required for the Project.

§ 1.2.4 Sustainability Certification

The Sustainability Certification is the initial third-party certification of sustainable design, construction, or environmental or energy performance, such as LEED®, Green GlobesTM, Energy Star® or another rating or certification system, that may be designated as the Sustainable Objective or part of the Sustainable Objective for the Project. The term Sustainability Certification shall not apply to any recertification or certification occurring subsequent to the initial certification.

§ 1.2.5 Sustainability Documentation

The Sustainability Documentation includes all documentation related to the Sustainable Objective or to a specific Sustainable Measure that the Owner, Architect or Contractor is required to prepare in accordance with the Contract Documents. Responsibility for preparation of specific portions of the Sustainability Documentation will be allocated among the Owner, Architect and Contractor in the Sustainability Plan and may include documentation required by the Certifying Authority.

§ 1.2.6 Certifying Authority

The Certifying Authority is the entity that establishes criteria for achievement of a Sustainability Certification and is authorized to grant or deny a Sustainability Certification.

(A detailed discussion of the Sustainability Plan and example of a Sustainability Plan can be found in Chapter 9.)

Application of the Definitions to Different Sustainable Project Types

Given the range of sustainability requirements encountered on today's projects, there will likely be three general categories of projects: those with no Sustainable Objective, those that voluntarily adopt a Sustainable Objective, and those with a Sustainable Objective mandated by code or other legal requirements.

Agreements for projects with a Sustainable Objective, whether code or contract-required, can be regarded similarly. If the project is required to have a Sustainable Objective, either because of the applicable code or because the Owner has elected to pursue extensive sustainable design and construction elements, use of a Sustainable Projects Exhibit is appropriate. A Sustainability Workshop should be conducted and a Sustainability Plan approved to document the outcomes of the Workshop. These two milestones form a roadmap for achieving the Sustainable Objective.

When using a Sustainable Projects Exhibit, application of the Definitions will be different when the Sustainable Objective is code-mandated than when voluntarily selected by the Owner. For example, when the Sustainable Objective is mandated by code, the Sustainable Objective is likely to be a project designed to meet code requirements and approved by the Authority Having Jurisdiction (AHJ). When a Sustainable Objective is adopted voluntarily, it would be defined by the Owner and tied to requirements mandated by the Certifying Authority or the Owner's other requirements.

The process described in the Sustainable Projects Exhibit can be used to describe the framework and establish procedures for meeting the Sustainable Objective. Below is a brief description of how the Definitions for projects involving either a code-mandated or Owner-developed Sustainable Objective may be viewed.

Sustainable Measure

- When the Sustainable Objective is based on code or other
 jurisdictional requirement or elective, the Sustainable Measures include
 the code's specific requirements and its electives, as well as related
 items required to meet those requirements and electives.
- When the Sustainable Objective is adopted voluntarily, the Sustainable Measures include the points or credits required by the Certifying Authority, or other Owner-selected requirement, and related items necessary to meet those requirements.

Sustainability Plan

When the Sustainable Objective is based on code or other jurisdictional

- requirement or elective, the Sustainability Plan is based on the code's tables, elective tables, and other jurisdictional requirements, and the actions required of each of the project participants to meet those requirements.
- When the Sustainable Objective is adopted voluntarily, the Sustainability Plan is based on the Certifying Authority's score or credit sheet or the other requirements (Sustainable Measures) selected by the Owner, as well as the actions required of each of the project participants to meet those requirements.

Sustainability Certification

- When the Sustainable Objective is based on code or other jurisdictional requirement or elective, the Sustainability Certification is the basis for approval by the AHJ.
- When the Sustainable Objective is adopted voluntarily, the Sustainability Certification is certification by the Certifying Authority.

Sustainability Documentation

- When the Sustainable Objective is based on code or other jurisdictional requirement or elective, the Sustainability Documentation is the information that the code requires to be submitted to the authority having jurisdiction.
- When the Sustainable Objective is adopted voluntarily, the Sustainability Documentation is the documentation required by the Certifying Authority or Owner.

Certifying Authority

- When the Sustainable Objective is based on code or other jurisdictional requirement, the Certifying Authority is the authority having jurisdiction.
- When the Sustainable Objective is adopted voluntarily, the Certifying Authority is the private organization authorized to grant or deny a Sustainability Certification.

Section 1.3 of E2O4 allows the Owner, Architect, and Contractor to name incentive programs related to the Sustainable Objective. Many jurisdictions and the federal government offer incentives for projects that incorporate sustainable design and construction measures. Incentives may include expedited permitting; tax rebates, deductions, and credits; or other financial or project incentives. Some incentives are available exclusively to the Owner while others are available directly to the Architect or Contractor. The parties should understand from the beginning of the Project what incentive programs the Owner intends to pursue if those incentives are based on achieving a certain Sustainable Objective. This will allow the parties to take steps to meet the requirements of the authority granting the incentive.

ARTICLE 1 GENERAL PROVISIONS

§ 1.3 Set forth below any incentive programs related to the Sustainable Objective the Owner intends to pursue, any deadlines for receiving the incentives, and any requirements related to the incentive programs that are applicable to the Architect or the performance of the Architect's services:

(Identify incentive programs the Owner intends to pursue and deadlines for submitting or applying for the incentive program.)

As with BlOl, E204, Section 1.4 requires the Parties to incorporate the Sustainable Projects Exhibit into their other agreements with project participants who are performing services or Work pertaining to the Sustainable Objective. By completing E204 and incorporating it into such an agreement, E204 becomes binding on the parties. By incorporating E204 into other agreements used on the Project, all parties can ensure that they are following the same contractual framework and obligations with respect to the Sustainable Objective.

§ 1.4 The Parties agree to incorporate this Exhibit into the agreements with the project participants performing services or Work in any way associated with the Sustainable Objective.

Article 2 - Architect

Sustainability Certification Agreements. If the Project includes achievement of a Sustainability Certification, such as LEED, the Certifying Authority may require that the person registering the Project consent to a number of agreements with the Certifying Authority through an online tool. These agreements may be "click through" agreements that are displayed onscreen as part of the registration process. They can create significant legal and performance obligations for the party registering the Project. The Owner should be aware of the requirements of these agreements and be willing to recognize, through a written agreement, that the party registering the Project is doing so on the Owner's behalf as an agent of the Owner. However, laws regarding the establishment and enforcement of an agency relationship may vary from jurisdiction to jurisdiction and should be reviewed with appropriate legal counsel. E204 assumes that the Architect will register the Project on behalf of the Owner. The Architect will provide any agreements required by the Certifying Authority to the Owner for review. The Owner agrees to execute all documents required by the Certifying Authority to establish the Architect as the agent of the Owner for purposes of certifying the Project.

In addition to mandatory or optional credits and other specific requirements necessary to achieve a given certification, Certification Authorities may require users of the certification or rating system to enter into agreements directly with the Certification Authority. These agreements can create unique obligations and liabilities, and may include waivers, disclaimers, releases, confidentiality and indemnification obligations. A project participant that simply accepts the terms of those agreements, without fully understanding them, may be accepting significant, unanticipated liability.

§ 2.2 If the anticipated Sustainable Objective set forth in the Initial Information includes a Sustainability Certification, the Architect shall provide the Owner with copies of all agreements required by the Certifying Authority to register the Project and pursue the Sustainability Certification. The Owner and Architect will review and confirm that the terms of those agreements are acceptable to the Owner before moving forward with the Sustainability Services under this Article 2. The Owner agrees to execute all documents required by the Certifying Authority to be executed by the Owner, including any documentation required to establish the authority of the Architect as an agent of the Owner, for the limited purpose of pursuing the Sustainability Certification.

In addition, even in circumstances where the Project Owner has primary liability under the agreements, the owner may assert claims against other participants that flow down from the Owner's agreements with the Certification Authority. For example, the agreements might require the owner to indemnify the Certification Authority for third party intellectual

property infringement claims arising from the Certification Authority's use of information or materials submitted to it by, or on behalf of, the owner. In those circumstances, while the owner might be primarily responsible to the Certification Authority, the owner might seek to assert a claim against another project participant who negligently or intentionally allowed the information to be submitted. Because of this potential for secondary liability, it is important for each project participant to fully understand the range of possible outcomes associated with fulfillment of their specific project obligations, and to clearly delineate their roles and responsibilities. Project participants should carefully review the agreements required by the Certification Authority, and related documents, and when appropriate consult with legal and insurance counsel.

Sustainability Workshop. Understanding the Owner's goals and expectations for the Project is fundamental to the success of sustainable projects. The Architect is required to conduct a Sustainability Workshop with the Owner and the Owner's and Architect's consultants to establish the Sustainable Objective, if not already identified in the Owner-Architect Agreement, and discuss potential Sustainable Measures for the Project. The Sustainability Workshop could be one or a series of meetings to clearly establish the sustainability goals for the Project.

The Sustainability Workshop allows the Owner, Architect, and other participants to meet prior to conclusion of the Schematic Design Phase to establish the Sustainable Objective and Sustainable Measures. During the Sustainability Workshop, Project participants should discuss the Owner's intended use of the Project and Sustainable Measures. In addition, the Architect may advise the Owner on the feasibility of, or budget impacts arising from, the potential incorporation of the Sustainable Measures, or necessary implementation procedures. The Owner and Architect may also discuss the potential post-construction impact the Sustainable Measures may have on the completed Project, such as building operations or maintenance procedures.

§ 2.3 As soon as practicable, but not later than the conclusion of the Schematic Design Phase Services, the Architect shall conduct a Sustainability Workshop with the Owner, the Owner's consultants, and the Architect's consultants, during which the participants will: review and discuss potential Sustainability Certifications; establish the Sustainable Objective; discuss potential Sustainable Measures; examine strategies for implementation of the Sustainable Measures; and discuss the potential impact of the Sustainable Measures on the Project schedule, the Owner's program, and the Owner's budget for the Cost of the Work.

It should be noted that the language above states that the Sustainability Workshop will occur no later than the conclusion of the Schematic Design Phase Services. This language was included because the Sustainability Workshop should occur during the very early stages of the Project. Remember, when scheduling the Sustainability Workshop, the Sustainability Plan is required to be submitted to, and approved by, the Owner with the Schematic Design Documents. Holding the Sustainability Workshop late in the Schematic Design Phase may not provide adequate time to prepare the Sustainability Plan.

Sustainability Plan Services. The Sustainability Plan Services outlined below establish a process to: (1) develop a Sustainability Plan outlining the Sustainable Measures necessary to achieve the Sustainable Objective; (2) designate responsibility for each Sustainable Measure; and (3) incorporate the Sustainable Measures into the drawings and specifications for the Project.

This scope of services is meant to be flexible and may be used on many types of sustainable projects. For example, this scope of services could be used on

a Project where the Sustainable Objective is 75% energy savings, compared to a referenced benchmark, or a Project where the Sustainable Objective is both 75% energy savings and a third-party rating or certification. The level of service can be specifically tailored to the Owner's requirements and budget.

Following the Sustainability Workshop, the Architect will develop a Sustainability Plan that identifies and describes the Sustainable Objective; the Sustainable Measures targeted; implementation strategies selected to achieve the Sustainable Measures; the Owner's, Architect's, and Contractor's roles and responsibilities associated with achieving the Sustainable Measures; the specific details about design reviews, testing or metrics to verify achievement of each Sustainable Measure; and the Documentation for Certification required for the Project. The Sustainability Plan is not intended to be aspirational in nature, but rather a road map for achieving the Sustainable Objective that clearly outlines the Sustainable Measures and who is responsible for achieving them. When developing the Sustainability Plan, the parties should consider how achieving each Sustainable Measure will be verified. The Sustainability Plan can be used to establish performance parameters that will demonstrate achievement of each Sustainable Measure, the types of testing necessary, and the party responsible for verifying that those performance parameters have been met. Including a clear methodology in the Sustainability Plan to verify that the Sustainable Measures have been achieved will clarify each party's responsibility and may reduce the potential for claims on the Project. The Sustainability Plan may take the form of a spreadsheet outlining each Sustainable Measure targeted and allocating responsibility for that measure to one or more Project participants. Chapter 9 of this Guide includes a more detailed discussion about developing the Sustainability Plan, as well as an example of a Sustainability Plan.

Once the Sustainability Plan is complete, the Architect will submit it to the Owner for approval. During the design phase, the Sustainable Measures in the Sustainability Plan should be incorporated into the drawings and specifications, as appropriate, and will form part of the basis for the bidding or negotiation of the Owner-Contractor Agreement. Additionally, the Sustainability Plan may be bound into the specifications for the Project and will become a Contract Document upon which the Contractor's Work will be based. Once the Owner and Architect agree to the Sustainability Plan, each party should acknowledge that agreement in writing. This can avoid confusion and minimize disputes later.

§ 2.4.1 Following the Sustainability Workshop, the Architect shall prepare a Sustainability Plan based on the Sustainable Objective and targeted Sustainable Measures.

§ 2.4.2 As part of the Architect's submission of the Schematic Design Documents in accordance with the Owner-Architect Agreement, the Architect shall submit the Sustainability Plan prepared in accordance with Section 2.4.1, to the Owner, and request the Owner's approval.

The Architect is required to submit an updated Sustainability Plan as part of its Design Development Documents submission to the Owner and advise the Owner of any adjustments made to the Sustainability Plan.

§ 2.4.3 As part of the Architect's submission of the Design Development Documents and Construction Documents in accordance with the Owner-Architect Agreement, the Architect shall advise the Owner of any adjustments to the Sustainability Plan, and request the Owner's approval.

The Sustainability Plan is an evolving document that may be adjusted as the design and construction of the Project progresses. The Architect must revise the Sustainability Plan based on changes approved by the Owner.

§ 2.4.5 Subject to Section 2.9.2, the Architect shall make adjustments to the Sustainability Plan as the design and construction of the Project progresses.

Design Phases. The requirements of the Sustainability Plan are ultimately incorporated into the Schematic Design Documents, Design Development Documents, and Construction Documents for the Project. The Sustainability Plan becomes a Contract Document forming, in part, the basis of the Contractor's performance. The Owner may also have certain responsibilities under the Sustainability Plan. Some aspects of the Sustainability Plan may not lend themselves to incorporation into the Drawing and Specifications, such as an Owner requirement to provide energy use information to a Certifying Authority.

The Architect, as part of the design phase for the Project, is required incorporate the Sustainable Measures into the drawings and specifications as appropriate. This may require information in the drawings and specifications, such as specific performance criteria or other required characteristics of materials or equipment. MasterSpec has developed comprehensive green, sustainable, and LEED language that can assist in the development of specifications for sustainable Projects. (For more information about MasterSpec, go to masterspec.com.)

In preparing specifications, the Architect should carefully consider, and be prepared to explain, the effect the Sustainable Measures will have on building systems and other aspects of the Project; how those building systems are intended to be operated in accordance with the design parameters; and the impact on building use and occupancy resulting from the utilization of Sustainable Measures. Identification of how the performance criteria or other required characteristics contributes to attaining a Sustainable Measure will provide guidance for substitution requests (see Substitutions in Chapter 6, below) and help the Owner understand how to operate the systems in accordance with the design parameters.

§ 2.5.1 The Architect shall prepare Schematic Design Documents, Design Development Documents and Construction Documents that incorporate the Sustainable Measures identified in the Sustainability Plan, as appropriate.

The Owner's Sustainable Objective or other Project requirements may warrant the use of untested materials and equipment on the Project. The Architect or its consultants may be unable to confirm a track record of reliability for the materials or equipment. If the materials or equipment fail to perform in accordance with the manufacturer's representations, the Project may fail to achieve the Sustainable Objective. It is important that the Architect discuss the proposed use of such materials or equipment with the Owner and inform the Owner of any potential impact on the Sustainable Objective that may occur if the product fails to meet the manufacturer's representations. If the Owner chooses to use the product, the language in this section may limit the Architect's liability for a failure of the product to perform in accordance with the manufacturer's representations.

§ 2.5.2 As part of the Sustainable Measures, the Project may require the use of materials and equipment that have had limited testing or verification of performance. The Architect may be unable to determine whether the materials or equipment will perform as represented by the manufacturer or supplier. The Architect shall discuss with the Owner the proposed use of such materials or equipment and potential effects on the Sustainable Objective that may occur if the materials or equipment fail to perform in accordance with the manufacturer's or supplier's representations. The Owner will render a written decision regarding the use of such materials or equipment in a timely manner. In the event the Owner elects to proceed with the use of such materials or equipment, the Architect shall be permitted to rely on the manufacturer's or supplier's representations and shall not be responsible for any damages arising from failure of the material or equipment to perform in accordance with the manufacturer's or supplier's representations.

Construction Phase. The Architect has a duty to keep the Owner apprised of the Project's progress toward achievement of the Sustainable Measures and any defects or deficiencies in the Work that the Architect recognizes will impact achievement of the Sustainable Measures. If such a condition is recognized, the Owner, Architect, and Contractor are required to meet to discuss alternatives to remedy the condition.

§ 2.6.1 The Architect shall advise and consult with the Owner regarding the progress of the Project toward achievement of the Sustainable Measures. Based on site visits performed in accordance with the Owner-Architect Agreement and other information received from the Contractor, the Architect shall promptly notify the Owner of known deviations from the Contract Documents and defects or deficiencies in the Work that will affect the achievement of Sustainable Measures. The Architect shall meet with the Owner and Contractor to discuss remedies or, where appropriate, alternatives to achieve the Sustainable Measures.

Because of the significant impact a change could have on achievement of the Sustainable Measures or the Sustainable Objective, the Architect is required to notify the Owner of proposed changes that will materially affect achievement of a Sustainable Measure or the Sustainable Objective. The Owner may then authorize the Architect to further investigate the change and provide recommendations regarding the proposed change.

§ 2.6.2 If the Architect determines that a proposed change in the Work would materially impact a Sustainable Measure or the Sustainable Objective, the Architect shall notify the Owner and, upon the Owner's written authorization, further investigate such change.

As part of its obligations in Section 3.8, the Contractor is required to submit all of its Sustainability Documentation to the Architect as a condition of Substantial Completion; unless a portion of the Sustainability Documentation, by its nature, cannot be provided until after Substantial Completion. Sustainability Documentation to be provided after Substantial Completion might include commissioning results, certain systems testing, or other requirements that cannot be tested or verified until the building is occupied. Section 2.6.3 excludes post Substantial Completion Sustainability Documentation from the items that the Architect must provide the Owner as part of Project completion.

§ 2.6.3 At Substantial Completion, the Architect shall forward to the Owner all Sustainability Documentation prepared by the Contractor in accordance with the Contract Documents, except for Sustainability Documentation which by its nature must be completed after Substantial Completion.

Project Completion. Substantial Completion and award of a Sustainability Certification are not likely to occur at the same time. Awarding a Sustainability Certification will typically occur after the date of Substantial Completion. Because Substantial Completion triggers the release of retainage and the beginning of the Contractor's warranties and corrections period, the Architect should discuss Section 3.8 with the Owner to be sure the Owner understands that these items are triggered by Substantial Completion and not necessarily by award of the Sustainability Certification, or verification that the Sustainable Objective was met.

§ 3.8 Substantial Completion

Verification that the Project has achieved the Sustainable Objective, or the actual achievement of the Sustainable Objective, shall not be a condition precedent to issuance of a Certificate of Substantial Completion...

Project Registration and Submissions of Sustainability Documentation to the Certifying Authority. Section 2.7 sets forth specific services the Architect will perform if the Sustainable Objective or Sustainable Measures include Sustainability Certification. The Architect will register the Project; collect and submit the Sustainability Documentation to the Certifying Authority; and prepare and submit the application for certification to the Certifying Authority. Each of these services is performed as an agent for the Owner. An agency relationship creates certain legal rights that may differ based on the jurisdiction where the Project is located. Users should consult an attorney regarding the specific legal implications of this relationship.

§ 2.7.1 If the Sustainable Objective includes a Sustainability Certification, the Architect, as agent for the Owner, shall perform the services set forth in this Section 2.7.

The Architect will register the Project with the Certifying Authority. As discussed previously, this can have important legal implications for the Architect that should be considered. Additionally, the fees charged by the Certifying Authority can be a significant Project expense. Under Section 2.7.2, the Architect will pay these fees as a reimbursable expense. However, the Owner and Architect may negotiate an initial payment in the Owner-Architect Agreement to cover these expenses.

§ 2.7.2 The Architect shall register the Project with the Certifying Authority. Registration fees and any other fees charged by the Certifying Authority, and paid by the Architect, shall be a reimbursable expense and shall be credited against any initial payment received pursuant to the Owner-Architect Agreement.

In addition to registration, the Architect is required to collect Sustainability Documentation from the party responsible for producing it in accordance with the Sustainability Plan and submit the Sustainability Documentation to the Certifying Authority. Submissions beyond the limitations set forth in Section 2.9.2 will be compensated as Additional Services.

§ 2.7.3 The Architect shall collect the Sustainability Documentation from the Owner and Contractor; organize and manage the Sustainability Documentation; and, subject to Section 2.9.2, submit the Sustainability Documentation to the Certifying Authority as required for the Sustainability Certification process.

The Architect is required to prepare and submit the application for certification to the Certifying Authority.

§ 2.7.4 Subject to Section 2.9.2, the Architect shall prepare and submit the application for certification of the Project to the Certifying Authority, including any required supporting documentation, in accordance with the Sustainability Plan.

In some circumstances, the Certifying Authority may have a process to appeal an adverse credit or point ruling. Provided the Architect has received timely notice of denial of a credit or point necessary to achieve the Sustainability Certification, the Architect will prepare and file the appeal of the credit or point ruling to the Certifying Authority. Appeals to the Certifying Authority are performed as part of the Architect's Basic Services subject to a limitation on the number of appeals under Section 2.9.2. Any appeals exceeding the number set in Section 2.9.2 will be compensated as an Additional Service. In addition, the Architect's obligation under Section 2.7.5 does not extend to prosecuting appeals to the Certifying Authority arising from the revocation or reduction of an awarded Sustainability Certification. The same is true with respect to taking any other actions determined by the Owner to be necessary or desirable. This responsibility lies with the Owner, as provided in Section 4.4.

§ 2.7.5 Subject to Section 2.9.2, and provided the Architect receives timely notice from the Owner or Certifying Authority, the Architect shall prepare and file necessary documentation with the Certifying Authority to appeal a ruling or other interpretation denying a requirement, prerequisite, credit or point necessary to achieve the Sustainability Certification.

The Architect is required to prepare responses and submit additional documentation required by comments or questions received from the Certifying Authority, subject to the limitations set forth in Section 2.9.2.

§ 2.7.6 Subject to Section 2.9.2, the Architect shall prepare responses to comments or questions received from the Certifying Authority, and submit additional required documentation.

Section 2.7.7 clarifies that any certification, declaration, or affirmation the Architect makes to the Certifying Authority does not create a warranty or guarantee to the Owner. This is to avoid creating a potentially uninsurable contractual warranty or guarantee to the Owner.

§ 2.7.7 Any certification, declaration or affirmation the Architect makes to the Certifying Authority shall not constitute a warranty or guarantee to the Owner or to the Owner's contractors or consultants.

Copyrights and Licenses. For sustainable projects where a Sustainability Certification is sought, the Owner may be required to submit the Architect's Instruments of Service to the Certifying Authority to comply with the documentation requirements. The Owner's license to use the Architect's Instruments of Service therefore must be expanded to include transmission of the Architect's Instruments of Service to the Certifying Authority to comply with the requirements of the Certifying Authority. In addition, the Architect grants to the Owner a license to allow the Certifying Authority to publish the Architect's Instruments of Service as required by the Certifying Authority.

§ 2.8.1 Solely for the purpose of obtaining or maintaining the Sustainability Certification, the Architect grants to the Owner a nonexclusive license to submit the Architect's Instruments of Service, directly or through third parties, to the Certifying Authority to comply with the requirements imposed by the Certifying Authority, and further grants the Owner a nonexclusive license to allow the Certifying Authority to publish the Instruments of Service in accordance with the policies and agreements required by the Certifying Authority. The licenses granted in this Section are valid only if the Owner substantially performs its obligations under the Owner-Architect Agreement, including prompt payment of all sums when due.

Section 2.8.2 recognizes that the Owner may submit the Architect's Instruments of Service to the Certifying Authority without violating the Architect's reserved rights to the Instruments of Service.

§ 2.8.2 Submission or distribution of Instruments of Service to meet requirements of a Certifying Authority in connection with the Project is not to be construed as publication in derogation of the reserved rights of the Architect and the Architect's consultants under the Owner-Architect Agreement.

Additional Services. The requirements for a specific Sustainability Certification may change during the Project. When a Sustainability Certification is selected for the Project, clearly identify the version of the Sustainability Certification in the Sustainability Plan. Some Sustainability Certifications may allow you to "lock in" a particular version of the certification system when registering the Project. If the requirements to achieve the Sustainability Certification change during the Project, the Architect may need to perform significant additional work to revise the plans and specifications to meet the new requirements.

E204 identifies two potential Additional Services that may arise during a Project with a Sustainable Objective. Section 2.9.1.1 adds changing or editing previously prepared Instruments of Service, including the Sustainability Plan, necessitated by changes in the requirements to achieve the Sustainability Certification for the Project. Section 2.9.1.2 adds assisting the Owner or Contractor with preparing the Sustainability Documentation for which the Owner or Contractor are responsible under the Sustainability Plan.

- § 2.9.1 Upon recognizing the need to perform the following Additional Services, in addition to those listed in the Owner-Architect Agreement, the Architect shall notify the Owner with reasonable promptness and explain the facts and circumstances giving rise to the need. The Architect shall not proceed to provide the following services until the Architect receives the Owner's written authorization:
 - .1 Changing or editing previously prepared Instruments of Service, including the Sustainability Plan, necessitated by the Certifying Authority's changes in the requirements necessary to achieve the Sustainability Certification; or
 - **.2** Assistance to the Owner or Contractor with preparation of Sustainability Documentation, for which the Owner or Contractor is responsible pursuant to the Sustainability Plan.

The Architect should clearly define the scope of the Architect's sustainable design and construction phase services. Throughout the design and construction of the Project, it may be necessary to make multiple revisions to the Sustainability Plan or multiple submissions to the Certifying Authority. These services may not be contemplated as part of the scope of the Architect's Sustainability Services and could require a significant expenditure

of resources or funds - especially where Sustainability Services are performed on a fixed-fee basis. The Architect might consider placing limits on certain services which, if exceeded, would be compensated as an Additional Service.

§ 2.9.2 The Architect shall provide services exceeding the limits set forth below as Additional Services. When the limits below are reached, the Architect shall notify the Owner:

- .1 () adjustments to the Sustainability Plan
- .2 () meetings during the Design and Construction Phases required to define, develop and incorporate the Sustainable Measures into the Contract Documents
- **.3** () submittals to the Certifying Authority
- .4 () responses to the Certifying Authority's comments and questions
- .5 () appeals to the Certifying Authority pursuant to Section 2.7.5
- .6 () meetings with the Owner and Contractor, pursuant to Section 2.6.1, to discuss remedies or, where appropriate, alternatives to achieve the Sustainable Measures due to deviations from the Contract Documents or defects or deficiencies in the Contractor's Work.

Article 3 - Contractor

E204 requires the Contractor – like the Owner – to perform those Sustainable Measures identified as its responsibility in the Sustainability Plan and Contract Documents.

§ 3.1 The Contractor shall perform those Sustainable Measures identified as the responsibility of the Contractor in the Sustainability Plan.

Section 3.2 provides a process for correcting conditions that might affect achievement of the Sustainable Objective. If the Owner or Architect recognizes such a condition, the Contractor is required to participate in meetings with the Owner and Architect to discuss alternatives to correct the condition. The Contractor is also responsible for reporting such conditions that are discovered or made known to the Contractor.

§ 3.2 The Contractor shall meet with the Owner and Architect to discuss alternatives in the event the Owner or Architect recognizes a condition that will affect achievement of a Sustainable Measure or achievement of the Sustainable Objective. If any condition is discovered by, or made known to, the Contractor that will adversely affect the Contractor's achievement of a Sustainable Measure for which the Contractor is responsible pursuant to the Sustainability Plan, the Contractor will promptly provide notice to the Architect and meet with the Owner and Architect to discuss alternatives to remedy the condition.

The process for handling substitutions on a sustainable project is complicated by the fact that the suitability, characteristics, performance, and reliability of materials and equipment can have far-reaching impacts, not only on the Project schedule and the long-term function of the Project, but also on whether targeted Sustainable Measures will be achieved. The process for evaluating substitutions must be communicated to all parties to the Project. The following section establishes the criteria for submission of substitution requests that may have an effect on the Sustainable Objective. Such language may also be included in the General Requirements (Division 1 of the Specifications) as well as the Supplementary Conditions. A more detailed process for the review of substitutions can be found in AIA Document A503™−2017.

§ 3.3 The Contractor shall include, with any request for substitution, a written representation identifying any potential effect the substitution may have on the Project's achievement of a Sustainable Measure or the Sustainable Objective. The Owner and Architect shall be entitled to rely on any such representation. In preparing this representation, the Contractor may request additional information from the Architect describing how the product, material or equipment, for which a substitution is proposed, was intended to satisfy the requirements of a Sustainable Measure or contribute toward achievement of the Sustainable Objective.

Where an Owner requires achievement of a Sustainability Certification or where a Sustainability Certification is required by law, the Contractor may be responsible for preparing certain Sustainability Documentation related to the Contractor's Work as set forth in the Sustainability Plan.

§ 3.4 The Contractor shall be responsible for preparing and completing the Sustainability Documentation required from the Contractor by the Contract Documents, including any Sustainability Documentation required to be submitted after Substantial Completion. The Contractor shall submit the Sustainability Documentation to the Architect in accordance with any schedules or deadlines set forth in, or as otherwise required by, the Contract Documents. In the absence of schedules or deadlines for submission of Sustainability Documentation in the Contract Documents, the Contractor will submit the Sustainability Documentation with reasonable promptness, but in no event more than 60 days after Substantial Completion, so that the Architect may submit the Sustainability Documentation to the Certifying Authority.

The Contractor's submittals, such as shop drawings, product data, and samples, play an important role on sustainable projects. Submittals related to sustainable products, materials, and methods often require additional time for preparation. While E2O4 does not discuss the Contractor's submittals, the Contractor may consider including additional time in its submittal schedule to allow for preparation of submittals relating to sustainable products, materials, and methods. Multiple submittals related to a particular Sustainable Measure must be considered together as they often have a collective effect on achieving a Sustainable Measure. As with all submittals, the Contractor has an obligation, under Section 3.12.6 of A2O1®–2O17, to review, coordinate, and approve all submittals prior to submission to the Architect. In addition, the Contractor may not perform Work for which a submittal was required until the submittal is approved by the Architect pursuant to Section 3.12.7 of A2O1. On Projects where performance specifications are provided for sustainable products there may be additional criteria that the Contractor must verify.

The Owner's Sustainable Objective or other Project requirements may necessitate that the Contractor's design professionals recommend the use of untested materials or equipment on the Project. The Contractor's design professionals may be unable to confirm a track record of reliability for the materials or equipment. If the materials or equipment fail to perform in accordance with the manufacturer's representations, the Project may fail to achieve the Sustainable Objective. The Contractor will discuss untested products proposed by its design professionals with the Owner and Architect and inform the Owner and Architect of any potential impact on the Sustainable Objective that may occur if the product fails to meet the manufacturer's representations. If the Owner then chooses to use the product, Section 3.5 may limit the liability of the Contractor, the Contractor's design professional, and the Architect for a failure of the product to perform in accordance with the manufacturer's representations.

§ 3.5 If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents and the Contractor's design professional proposes the use of materials or equipment that have had limited testing or verification of performance, the Contractor shall discuss with the Architect and Owner the proposed use of such materials or equipment and potential effects on the Sustainable Objective that may occur if the materials or equipment fail to perform in accordance with the manufacturer's or supplier's representations. The Owner will render a written decision regarding the use of such materials or equipment in a timely manner. In the event the Owner elects to proceed with the use of such materials or equipment, the Contractor and Architect shall be permitted to rely on the manufacturer's or supplier's representations and shall not be responsible for any damages arising from the failure of the material or equipment to perform in accordance with the manufacturer's or supplier's representations.

Construction Waste Management. Construction waste management and disposal plays an important part on sustainable projects. Building demolition, selective demolition, renovation, and new construction all contribute to generating waste, which is often diverted to landfills. Many materials generated from the construction process can be re-used in the Project or recycled. For example, site demolition could offer opportunities for recycling of asphalt paving for use in new paving, and for recycling masonry and concrete for use in clean site fill. Consumables, such as paper and beverage containers used by construction workers, can also be recycled.

E204 requires the Contractor to prepare and submit a construction waste management and disposal plan in accordance with the Contract Documents. The goal of a construction waste management and disposal plan is to reduce the amount of materials entering a landfill. There are several components to the plan. First, a quantitative goal must be set by the Owner for recycling or salvaging a certain percentage by weight of nonhazardous demolition and construction waste on the Project. This percentage can also be set by public authorities having jurisdiction over the Project or by a Certifying Authority. Other portions of the plan include identification of waste for recycling, a waste reduction work plan, a cost analysis, and an implementation plan (including training, monitoring, and reporting).

The process can be complex and time consuming. It can also be costly, as reports must be generated, personnel must be trained, and often a waste management coordinator is employed. The construction waste management and disposal program may also need to be detailed under a separate Division OI specification section for the Project outlining all applicable requirements and procedures.

§ 3.7 The Contractor, in accordance with the Contract Documents, shall prepare and submit to the Architect and Owner a construction waste management and disposal plan setting forth the procedures and processes for salvaging, recycling or disposing of construction waste generated from the Project. The Contractor shall recycle, reuse, remove or dispose of materials as required by the Contract Documents.

Substantial Completion. On a sustainable project in which the Owner's Sustainable Objective includes pursuit of a Sustainability Certification, the date of Substantial Completion may precede the date of award of the Sustainability Certification. A201, Section 9.8.1, defines Substantial Completion as "the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use." A201, Section

8.1.3 defines the date of Substantial Completion as "the date certified by the Architect in accordance with Section 9.8." The Sustainability Certification may be issued some time later than Substantial Completion and should not be a reason to postpone award of the Project's Substantial Completion date. After all, completion of the Contractor's Work, release of the Contractor's retainage, and beginning the warranty period should not be conditioned on the time it takes a Certifying Authority to recognize that the Project achieves certification. Rather, Substantial Completion depends on the Contractor completing Work so the Project can be used for its intended purpose, as certified by the Architect. Accordingly, E204, Section 3.8 notes that Substantial Completion is not conditioned on verification of, or actual achievement of, the Sustainable Objective. This language does not relieve the Contractor of its obligation to correct defective Work, particularly defective Work that might be an impediment to achieving the Sustainable Objective.

§ 3.8 Substantial Completion

Verification that the Project has achieved the Sustainable Objective, or the actual achievement of the Sustainable Objective, shall not be a condition precedent to issuance of a Certificate of Substantial Completion. Except for that portion of the Sustainability Documentation that by its nature must be provided after Substantial Completion, the Contractor shall submit all other Sustainability Documentation required from the Contractor by the Contract Documents no later than the date of Substantial Completion.

As part of its obligations in Section 3.8, the Contractor is required to submit all of its Sustainability Documentation to the Architect as a condition of Substantial Completion unless a portion of the Sustainability Documentation, by its nature, cannot be provided until after Substantial Completion. Sustainability Documentation to be provided after Substantial Completion might include commissioning results, certain systems testing, or another requirement that cannot be tested or verified until the building is occupied. Section 2.6.3 of E204 excludes post–Substantial Completion Sustainability Documentation from the items that the Architect must provide the Owner as part of Project completion.

Final Completion. The Contractor must provide all required Sustainability Documentation to the Architect before final payment or final release of retainage may occur. Verification of, or actual achievement of, the Sustainable Objective is not a condition precedent to issuance of a final Certificate for Payment. However, this does not relieve the Contractor of its obligation to correct defective Work, particularly defective Work that might be an impediment to achieving the Sustainable Objective.

§ 3.9.1 All Sustainability Documentation required from the Contractor by the Contract Documents shall be submitted to the Architect before final payment or any remaining retained percentage shall become due.

§ 3.9.2 Verification that the Project has achieved the Sustainable Objective, or the actual achievement of the Sustainable Objective, shall not be a condition precedent to issuance of the final Certificate for Payment. Final payment does not relieve the Contractor's obligation to fulfill its responsibilities related to achieving the Sustainable Objective.

Article 4 - Owner

The success of sustainable projects depends on each party performing the tasks assigned to it in the Sustainability Plan. E204 requires the Owner to perform those Sustainable Measures identified as a responsibility of the Owner in the Sustainability Plan.

§ 4.1 Based on the Owner's approval of the Sustainability Plan and any approved changes to the Sustainability Plan, the Owner shall perform those Sustainable Measures identified as the responsibility of the Owner in the Sustainability Plan, or as otherwise required by the Contract Documents. The Owner shall require that each of its contractors and consultants performs the contractor's or consultant's services in accordance with the Sustainability Plan.

Sustainable projects may require additional information about the Project site or existing construction. The Owner is to provide relevant and necessary information upon the Contractor's or Architect's request.

§ 4.2 The Owner shall provide to the Contractor and Architect any information requested by the Contractor or Architect that is relevant and necessary for achievement of the Sustainable Objective, including: design drawings; construction documents; record drawings; shop drawings and other submittals; operation and maintenance manuals; master plans; building operation costs; building operation budgets; pertinent records relative to historical building data, building equipment and furnishings; and repair records.

Because the various Sustainability Certifications may place requirements specifically on the Owner – in addition to those related to the design and construction of the Project, such as the requirement to provide utility bills – Section 4.3 requires the Owner to comply with the requirements of the Certifying Authority before and after construction.

§ 4.3 The Owner shall comply with the requirements of the Certifying Authority as they relate to the ownership, operation and maintenance of the Project both during construction and after completion of the Project.

Section 4.4 obligates the Owner to pursue any appeals or other actions with the Certifying Authority necessitated by the revocation or reduction of a Sustainability Certification. For example, if the Owner occupies the Project and fails to comply with the requirements of the Certifying Authority to submit energy usage data, the Sustainability Certification could be revoked. The Owner would be the party responsible for pursuing any appeal or reinstatement action with the Certifying Authority.

§ 4.4 The Owner shall be responsible for preparing, filing, and prosecuting appeals to the Certifying Authority, or taking any other actions determined by the Owner to be necessary or desirable, arising from the revocation or reduction of an awarded Sustainability Certification.

Building commissioning is a process that verifies that key systems in a new building perform in accordance with the Owner's requirements, as well as with applicable certification requirements, and are consistent with the design requirements. Commissioning is an important aspect of sustainable design and construction. While some sustainability codes and certifications require that the commissioning agent be an independent third party, E2O4 requires the Owner to provide a commissioning agent for the Project unless the Architect otherwise agrees to perform commissioning as an Additional Service. Building commissioning is a requirement of LEED and may also be a requirement of Sustainability Certifications, ordinances, and laws. Key to the commissioning process is establishing performance criteria for the systems to be commissioned. The ability to demonstrate, through measurable and objective testing, that the systems perform in accordance with these criteria is a key benefit of commissioning. In addition, commissioning should

include operator systems training that addresses proper operation and maintenance of the systems and demonstrates the purpose of the system, special design features, operating sequences, and any system limitations. Commissioning may also include a follow-up meeting with the Owner, typically one year following Substantial Completion, to review specific systems and provide additional recommendations on the operation and performance of commissioned systems.

§ 4.5 The Owner shall provide the services of a commissioning agent who shall be responsible for commissioning of the Project, or the Owner may engage the Architect to provide commissioning services as an Additional Service.

AIA Document C2O3[™]–2017, Standard Form of Consultant's Services: Commissioning, provides a scope of services for commissioning in a standard form that the Owner and Consultant can modify to suit the needs of the Project. C2O3–2017 is not a stand-alone document and is intended to be used with AIA Document ClO3[™]–2015, Standard Form of Agreement Between Owner and Consultant without a Predefined Scope of Consultant's Services. C2O3 replaces B2ll-20O7, Standard Form of Architect's Services: Commissioning and includes several notable changes.

In developing C203, the AIA Documents Committee recognized that professionals from a variety of backgrounds perform commissioning services. Thus, C203 is no longer written as an architect's scope of services in the B-Series of documents. Instead, C203 is silent as to the professional background of the person or entity performing the commissioning services and is categorized as a consultant document in the C-Series of documents. An owner may still use C203 to hire an architect to perform commissioning services but may also use C203 to hire professionals from other backgrounds to perform these services.

C2O3 was also updated to reflect changes in the industry that have taken place since the prior version. For example, C2O3 now includes: (1) provisions describing the consultant's role to assist in preparing the Owner's Project Requirements; (2) a more detailed description of the consultant's Commissioning Plan; (3) updated provisions pertaining to commissioning-related design reviews; and (4) updated provisions related to the consultant's role in commissioning during the construction phase of the Project. C2O3 also includes an expanded Initial Information section and updated provisions for Supplemental Services.

C203 requires the Consultant, based on the Owner's Project Requirements and the Basis of Design, to develop a Commissioning Plan and Commissioning Specifications. Additionally, C203 also requires the Consultant to review the Contractor's submittals related to the systems and assemblies to be commissioned; coordinate, observe, and document Functional Performance Tests; train operators; and prepare a final Commissioning Report.

Different certification systems designate different requirements for the party allowed to perform commissioning. LEED, for example, permits an Architect to perform the prerequisite "Fundamental Commissioning" for a Project the Architect designed, but requires an independent agent, that may be contracted by the Architect, to perform "Enhanced Commissioning." Local law or Owner preference may also dictate who performs commissioning of the Project.

Where an Architect is permitted to perform commissioning, such as under the IgCC, the Architect's performance of commissioning can be beneficial for various reasons. Commissioning allows the Architect to play a key role in verifying that the systems perform in the manner intended. It should be noted that commissioning can extend an Architect's services well beyond Final Completion. The IgCC, for example, utilizes a minimum twelve-month commissioning period to evaluate system performance and make adjustments.

Bl01–2017 does not assume that the Architect will provide commissioning as a Basic Service. Rather, Bl01 lists commissioning as a Supplemental Service, which is to be assigned as the Architect or Owner's responsibility. This allows the parties to independently determine if the Architect is the most appropriate party to perform commissioning. If the Owner does hire the Architect to commission the Project, C203–2017 can be used as the Architect's scope of services.

Article 5 - Claims and Disputes

Potential damages are an important issue on all projects, including those with sustainability requirements. This topic is addressed fully in the Owner-Architect and Owner-Contractor Agreements. However, because new types of consequential damages may be claimed on sustainable projects, E2O4 specifically waives any consequential damages resulting from the failure of the Project to achieve the Sustainable Objective.

ARTICLE 5 CLAIMS AND DISPUTES

The Owner, Contractor and Architect waive claims against each other for consequential damages resulting from failure of the Project to achieve the Sustainable Objective or one or more of the Sustainable Measures.

Limitation of Liability. Due to the nature of the risks to the Architect on a sustainable project, the Architect might consider including a limitation of liability provision to establish a maximum amount of liability for the Architect if there is a claim by the Owner. Note that the Limitation of Liability clause applies only to claims between the Owner and Architect, and that claims from third parties will not normally be affected.

For model language that provides several methods of formulating a limitation of liability provision that may be used in BlOl−2017, see AIA Document B503™−2017, Guide for Amendments to AIA Owner-Architect Agreements.

Indemnity. BlOl–2017 does not contain a provision requiring that the Architect indemnify the Owner. However, B5O3–2017 contains a discussion of indemnity provisions under Section C-7. Generally, the Architect's duty to indemnify should be carefully drafted so that the Architect is only liable for those third-party claims that are caused by the Architect's negligent acts or omissions with recovery limited to the available proceeds of insurance coverage. Indemnity language that would require the Architect to indemnify the Owner for liability not caused by the Architect's negligence or that is otherwise outside the policy limits of insurance coverage on the Project poses additional uninsurable risk for an architect. Moreover, many states have laws limiting or prohibiting the enforceability of indemnity clauses. The parties are cautioned to consult with legal counsel as to the specific application of local laws.

Article 6 Miscellaneous Provisions

Guarantee of Performance. As stated previously, successful achievement of the Sustainable Objective will depend not only on the design of the Project but also the Owner's use and operation of the Project; the Work provided by the Contractor or the work or services provided by the Owner's other contractors or consultants; or interpretation of credit requirements by a Certifying Authority. Accordingly, neither the Architect nor the Contractor is not in a position to guarantee or warrant that the Project will achieve the Sustainable Objective. Section 6.1 below has been included to address this risk.

ARTICLE 6 MISCELLANEOUS PROVISIONS

§ 6.1 The Owner, Contractor and Architect acknowledge that achieving the Sustainable Objective is dependent on many factors beyond the Contractor's and Architect's control, such as the Owner's use and operation of the Project; the work or services provided by the Owner's other contractors or consultants; or interpretation of credit requirements by a Certifying Authority. Accordingly, neither the Architect nor the Contractor warrant or guarantee that the Project will achieve the Sustainable Objective.

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Chapter 3. C204-2020, Consultant's Services: Sustainable Project Services

When to Use AIA Document C204

An Owner choosing to implement sustainable features on a Project may pursue one of two contract paths: hire the Architect of Record to provide sustainability services (who, in turn, may contract with a third party to provide these services) or hire a Consultant. Note that the Consultant may be an architect or non-architect who specializes in sustainability.

For the former scenario, an Owner executes an Agreement with an Architect, such as the BlOl™-20l7 Standard Owner-Architect Agreement, which allows the parties to identify and describe a Sustainable Objective for the Project. Then, the parties complete AIA Document E204™-20l7 Sustainable Projects Exhibit, and incorporate it into their Owner-Architect Agreement and agreements with consultants and contractors who perform services or Work related to the Sustainable Objective. As detailed in Chapter 2, E204 establishes the roles and responsibilities of the Architect, Contractor, and Owner in pursuit of the Sustainable Objective.

For the latter scenario, an Owner executes an Agreement with a Consultant, namely, the ClO3™-2015 Owner-Consultant Agreement without a Predefined Scope of Services, which contains only the agreement terms. To specify a Consultant's sustainability services, the parties complete and execute C2O4™-2020 Consultant's Services: Sustainable Project Services and attach it as an Exhibit to ClO3.

C204 follows the same procedures as E204 to achieve the Sustainable Objective: hold a Sustainability Workshop to develop a Sustainability Plan that outlines Sustainable Measures assigned to each participant. Where the Architect of Record in E204 would lead the Sustainability effort, the Consultant in C204 leads this effort, including preparing the Sustainability Plan, gathering and coordinating information with all parties, submitting and obtaining approvals from the Certifying Authority, and handling fees. As required by C103, the Sustainability Consultant must coordinate its services with the Architect of Record and the Owner's other consultants. The Architect of Record then incorporates the sustainability features, developed through the Sustainability Consultant, into the Project design, pursuant to B101 and E204.

Coordination between services in C204 and E204 is crucial. C204 assumes that there will be an executed E204 and that edits to E204 will be necessary to account for services that the Sustainability Consultant will provide.

ARTICLE 2 SUSTAINABLE PROJECT SERVICES

§ 2.1 Scope of Consultant's Sustainability Services

 \S 2.1.1 The Owner shall coordinate the services of its Architect with those of this Consultant and make necessary modification to E204.

The C204 Consultant Services scope differs from the E204 Sustainable Projects Exhibit in that it includes services during the Procurement Phase, consistent with the Owner-Architect Agreements. The C204 includes these services because the C103 Owner-Consultant Agreement does not predefine them. By comparison, Procurement Phase Services are not found in the E204 because they are specified in the Owner-Architect Agreements.

If an Owner hires the Sustainability Consultant to provide commissioning services, the parties will execute C2O3™-2017 Commissioning Scope of Services. It is important to edit C2O3 and C2O4 to eliminate any overlap in the C2O4 Supplemental Services table.

Other notable features about C204 include:

• It references E204 for defined terms.

ARTICLE 1 INITIAL INFORMATION

§ 1.1.1 Sustainability terms shall have the same meaning as those in AIA Document E204TM—2017, Sustainable Projects Exhibit executed by the Owner and Architect and coordinated with Section 2.1.

• A fill point is available to capture the Owner's Sustainable Objective.

§ 1.1.2 The Owner's Sustainable Objective for the Project: (Describe the Owner's Sustainable Objective.)

- "Notice" and "notification" are defined as being in writing. This is because the A201-2007 General Conditions, which Cl03-2015 incorporates, does not define notice and notification as being in writing.
- A list of Supplemental Services, such as performing a Daylight Analysis and Energy Modeling, was developed.
- It does not contain Articles about the Contractor, Claims and Disputes, Miscellaneous Provisions, and Special Terms and Conditions because Cl03 and E204 address these topics.

Chapter 4. B101-2017, Agreement Between Owner and Architect

This Chapter 4 references Bl01-2017, but other Owner-Architect Agreements with sustainability requirements may be edited to include the following sustainability information.

Initial Information

At the beginning of a Project, an Owner may only have a vague notion of its Sustainable Objective. Even so, it is beneficial to establish a meaningful description of the anticipated Sustainable Objective at that time to facilitate the design process. Ultimately, major deviations from the intent of the anticipated Sustainable Objective could result in Additional Services for the Architect.

ARTICLE 1 INITIAL INFORMATION

§ 1.1.6 The Owner's anticipated Sustainable Objective for the Project: (Identify and describe the Owner's Sustainable Objective for the Project, if any.)

Standard of Care

The Owner-Architect Agreements sets forth the standard of care generally applicable to the Architect's services. That language was added so that the parties to the Owner-Architect Agreement would not, without discussion or negotiation, insert a standard of care provision that differs from the common law standard of care. As more jurisdictions institute green building standards by code, the Architect's standard of care may include requirements established by newly adopted code or practice. In other words, "standard of care" is an evolving concept. As design professionals incorporate sustainable design practices (either voluntarily or through jurisdictional requirements), the Architect's standard of care may eventually be construed to include those sustainable design practices as the accepted baseline standard of performance for the Architect. Even in jurisdictions where the IgCC is not officially adopted, professional practices initially adopted to comply with the IgCC may become part of the general practice of architecture or engineering on a local, regional, or national level and thereby influence the standard of care.

In addition to industry changes or code requirements that may alter the Architect's baseline standard of care, the Architect may inadvertently assume greater obligations or liabilities. This can occur by including contractual assurance provisions, such as warranties or guarantees that a specific Sustainable Objective will be achieved. Because "guarantees" and "warranties" are often excluded from coverage under professional liability insurance policies, a non-negligent failure to achieve a contractually guaranteed Sustainable Objective may not be covered by the Architect's professional liability insurance, and accordingly, should be avoided.

Scope of Architect's Basic, Supplemental, and Additional Services

Because the SP documents were developed for use on projects intended, from the outset, to include significant sustainable design and construction elements, Sustainability Services were not treated as Additional Services. Accordingly, under BlOl–2007 SP, the Architect's Sustainability Services were included as Basic Services.

As AIA no long publishes SP versions of its documents, Bl01-2017 does not include Sustainability Services as a Basic Service. Bl01-2017 divides the Architect's services into three categories: Basic, Supplemental, and Additional Services. Basic Services consist of Schematic Design, Design Development, Construction Documents, Procurement, and Construction. Supplemental Services are those not included under Basic Services and identified as the Architect's responsibility at the time the agreement is executed. Additional Services are those not included as Basic Services or Supplemental Services

and for which a need may arise as the Project proceeds. BlOl, Section 4.1.1.24 classifies Sustainable Project Services as a Supplemental Service, and Section 11.2 allows the Owner and Architect to define the amount of, or basis for, this separate compensation.

Even where a jurisdiction may require a specific Sustainability Certification or compliance with a sustainability-related code, it is still important to define:

- how the Sustainability Plan will be developed.
- who will perform the Sustainable Measures,
- who will register the Project with the Certifying Authority, and
- who will submit documents to the Certifying Authority.

For these reasons, the Sustainable Projects Exhibits are appropriate and beneficial even where the sustainable elements of the Project are defined by code. (See, for example, the discussion in Chapter 2.)

Materials or Equipment Substitutions. Sustainable projects require careful selection of building materials and equipment. Often, the Architect will select specific materials or equipment necessary to achieve the Sustainability Certification or otherwise necessary for the Sustainable Objective.

Substitutions that fail to conform to the specific requirements of the Architect-specified materials and equipment could prevent a Project from achieving the Sustainable Objective. It is, therefore, critical that each substitution be carefully considered in light of the impact it may have on achieving the Sustainable Objective. For further discussion of the substitution issue, including additional Contractor obligations, see Chapter 6 of this Guide.

Completion of the Architect's Services. The Architect's Basic Services during the Construction Phase end 60 days after (1) the date of Substantial Completion of the Work or (2) the initial date of Substantial Completion identified in the agreement between the Owner and Contractor, whichever is earlier, unless the Owner has authorized the Architect to continue performing Construction Phase services as Additional Services. Additionally, Bl01–2017, Section 4.2.5 establishes a time limit for performance of the Architect's services. If the Project is not completed within the time specified, continued performance by the Architect will be compensated as Additional Services.

ARTICLE 4 SUPPLEMENTAL AND ADDITIONAL SERVICES

§ 4.2 Architect's Additional Services

§ 4.2.4 Except for services required under Section 3.6.6.5 and those services that do not exceed the limits set forth in Section 4.2.3, Construction Phase Services provided more than 60 days after (1) the date of Substantial Completion of the Work or (2) the initial date of Substantial Completion identified in the agreement between the Owner and Contractor, whichever is earlier, shall be compensated as Additional Services to the extent the Architect incurs additional cost in providing those Construction Phase Services.

§ 4.2.5 If the services covered by this Agreement have not been completed within () months of the date of this Agreement, through no fault of the Architect, extension of the Architect's services beyond that time shall be compensated as Additional Services.

Compensation

Additional Services. The standard BlOl–2017 separates the Architect's compensation for services into three categories: compensation for Basic Services, Supplemental Services (which include Sustainable Services), and Additional Services. This allows for flexibility in developing the Architect's compensation structure for the Project. For example, Basic Services could be compensated based on a percentage of the Cost of the Work while Additional Services might be billed on an hourly basis. B503–2017 Guide for Amendments to AIA Owner-Architect Agreements may be referenced for a

more detailed discussion on compensation.

In jurisdictions where building codes have incorporated sustainable design and construction requirements, Owners may expect sustainable design services as part of the Architect's Basic Services without additional compensation. However, sustainable projects can, and often do, require more time, consideration, and effort on the part of the Architect. The Architect will need to consider whether the Architect's typical compensation structure for Basic Services requires adjustment for its additional responsibilities, risks, and time. This may be problematic for Architects who bill Basic Services as a percentage of the Cost of the Work and may be particularly troublesome on public projects where compensation for the Architect's Basic Services may be set by laws, ordinances, and regulations. The Architect will need to discuss with the Owner the additional time and effort involved in delivering a sustainable project and the necessity for additional compensation.

Compensation for Architect's Consultants. The Architect's Sustainability Services may include elements outside the services typically performed in the Architect's day-to-day practice and may require the involvement of consultants. These services could include those outlined in this Guide, such as commissioning, or may include, for example, energy modeling or lighting. The services of consultants may be costly and fall outside of what Architects traditionally include in their compensation for Basic Services. The Architect may consider a form of direct reimbursement for the costs of these consultants.

Reimbursable Expenses. Sustainable projects may involve reimbursable expenses that are not common on traditional projects. BlOl-2017 specifies reimbursable expenses unique to sustainable projects. The specific requirements of your Project may necessitate expansion of this list.

ARTICLE 11 COMPENSATION

§ 11.8 Compensation for Reimbursable Expenses

- § 11.8.1 Reimbursable Expenses are in addition to compensation for Basic, Supplemental, and Additional Services and include expenses incurred by the Architect and the Architect's consultants directly related to the Project, as follows:
 - .1 Transportation and authorized out-of-town travel and subsistence; . . .
 - .7 Renderings, physical models, mock-ups, professional photography, and presentation materials requested by the Owner or required for the Project; ...
 - **.11** Registration fees and any other fees charged by the Certifying Authority or by other entities as necessary to achieve the Sustainable Objective; and,
 - .12 Other similar Project-related expenditures.

Payments to the Architect. Because of the potentially significant costs involved in registering a Project with a Certifying Authority, Section 11.10.1.2 has been added to allow for an initial payment from the Owner to the Architect for registration fees and other fees payable to the Certifying Authority and necessary to achieve the Sustainability Certification. The initial payment should be based on an estimate of the potential cost of registration and will be credited to the Owner's account at the time the expense is incurred.

§ 11.10 Payments to the Architect

§ 11.10.1 Initial Payments

§ 11.10.1.2 If a Sustainability Certification is part of the Sustainable Objective, an initial payment to the Architect of _______(\$___) shall be made upon execution of this Agreement for registration fees and other fees payable to the Certifying Authority and necessary to achieve the Sustainability Certification. The Architect's payments to the Certifying Authority shall be credited to the Owner's account at the time the expense is incurred.

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Chapter 5. C401–2017, Agreement Between Architect and Consultant and C402–2018, Agreement Between Architect and Consultant for Special Services

For some projects, it may be necessary for the Architect to hire consultants with expertise in sustainable design. Like all projects, sustainable projects require the careful development and coordination of the scope of services to be provided by each consultant.

Architects have two options for agreements when contracting with consultants: AIA Document C401™-2017 Standard Form of Agreement Between Architect and Consultant and AIA Document C402™-2018 Standard Form of Agreement Between Architect and Consultant for Special Services. C401 establishes the Architect's and Consultant's responsibilities to each other and their mutual rights under the Agreement. It incorporates by reference a pre-existing Owner-Architect Agreement, known as the Prime Agreement, and is coordinated for use with BI01-2017. C401 utilizes a flow down provision at Section 1.3 to incorporate the rights and responsibilities that the Owner and Architect have with respect to each other in the Prime Agreement and extend those rights and responsibilities, respectively, to the Architect and Consultant.

C401 - § 1.3 To the extent that the provisions of the Prime Agreement apply to This Portion of the Project, the Architect shall assume toward the Consultant all obligations and responsibilities that the Owner assumes toward the Architect, and the Consultant shall assume toward the Architect all obligations and responsibilities that the Architect assumes toward the Owner. Insofar as applicable to this Agreement, the Architect shall have the benefit of all rights, remedies and redress against the Consultant that the Owner, under the Prime Agreement, has against the Architect, and the Consultant shall have the benefit of all rights, remedies and redress against the Architect that the Architect, under the Prime Agreement, has against the Owner. Where a provision of the Prime Agreement is inconsistent with a provision of this Agreement, this Agreement shall govern.

If the Architect and Consultant will incorporate all terms of the Prime Agreement and involve the Consultant in the construction phase, C401 should be used. C401 is also appropriate for Consultants who provide the usual and customary mechanical, electrical, and structural engineering services. Additionally, C401 is available for Consultants who engage Subconsultants.

Section 1.2 of C401 requires the Architect and Consultant to describe the Portion of the Project for which the Consultant is required to provide services.

C401 - § 1.2 The portion of the Project for which the Consultant shall provide services is hereinafter called This Portion of the Project. Except as set forth herein, the Consultant shall not have any duties or responsibilities for any other portion of the Project. This Portion of the Project consists of the following:

(Fully describe the Portion of the Project for which the Consultant shall provide the services set forth in Article 3 of this Agreement.)

Once the Consultant's Portion of the Project has been defined, the flow down provision requires the Consultant to assume toward the Architect all obligations and responsibilities that the Architect assumes toward the Owner in the Prime Agreement as applicable to the Consultant's Portion of the Project.

Additionally, E204, Section 1.4 requires the Architect to incorporate the Sustainability Exhibit into its agreements with consultants performing services in any way associated with the Sustainable Objective.

E204 - § 1.4 The Parties agree to incorporate this Exhibit into the agreements with the project participants performing services or Work in any way associated with the Sustainable Objective.

Both C401, Section 1.2 and E204, Section 1.4 ensure that any Sustainable Measures required of the Architect in the Sustainability Plan that are contained in the Consultant's Portion of the Project become the responsibility of the Consultant.

With the flow down of responsibilities, the Architect should clearly define the Consultant's scope of services for the Consultant's Portion of the Project. Additionally, the Architect should specify any limitations or other conditions on the Consultant's services.

It may not always be necessary, however, to flow down the entire Prime Agreement to certain Consultants depending on the nature of the services provided. For limited flow down, the Architect should consider C402, which is intended for Consultant's services that are limited in scope or do not extend to the construction phase of the Project. Examples of these services include, but are not limited to, modeling, planning, feasibility studies, post-occupancy studies, specification writing, kitchen design, hardware schedules, elevators, lighting, fire protection, security systems, and carpet carvers. C402 "flows down" only the copyrights and licenses and payment provisions of the Prime Agreement.

C402 - § 6.4 Documents prepared by the Consultant are its Instruments of Service. The Consultant shall be deemed the author of these documents and shall retain all common law, statutory and other reserved rights, including copyrights. Upon execution of this Agreement, the Consultant grants to the Architect a nonexclusive license to use the Consultant's Instruments of Service in the same manner and to the same extent as the Architect has granted a license to the Owner in the Prime Agreement. If the Consultant rightfully terminates this Agreement for cause as provided in Section 8.2, the license granted in this Section 6.4 shall terminate.

If the Architect intends to flow down any sustainability requirements from the E2O4 to a Consultant providing Special Services, the Architect must specifically add those provisions to C4O2 or otherwise incorporate the relevant portions of E2O4.

Chapter 6. A101–2017, Agreement Between Owner and Contractor, A201–2017, General Conditions of the Contract for Construction, and E204–2017, Sustainable Projects Exhibit

The following sections are coordinated with the article and section numbers found in AIA Documents AlOl®-2017, A2Ol®-2017, and E2O4™-2017 as indicated, for easy reference. However, the information included below, with careful review and coordination, may apply to other AIA agreements. Users are encouraged to consult an attorney before modifying a document.

General Provisions

The Contract Documents. Because the Sustainability Plan prepared by the Architect and approved by the Owner is the critical document in outlining the Owner's, Architect's, and Contractor's responsibilities for Sustainable Measures necessary to achieve the Sustainable Objective, it is important to include reference to the Sustainability Plan as a Contract Document.

The term Sustainability Plan is defined in AIA Document E204-2017, Section 1.2.3 as a Contract Document, which is detailed in Chapter 2, Definitions of this Guide.

Reference to the Sustainability Plan has also been added to the enumeration of Contract Documents included in AlOl–2017, Article 9.

A101 - ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS § 9.1.8 Other Exhibits: (Check all boxes that apply and include appropriate information identifying the exhibit where required.) [] AIA Document E204™_2017, Sustainable Projects Exhibit, dated as indicated below: (Insert the date of the E204-2017 incorporated into this Agreement.) [] The Sustainability Plan: Title Date Pages

Owner's Responsibilities

Achieving the Sustainable Objective depends on more than the Contractor's performance. The Owner, Architect, and Contractor must each perform those services identified as their responsibility in the Sustainability Plan. An affirmative obligation for the Owner to perform those Sustainable Measures identified as the responsibility of the Owner has been included as part of the Sustainable Projects Exhibit.

E204 - ARTICLE 4 OWNER

§ 4.1 Based on the Owner's approval of the Sustainability Plan and any approved changes to the Sustainability Plan, the Owner shall perform those Sustainable Measures identified as the responsibility of the Owner in the Sustainability Plan, or as otherwise required by the Contract Documents. The Owner shall require that each of its contractors and consultants performs the contractor's or consultant's services in accordance with the Sustainability Plan.

Because various Sustainability Certification programs may place requirements specifically on the Owner, in addition to those related to the design and construction of the Project, such as the requirement to provide post-occupancy utility bills, language states that the Owner will comply with the requirements of the Certifying Authority before and after construction.

§ 4.3 The Owner shall comply with the requirements of the Certifying Authority as they relate to the ownership, operation and maintenance of the Project both during construction and after completion of the Project.

Contractor's Responsibilities

E204 requires the Contractor – like the Owner – to perform those Sustainable Measures identified as its responsibility in the Sustainability Plan.

E204 - ARTICLE 3 CONTRACTOR

§ 3.1 The Contractor shall perform those Sustainable Measures identified as the responsibility of the Contractor in the Sustainability Plan.

Section 3.2 provides a process for correcting conditions that might affect achievement of the Sustainable Objective. If the Owner or Architect recognizes such a condition, the Contractor is required to participate in meetings with the Owner and Architect to discuss alternatives to correct the condition. The Contractor is also responsible for reporting such conditions that are discovered or made known to the Contractor.

§ 3.2 The Contractor shall meet with the Owner and Architect to discuss alternatives in the event the Owner or Architect recognizes a condition that will affect achievement of a Sustainable Measure or achievement of the Sustainable Objective. If any condition is discovered by, or made known to, the Contractor that will adversely affect the Contractor's achievement of a Sustainable Measure for which the Contractor is responsible pursuant to the Sustainability Plan, the Contractor will promptly provide notice to the Architect and meet with the Owner and Architect to discuss alternatives to remedy the condition.

Substitutions. The process for handling substitutions on a sustainable project is complicated by the fact that the suitability, characteristics, performance and reliability of materials and equipment can have far-reaching impacts, not only on the Project schedule and the long-term function of the Project, but also on whether targeted Sustainable Measures will be achieved. The process for evaluating substitutions must be communicated to all parties to the Project. The following section establishes the criteria for submission of substitution requests that may have an effect on the Sustainable Objective. Such language may also be included in the General Requirements (Division 1 of the Specifications), as well as the Supplementary Conditions. A more detailed process for the review of substitutions can be found in AIA Document A503™−2017.

E204 - ARTICLE 3 CONTRACTOR

§ 3.4.2.1 The Contractor shall include, with any request for substitution, a written representation identifying any potential effect the substitution may have on the Project's achievement of a Sustainable Measure or the Sustainable Objective. The Owner and Architect shall be entitled to rely on any such representation. In preparing this representation, the Contractor may request additional information from the Architect describing how the product, material or equipment, for which a substitution is proposed, was intended to satisfy the requirements of a Sustainable Measure or contribute toward achievement of the Sustainable Objective.

Warranty. Achieving the Sustainable Objective depends upon a number of decisions and actions during design and construction of the Project. The Owner's actions post-construction and during occupancy of the building also affect achievement and maintenance of the Sustainable Objective. Contractors should avoid incorporating contractual language or taking actions that could be construed as establishing a warranty as it pertains to achievement of the Sustainable Objective. Language stating that attaining the Sustainable Objective depends on many factors beyond the Contractor's control and that the Contractor cannot warrant or guarantee that the Project will achieve the Sustainable Objective is included in Section 6.1.

E204 - ARTICLE 6 MISCELLANEOUS PROVISIONS

§ 6.1 The Owner, Contractor and Architect acknowledge that achieving the Sustainable Objective is dependent on many factors beyond the Contractor's and Architect's control, such as the Owner's use and operation of the Project; the work or services provided by the Owner's other contractors or consultants; or interpretation of credit requirements by a Certifying Authority. Accordingly, neither the Architect nor the Contractor warrant or guarantee that the Project will achieve the Sustainable Objective.

Compliance with Laws. Many state and local jurisdictions have adopted policies and laws establishing requirements for sustainable design and construction. Some jurisdictions require all projects to achieve a specified Sustainability Certification while others have enacted comprehensive laws that outline specific performance requirements. The Contractor should understand what is required in the jurisdiction where the Project is located.

AIA Document A201–2017, Section 3.7, requires the Contractor to (1) comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work and (2) assume appropriate responsibility for such Work and bear the costs attributable to correction of Work the Contractor performs knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities. The Contractor should become familiar with applicable jurisdictional requirements related to sustainable design and construction.

A201 - ARTICLE 3 CONTRACTOR

§ 3.7 Permits, Fees, Notices and Compliance with Laws

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

Sustainability Documentation. Where an Owner requires achievement of a Sustainability Certification or where a Sustainability Certification is required by law, the Contractor may be responsible for preparing certain Sustainability Documentation related to the Contractor's Work as set forth in the Sustainability Plan.

E204 - ARTICLE 3 CONTRACTOR

§ 3.4 The Contractor shall be responsible for preparing and completing the Sustainability Documentation required from the Contractor by the Contract Documents, including any Sustainability Documentation required to be submitted after Substantial Completion. The Contractor shall submit the Sustainability Documentation to the Architect in accordance with any schedules or deadlines set forth in, or as otherwise required by, the Contract Documents. In the absence of schedules or deadlines for submission of Sustainability Documentation in the Contract Documents, the Contractor will submit the Sustainability Documentation with reasonable promptness, but in no event more than 60 days after Substantial Completion, so that the Architect may submit the Sustainability Documentation to the Certifying Authority.

Submittals. The Contractor's submittals, such as shop drawings, product data, and samples, play an increasingly important role on sustainable projects. Submittals related to sustainable products, materials, and methods often require additional time for preparation. The Contractor may consider including

additional time in its submittal schedule to allow for preparation of submittals relating to sustainable products, materials, and methods. Multiple submittals related to a particular Sustainable Measure must be considered together as they often have a collective effect on achieving a Sustainable Measure. As with all submittals, the Contractor has an obligation, under Section 3.12.6 of AIA Document A201–2017, to review, coordinate, and approve all submittals prior to submission to the Architect. In addition, the Contractor may not perform Work for which a submittal was required until the submittal is approved by the Architect pursuant to Section 3.12.7 of A201–2017. On Projects where performance specifications are provided for sustainable products, there may be additional criteria that must be verified by the Contractor.

The Owner's Sustainable Objective or other Project requirements may necessitate that the Contractor's design professionals recommend the use of untested materials or equipment on the Project. The Contractor's design professionals may be unable to confirm a track record of reliability for the materials or equipment. If the materials or equipment fail to perform in accordance with the manufacturer's representations, the Project may fail to achieve the Sustainable Objective. The Contractor will discuss untested products proposed by its design professionals with the Owner and Architect and inform the Owner and Architect of any potential impact on the Sustainable Objective that may occur if the product fails to meet the manufacturer's representations. If the Owner then chooses to use the product, Section 3.5 may limit the liability of the Contractor, the Contractor's design professional, and the Architect for a failure of the product to perform in accordance with the manufacturer's representations.

E204 - ARTICLE 3 CONTRACTOR

§ 3.5 If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents and the Contractor's design professional proposes the use of materials or equipment that have had limited testing or verification of performance, the Contractor shall discuss with the Architect and Owner the proposed use of such materials or equipment and potential effects on the Sustainable Objective that may occur if the materials or equipment fail to perform in accordance with the manufacturer's or supplier's representations. The Owner will render a written decision regarding the use of such materials or equipment in a timely manner. In the event the Owner elects to proceed with the use of such materials or equipment, the Contractor and Architect shall be permitted to rely on the manufacturer's or supplier's representations and shall not be responsible for any damages arising from the failure of the material or equipment to perform in accordance with the manufacturer's or supplier's representations.

Cleaning Up. Construction waste management and disposal plays an important part on sustainable projects. Building demolition, selective demolition, renovation, and new construction all contribute to generating waste which is often diverted to landfills. Many materials generated from the construction process can be salvaged for re-use in the Project or for recycling. For example, site demolition could offer opportunities for recycling of asphalt paving for use in new paving, and for recycling masonry and concrete for use in clean site fill. Waste generated by construction workers (e.g. paper and beverage containers) and by the construction process can be recycled.

A201 - ARTICLE 3 CONTRACTOR

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the

Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

Under E204, the Contractor is required to prepare and submit a construction waste management and disposal plan in accordance with the Contract Documents. The goal of a construction waste management and disposal plan is to reduce the amount of materials entering a landfill. There are several components to the plan. First, a quantitative goal must be set by the Owner for recycling or salvaging a certain percentage by weight of nonhazardous demolition and construction waste on the Project. This percentage can also be set by public authorities having jurisdiction over the Project or by a Certifying Authority. Other portions of the plan include identification of waste for recycling, a waste reduction work plan, a cost analysis and an implementation plan (including training, monitoring and reporting).

The process can be complex and time-consuming. It can also be costly, as reports must be generated, personnel must be trained, and often, a waste management coordinator is employed. The construction waste management and disposal program may also need to be detailed under a separate Division OI specification section for the Project outlining all applicable requirements and procedures.

E204 - ARTICLE 3 CONTRACTOR

§ 3.7 Construction Waste Management

The Contractor, in accordance with the Contract Documents, shall prepare and submit to the Architect and Owner a construction waste management and disposal plan setting forth the procedures and processes for salvaging, recycling or disposing of construction waste generated from the Project. The Contractor shall recycle, reuse, remove or dispose of materials as required by the Contract Documents.

Site Visits. Section 4.2.3 of A201 requires that the Architect report to the Owner known deviations from the Contract Documents and defects or deficiencies in the Work that the Architect observes during site visits.

A201 - ARTICLE 4 ARCHITECT

§ 4.2.3 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of and will not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

Section 2.6.1 of E2O4 also requires the Architect to report known deviations from the Contract Documents to the Owner, with an emphasis on achievement of the Sustainable Measures.

E204 - ARTICLE 2 ARCHITECT

§ 2.6 Construction Phase

§ 2.6.1 The Architect shall advise and consult with the Owner regarding the progress of the Project toward achievement of the Sustainable Measures. Based on site visits performed in

accordance with the Owner-Architect Agreement and other information received from the Contractor, the Architect shall promptly notify the Owner of known deviations from the Contract Documents and defects or deficiencies in the Work that will affect the achievement of Sustainable Measures. The Architect shall meet with the Owner and Contractor to discuss remedies or, where appropriate, alternatives to achieve the Sustainable Measures.

Subcontractors. The Sustainable Projects Exhibit is required to be incorporated in the Contractor's agreement with its Subcontractors who are involved with the Sustainable Objective.

E204 - ARTICLE 1 GENERAL PROVISIONS

§ 1.4 The Parties agree to incorporate this Exhibit into the agreements with the project participants performing services or Work in any way associated with the Sustainable Objective.

Delays and Substantial Completion

Delays. Projects that seek to incorporate Sustainable Measures or achieve a Sustainability Certification pose challenges for a Contractor who desires to achieve Substantial Completion of the Project within the Contract Time. The use of new and potentially untested products, or products that must be obtained from a particular manufacturer or in a particular location, may cause delay.

Because specific materials or equipment may be necessary to achieve a Sustainable Measure or, ultimately, to achieve the Sustainable Objective, the Contractor should verify that the specified materials or equipment can be fabricated and delivered to the Project in accordance with the construction schedule. Any delays in delivery or unavailability of specified materials or equipment known to the Contractor should be communicated to the Architect as soon as possible so that alternative materials, equipment, or sources may be considered.

Substantial Completion. Under AIA Contract Documents, Substantial Completion occurs when the Project can be occupied and used for its intended purpose. Because the Contractor cannot control the review and approval process of a Certifying Authority or may not be responsible for collecting all data necessary to quantify achievement of a Sustainable Objective, the Contractor is cautioned against entering into a contract that would require achievement of the Sustainable Objective as a condition precedent to Substantial Completion. However, the Contractor often has some responsibility for documentation required to be submitted to the Certifying Authority. Because of this, Section 3.8 of E2O4 requires that the Contractor submit all Sustainability Documentation that the Contractor is required to provide as a condition precedent to achieving Substantial Completion. However, where the Sustainability Documentation cannot, by its nature, be provided prior to Substantial Completion, the Contractor may provide the documentation when it is available.

E204 - ARTICLE 3, CONTRACTOR

§ 3.8 Verification that the Project has achieved the Sustainable Objective, or the actual achievement of the Sustainable Objective, shall not be a condition precedent to issuance of a Certificate of Substantial Completion. Except for that portion of the Sustainability Documentation that by its nature must be provided after Substantial Completion, the Contractor shall submit all other Sustainability Documentation required from the Contractor by the Contract Documents no later than the date of Substantial Completion.

At Substantial Completion, the Contractor may still be responsible under the Contract Documents for certain Sustainable Measures necessary to achieve

the Sustainable Objective. A performance bond, such as AIA Document A312™–2010, may help protect the Owner's interests in seeing that the Contractor's obligations are met. Assuming the Owner is not in default of its obligations under the contract as defined by the bond form, in the event of a Contractor default, the performance bond surety assumes responsibility for either obtaining performance of the Contractor's Work under the Contract or paying the Owner a sum of money up to the limit of the penal sum of the bond to allow the Owner to procure performance by others.

If the Owner requires a performance bond, the bond amount should be inserted in AIA Document AlOl–2017 Exhibit A Insurance and Bonds in Section A.3.4. Additionally, the Owner might consider extending the Contractor's one-year correction period under A201, Section 12.2.2.2 to account for the estimated date when verification of the Sustainable Objective will occur. If the Owner desires to extend the corrections period, Section 12.2.2.2 of A201 can be modified by replacing the reference to one year with a reference to an agreed-upon correction period.

Final Completion

Final completion of the Project under A201 occurs when the Contractor's Work has been completed in accordance with the terms and conditions of the Contract Documents and the entire balance owed to the Contractor, and noted in the final Certificate for Payment, is due and payable. Final completion can be complicated when verification that the Project achieved the Sustainable Objective does not occur until after Substantial Completion. Energy Star certification, for example, is not issued until a full year of energy usage data has been compiled for the building. In many instances, the Contractor may have completed the punch list and performed all of its obligations under the Contract Documents. Here again, a performance bond will obligate a surety to perform the Contractor's Work under the Contract or pay a sum of money, up to the penal sum of the bond, so that the Work may be performed by others. An extended correction period can assure that the Contractor is available to correct defective Work.

A201 - ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.10.1... The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

The Sustainable Projects Exhibit clarifies that issuing the final Certificate for Payment does not depend on verification of, or actually achieving, the Sustainable Objective. Even when the Contractor receives final payment, the Contractor must still correct defective Work, particularly defective Work that might be an impediment to achieving the Sustainable Objective.

E204 - ARTICLE 3 CONTRACTOR

§ 3.9 Final Completion

§ 3.9.2 Verification that the Project has achieved the Sustainable Objective, or the actual achievement of the Sustainable Objective, shall not be a condition precedent to issuance of the final Certificate for Payment. Final payment does not relieve the Contractor's obligation to fulfill its responsibilities related to achieving the Sustainable Objective.

Insurance and Bonds

Insurance carriers may educate and inform their insureds about the risks of sustainable design and construction. Consult your carrier for recommendations regarding language that should be included in contracts to minimize potential claims and avoid assuming uninsured risk on sustainable projects.

In 2017, the AIA released an Insurance and Bonds Exhibit to accompany AlO1, AlO2, and AlO3, which provides insurance terms relating to the type and amount of coverage. Similar exhibits were included in the Owner-CMc agreements and Owner-Contractor agreement for CMa in 2019. The Insurance Exhibit addresses the Owner's property insurance, optional extended property insurance, and other optional insurance, such as cyber security insurance. In addition, Owners should review A201, Section 11.2, which discusses the Owner's failure to purchase required property insurance and notice of cancellation or expiration of the Owner's required property insurance.

Insurance products for Owners specifically tailored to sustainable projects have generally been limited to property insurance. Owners may want to consider property insurance policies available for sustainable projects. Some policies will allow the Owner to replace a damaged existing building with equivalent sustainable products instead of standard building materials. Others allow the Owner to rebuild an existing project to achieve a sustainability certification where the original building was not certified. Still, other insurance policies will allow for reconstruction of existing sustainable buildings using new or revised sustainability standards. Owners should discuss available insurance products with their carriers and select insurance that will best meet the Owner's needs.

When the Contractor has assumed professional liability for some portion of the project, AIA Documents generally require the Contractor to carry professional liability insurance. As with the Architect, the Contractor's professional liability insurance will likely exclude coverage for contractual guarantees or warranties. In addition, Contractors providing performance bonds or builder's risk coverage on sustainable projects should be mindful of any exclusions for sustainable construction included in the bonds or insurance policies.

Claims and Disputes

Consequential Damages. Owners often elect to include Sustainable Measures in their Projects for reasons other than increasing the environmental performance of the building. Many jurisdictions offer tax incentives for sustainably built buildings or offer expedited permitting. Owners may also incorporate Sustainable Measures to increase the marketability of the building, increase the public image of the company, decrease energy use, or increase

worker productivity. If a Project does not meet its Sustainable Objective, the Owner may claim to have sustained damages arising from the failure to realize these ancillary benefits. Such damages are often difficult to anticipate, quantify, or prove. For example, it is difficult to determine what damages may arise if the Owner alleges that its employees are not productive and motivated because the building failed to achieve a specific Sustainable Measure or did not achieve the Sustainable Objective.

Because it is unlikely that any one Project participant will be solely responsible for providing a sustainable building or achieving a Sustainability Certification, liability for consequential damages may be difficult to allocate. For this reason, users are cautioned against executing any AIA Contract Document that has been modified to eliminate the mutual waiver of consequential damages language.

The mutual waiver of consequential damages included in A201 and other AIA Documents includes all consequential damages regardless of the specific circumstances of the Project. E204 includes additional language addressing specific or unique concerns related to sustainable projects.

E204 - ARTICLE 5 CLAIMS AND DISPUTES

The Owner, Contractor and Architect waive claims against each other for consequential damages resulting from failure of the Project to achieve the Sustainable Objective or one or more of the Sustainable Measures.

Limitation of Liability. If the project fails to meet the Sustainable Objective, a limitation of liability provision can limit the Contractor's liability for damages. Such a provision might be considered if the Owner will not agree to the waiver of consequential damages or the Contractor's disclaimer of a warranty. A limitation of liability provision will place parameters around a loss and protect the Contractor from a potential loss that is difficult to quantify.

Such a provision would normally appear in the Owner-Contractor Agreement; for example, space is provided in AIA Document AlOl, Section 8.7 for insertion of other terms applicable to the Contract. However, Subcontractors and others should be aware of such a provision; therefore, it is not unusual for this requirement to be set out in the Supplementary Conditions.

A limitation of liability provision should not be included as Supplementary Conditions without review by the Owner's attorney and concurrence of the Owner. Repetition should be avoided. If the provision is written in the Supplementary Conditions, a cross-reference should appear in the Agreement between the Owner and Contractor. In multiple-prime contracting, the parties should include appropriate provisions addressing limitation of liability in the multiple prime contracts.

Chapter 7. A401–2017, Agreement Between Contractor and Subcontractor

For a sustainable project, the Contractor may need to hire subcontractors with expertise in specific areas of sustainable construction. Like all projects, sustainable projects require the careful development and coordination of the scope of Work to be provided by each subcontractor.

AIA Document A401®-2017, Standard Form of Agreement Between Contractor and Subcontractor, is a standard form of agreement to be used by the Contractor and the Subcontractor that establishes their responsibilities to each other and their mutual rights under the Agreement. A401 adopts by reference AIA Document A201®-2017, General Conditions of the Contract for Construction, and a pre-existing Owner-Contractor Agreement, known as the Prime Contract. A401 utilizes a flow down provision at Article 2 to incorporate the obligations and responsibilities that the Owner and Contractor have with respect to each other in the Prime Contract and extend those obligations and responsibilities, respectively, to the Contractor and Subcontractor.

Article 8 of A401 requires the Contractor and Subcontractor to describe the portion of the Work for which the Subcontractor is responsible. Once the Subcontractor's portion of the Work has been defined, the flow down provision requires the Subcontractor to assume toward the Contractor all obligations and responsibilities that the Contractor assumes toward the Owner in the Prime Contract as applicable to the Subcontractor's portion of the Work. Therefore, any Sustainable Measures required of the Contractor in the Sustainability Plan that are contained in the Contractor's portion of the Work would become the responsibility of the Subcontractor.

This obligation is also emphasized in E204, Section 1.4, which requires the Parties to incorporate the Sustainable Projects Exhibit into other agreements with project participants who perform services or Work pertaining to the Sustainable Objective. Furthermore, the Subcontractor must abide by obligations that are identified by, or flow down from, the Sustainability Plan, pursuant to Section 3.6 of E204.

E204 - ARTICLE 1 GENERAL PROVISIONS

§ 1.4 The Parties agree to incorporate this Exhibit into the agreements with the project participants performing services or Work in any way associated with the Sustainable Objective.

E204 - ARTICLE 3 CONTRACTOR

§ 3.6 The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Sustainability Plan and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Sustainability Plan.

Given this flow-down of responsibilities, the Contractor should clearly define the Subcontractor's portion of the Work. The Contractor should also specify any limitations or conditions on the Subcontractor's services.

An example of a provision that flows down to the Subcontractor is Construction Waste Management. Section 3.7 of E2O4 requires the Contractor to provide a construction waste management and disposal plan that specifies the procedures and processes for salvaging, recycling, or disposing of construction waste generated from the Project. It also requires recycling, reusing, removing, or disposing of materials as required by the Contract Documents.

E204 - ARTICLE 3 CONTRACTOR

§ 3.7 Construction Waste Management

The Contractor, in accordance with the Contract Documents, shall prepare and submit to the Architect and Owner a construction waste management and disposal plan setting forth the procedures and processes for salvaging, recycling or disposing of construction waste generated from the Project. The Contractor shall recycle, reuse, remove or dispose of materials as required by the Contract Documents.

As with the Architect and Contractor, the success of a sustainable Project depends on the work of all participants and cannot be guaranteed by any one party. The following section from E2O4 states that, through flow down, the Subcontractor will perform the Sustainable Measures required by the Subcontract Documents but does not provide a guarantee or warranty that the Project will achieve the Sustainable Objective. This language is not intended to absolve the Subcontractor of liability for failing to perform in accordance with the Subcontract Documents.

E204 - ARTICLE 6 MISCELLANEOUS PROVISIONS

§ 6.1 The Owner, Contractor and Architect acknowledge that achieving the Sustainable Objective is dependent on many factors beyond the Contractor's and Architect's control, such as the Owner's use and operation of the Project; the work or services provided by the Owner's other contractors or consultants; or interpretation of credit requirements by a Certifying Authority. Accordingly, neither the Architect nor the Contractor warrant or guarantee that the Project will achieve the Sustainable Objective.

A clear understanding of the Sustainable Measures included in the portion of the Work for which the Subcontractor is responsible will assist the Subcontractor in meeting the Sustainable Measures and avoiding disputes. Parties should specify the Sustainable Measures that apply to the Work of the Subcontract in the description of the Subcontractor's Work.

A401 - ARTICLE 8 THE WORK OF THIS SUBCONTRACT

The Subcontractor shall execute the following portion of the Work described in the Subcontract Documents, including all labor, materials, equipment, services and other items required to complete such portion of the Work, except to the extent specifically indicated in the Subcontract Documents to be the responsibility of others.

(Insert a precise description of the Work of this Subcontract, referring where appropriate to numbers of Drawings, sections of Specifications and pages of Addenda, Modifications, and accepted alternates.)

Chapter 8. Other Delivery Models

The concepts discussed in this Guide are presented in the context of the Sustainable Projects Exhibit and the current AIA documents in the Conventional (A201) family. The A201 family forms the basis on which other AIA document families are drafted. Therefore, many concepts discussed in this Guide may be applied to AIA Contract Documents for other delivery models, such as Construction Management, Design–Build, or Integrated Project Delivery. In many instances, a project may benefit from one of these other delivery models.

Increasing coordination among all parties on a sustainable project can be an effective way to achieve the owner's goals and increase project success for all participants. However, this Guide does not endorse any specific delivery model as the most appropriate model for sustainable building projects. Users are encouraged to consider all available delivery models and choose the one best suited for the particular project, given the Owner's goals and budget. Following is a brief discussion of the Construction Management, Design-Build, and Integrated Project Delivery models addressed by AIA Contract Documents.

Construction Management

AIA Contract Documents address project delivery using Construction Management in two distinct families: Construction Manager as Adviser and Construction Manager as Constructor. Each family offers unique opportunities for the sustainable building project.

Construction Manager as Adviser (CMa). Under the AIA's Construction Manager as Adviser documents, the Owner enters into three or more separate contracts: the Owner-Architect Agreement (Bl32™-20l9), the Owner-Construction Manager as Adviser Agreement (Cl32™-20l9), and the Owner-Contractor Agreement(s) (Al32™-20l9). The General Conditions document applicable to these agreements is A232™-20l9. The AIA previously offered SP versions of these documents, however, they are being retired and the relevant sustainability provisions have been moved to E235-20l9 Sustainable Projects Exhibit, Construction Manager as Adviser Edition. E235 mirrors E204-2017 (for the A20l family of documents), as it contains the same core sustainability provisions.

The CMa versions of the Owner-Architect and Owner-Contractor Agreements are similar to the corollary agreements in the A201 family with added recognition of the unique role the Construction Manager plays in this delivery model. Under C132, the Construction Manager is not hired to construct the Project. Instead, the Construction Manager is hired to advise the Owner in the preconstruction phase, and to assist in the management of the Project during construction. During the preconstruction phase, the Construction Manager performs various functions, including cost estimating, scheduling, design review, and advising the Owner regarding constructability, availability of materials and labor, sequencing for phased construction, time requirements for procurement, and installation and construction. The Construction Manager also advises the Owner concerning factors related to construction cost, including costs of alternative designs or materials, preliminary budgets, lifecycle data, and possible cost reductions. During the construction phase, the Construction Manager's duties include performing contract administration for the contract(s) for construction; overseeing the Work of multiple prime contractors on behalf of the Owner, if applicable; updating and issuing the Project schedule; scheduling tests and inspections; and assisting in Project close-out.

Because of the Construction Manager's close cooperation with the Owner and Architect during the preconstruction phase and the Construction Manager's additional responsibilities during the construction phase, the CMa documents offer a unique opportunity for the Construction Manager to assist in the development and implementation of a sustainable design and construction program. During the preconstruction phase, the CMa can review the Sustainability Plan and offer advice on constructability, materials availability, time requirements for procurement, life cycle data, etc. This additional review and coordination will provide an added layer of assurance that the Project is moving in the right direction to achieve the Sustainable Objective. In addition, the CMa's participation in the Project during the preconstruction phase allows for a targeted approach to contract administration and scheduling during the construction phase.

Additionally, Cl32-2019 requires the CMa to analyze design-assist suggestions from any contractors who are selected early and present during the preconstruction phase. The CMa analyzes these suggestions for cost and schedule impacts, as well as reviews impacts that one contractor's suggestion may have on the other contractors. For a sustainable project, these analyses also extend to items such as sustainable materials and Sustainable Measures.

Construction Manager as Constructor (CMc). Under the AIA's Construction Manager as Constructor documents, the Owner enters into two separate agreements: the Owner-Architect Agreement (typically AIA Document BI33™-2019) and the Owner-Construction Manager as Constructor agreement (either AI33™-2019 or AI34™-2019). The General Conditions document is A201®-2017. This delivery model is similar to CMa with the CMc performing similar preconstruction phase services. However, unlike the CMa delivery method, the Construction Manager in CMc project delivery also serves as the Constructor of the Project. The AIA previously offered SP versions of these documents, however, they are being retired and the relevant sustainability provisions have been moved to E234-2019 Sustainable Projects Exhibit, Construction Manager as Constructor Edition. E234 mirrors E204-2017 (for the A201 family of documents), as it contains the same core sustainability provisions.

The early involvement of the CMc during the design phase allows the CMc to provide input on the Sustainable Measures contemplated, assist in the development of the Sustainability Plan, procure items with longer lead times, and provide a smooth transition when it is time to start construction.

Design-Build

Under the AIA's Design-Build Family of documents, the Owner enters into one contract (Al4l™-20l4) with a Design-Builder who is obligated to design and construct the Project. The Design-Builder may then design and construct the project using its own forces, or enter into agreements with a Contractor (Al42™-20l4), or an Architect (Bl43™-20l4), or both. Often, the Design-Builder may also be the Architect or Contractor for the Project.

Many benefits cited for design-build as a Project delivery model, such as enhanced communication, single point responsibility, and increased value analysis, may be useful on a Sustainable Project. The single point responsibility for design and construction of the Project allows the Design-Builder to carefully coordinate the design with the input of the Architect or Contractor.

Like the design-bid-build and construction management documents, the design-build family has its own Sustainable Projects Exhibit, Al41-2014

Exhibit C. That Exhibit also mirrors the content and organization of E2O4-2O17 and contains the same requirements of conducting a Sustainability Workshop, after which the Design-Builder prepares a Sustainability Plan that, among other things, documents a Sustainable Objective for the Project and assigns Sustainable Measures to each responsible party. The allocation of responsibility for certification credits or other Sustainable Measures can be confirmed with the responsible party early in the design. This careful coordination of design with activities of the Contractor may allow for early identification of issues and adjustment of the Sustainable Measures to achieve the Sustainable Objective.

Integrated Project Delivery

The AIA's Integrated Project Delivery Family (IPD) is comprised of three different sets of documents. First, the transitional forms (A295[™]-2009, Al95[™]-2009, and Bl95[™]-2009) are modeled after existing Construction Manager as Constructor agreements and offer a comfortable first step into IPD. Second, the Multi-Party Agreement (Cl91[™]-2009) is a single agreement entered into by the Owner, Architect, Contractor and possibly other parties to design and construct a Project utilizing Integrated Project Delivery. Third, the Single Purpose Entity (Cl95[™]-2008) creates a limited liability company for the purpose of planning, designing, and constructing the Project.

A major element of Integrated Project Delivery is close cooperation among the parties to the Project. Like Construction Management or Design-Build projects, this close cooperation allows for coordination of the Sustainability Plan, responsibility for Sustainable Measures, constructability review, materials availability, time requirements for procurement, life cycle data, and other items of importance to this type of Project.

Under the Multi-Party and Special Purpose Entity models, close cooperation is further encouraged by providing for Goal Achievement Compensation. Goal Achievement Compensation under this model works by allowing the parties to establish goals early in the Project, such as achieving a Sustainable Measure, and paying amounts to each party in the form of goal achievement compensation if that goal is achieved. This provides an added incentive for parties on the Project to work together to achieve the Sustainable Objective. Unlike design-bid-build, construction management, and design-build, the IPD family does not include a dedicated Sustainable Projects Exhibit.

Chapter 9. Example of a Sustainability Plan

Introduction

The Sustainability Plan describes the Sustainable Objective, identifies the Sustainable Measures, and assigns the responsible party for each Sustainable Measure. Definitions of the Sustainability Plan and related terms are contained within the Sustainable Projects Exhibits Al41™-2014 Exhibit C, E204™-2017, E234™-2019, and E235™-2019 discussed previously. The Architect develops the Sustainability Plan based on the Sustainable Objective. The Sustainability Plan is intended to be a road map to achieve the Sustainable Objective. The Sustainability Plan should describe strategies selected to achieve each Sustainable Measure and establish metrics that will demonstrate completion of each Sustainable Measure, such as the types of testing necessary and the party who will verify that those metrics have been satisfied.

An Example of a Sustainability Plan is included at the end of this Chapter. The example was developed to show what a typical Sustainability Plan might include. The example is a table for listing each targeted Sustainable Measure and allocating responsibility to one or more Project participant. Developing a universal Sustainability Plan for all Projects may be difficult because of diverse requirements in different Sustainability Certifications, jurisdictions, and Owner goals. This example may be used as a starting point to develop an appropriate Project specific Sustainability Plan. The table parameters will need to be modified based on the specifics of each sustainable Project.

Following is a description of each section of the example of a Sustainability Plan with samples of how the Sustainability Plan may be completed on different types of sustainable Projects.

Cover Page

The cover page includes fill points to identify the Project to which the Sustainability Plan applies, identify the Owner and Architect, and state the Sustainable Objective. The same Project description should be used as that in the Project agreement, such as the Owner-Architect Agreement. The Sustainable Objective will often be the same as that included in the Initial Information of the Owner-Architect Agreement. However, if the Sustainable Objective was modified during the design process, the modified Sustainable Objective should be described in the Sustainability Plan.

Example of a Sustainability Plan

PROJECT: (Name and location or address)

THE OWNER:

(Name, legal status and location or address)

The **SUSTAINABLE OBJECTIVE** for the Project:

(Insert a description of the Sustainable Objective for the Project.)

Article 1 - Design Phase

Article 1 addresses the design phase to which the Sustainability Plan applies. Because E204–2017 requires the Architect to notify the Owner of changes to the Sustainability Plan and request Owner approval at the conclusion of each design phase, these check boxes identify in which design phase the Sustainability Plan is being submitted for approval. However, note that the Sustainability Plan may not need to be updated at each subsequent design phase. If changes to the Sustainability Plan have not been made between the Schematic Design Phase and the Design Development Phase, for example, there may be no need to seek Owner approval at the Design Development Phase.

ARTICLE 1 DESIGN PHASE

Select the design phase for which this Sustainability Plan is submitted for review and approval by the Owner.

(The Sustainability Plan will only be submitted for approval at the conclusion of design phases subsequent to the Schematic Design Phase if changes are made that require approval by the Owner in accordance with the Owner/Architect Agreement.)

- □ Schematic Design
- □ Design Development
- ☐ Construction Documents

Article 2 - Sustainable Measures

Article 2 provides a table to list the Sustainable Measures required to achieve the Sustainable Objective, identify the party responsible for each Sustainable Measure, and provide a detailed description of each Sustainable Measure. The table consists of five columns:

Item Number. Each Sustainable Measure listed in the Sustainability Plan should be numbered to provide easy reference for the Project participants.

Item	Sustainable Measure	Poin	t or C	redit		Resp	onsib	le Par	ty	Sustainable Measure Description
Number	List each Sustainable Measure required to achieve the Sustainable Objective. Where the Sustainable Objective includes achievements of a Sustainability Certification, the list may include a	s of eac edit list iinable	ents value a ch point eed in th Measur as defi	e es	respo P Par for the S Prov Sustain describ	ate each nsibilit ty prima Sustain vides sup nable Mo bed in th	y as fol rily resp able Me port for easure (d e Sustai	lows: consible asure the as	Describe the Sustainable Measure, including (1) implementation strategies selected to achieve the Sustainable Measure; (2) the specific details about design reviews, testing or metrics to verify achievement of the Sustainable Measure; and (3) the Sustainability Documentation required. Insert a description below or in an exhibit	
	description of each credit or point available toward the Sustainability Certification.	Available	Available Expected Rejected Contingent				Architect	Contractor	Other: CM, D-B, etc.	attached to this document and identified below

Sustainable Measure. This column is used to list each Sustainable Measure necessary to achieve the Sustainable Objective. When the Sustainable Objective includes a Sustainability Certification, the parties may list all points or credits available under the Sustainability Certification program, including those considered rejected, and those identified as contingent, which the parties may choose to pursue later.

Item	Sustainable Measure		t or C			Resp	onsib	le Par	ty	Sustainable Measure Description
Number	List each Sustainable Measure required to achieve the Sustainable Objective. Where the Sustainable Objective includes achievements of a Sustainability Certification, the list may include a	Indic statu or cre Susta	uirement the sate the safe each the list inable min and w.	value a h point ed in th Measu	ie res	respo P Par for the S Prov Sustai descri	ate each insibilit ty prima e Sustain vides sup nable Ma bed in th	y as fol rily resp able Me port for easure (d e Sustai	llows: ponsible pasure the as	Describe the Sustainable Measure, including (1) implementation strategies selected to achieve the Sustainable Measure; (2) the specific details about design reviews, testing or metrics to verify achievement of the Sustainable Measure; and (3) the Sustainability Documentation required. Insert a description below or in an exhibit
	description of each credit or point available toward the Sustainability Certification.	Available	Available Expected Rejected Contingent				CM, cto		Other: CM, D-B, etc.	attached to this document and identified below.

Point or Credit Requirements. This column is used when the Sustainable Objective includes a point or credit-based Sustainability Certification. On projects where the Sustainable Objective does not include a Sustainability

Certification, this section may be omitted or modified to include other information.

Item	Sustainable Measure		t or C				onsib		•	Sustainable Measure Description
Number	List each Sustainable Measure required to achieve the Sustainable Objective. Where the Sustainable Objective includes achievements of a Sustainability Certification, the list may include a	Indica status or cre Susta	of eace edit list inable nn and	ents value d ch point ed in th Measu l as defi	ie res	respo P Par for the S Prov Sustai descri	ate each nsibilit ty prima Sustain vides sup nable Ma bed in th	y as fol rily resp able Med port for easure (d e Sustain	lows: consible asure the	Describe the Sustainable Measure, including (1) implementation strategies selected to achieve the Sustainable Measure; (2) the specific details about design reviews, testing or metrics to verify achievement of the Sustainable Measure; and (3) the Sustainability Documentation required. Insert a description below or in an exhibit
	description of each credit or point available toward the Sustainability Certification.	Available	Available Expected Rejected Contingent				Owner Architect Contractor Other: CM, D-B, etc.		Other: CM, D-B, etc.	attached to this document and identified below.

Each Point should be listed in the appropriate sub-column to indicate its status:

Available — Indicates the total number of points or credits available for the Item Number.

Expected — Indicates the total points or credits expected for each Item Number. The Expected column may include a number equal to or less than the number indicated as available.

Rejected — Indicates the number of points or credits for each Item Number that will not be pursued or that are unattainable for the Project. If an item is rejected entirely, this number will equal the number included in the Available column.

Contingent — Indicates the total number of points or credits held as Contingent that could be pursued with additional cost or effort.

Responsible Party. This column identifies the party responsible for each Sustainable Measure. Some parties will be designated as taking primary responsibility and others as providing support services. For example, the Architect may have primary responsibility for designing and specifying systems that meet a certain standard of energy reduction while the Owner plays a supporting role in operating those systems in a manner consistent with the design specifications.

Item	Sustainable Measure	Poin	t or C	redit		Resp	onsib	le Par	ty	Sustainable Measure Description
Number	List each Sustainable Measure required to achieve the Sustainable Objective. Where the Sustainable Objective includes achievements of a Sustainability Certification, the list may include a	Indic statu or cr Susta	uiremente the sate the sate the sate the sate that the sat	value a h point ed in th Measu	ie res	respo P Par for the S Prov Sustai descri	ate each nsibilit ty prima Sustain vides sup nable Ma bed in th	y as fol rily resp able Me port for easure (d e Sustai	lows: oonsible asure the as	Describe the Sustainable Measure, including (1) implementation strategies selected to achieve the Sustainable Measure; (2) the specific details about design reviews, testing or metrics to verify achievement of the Sustainable Measure; and (3) the Sustainability Documentation required. Insert a description below or in an exhibit
	description of each credit or point available toward the Sustainability Certification.	Available	Expected	Rejected	Contingent	Owner	Architect	Contractor	Other: CM, D-B, etc.	attached to this document and identified below.

Sustainable Measure Description. This column is used to provide a detailed description of each Sustainable Measure.

The description of each Sustainable Measure might include:

- 1. the implementation strategies selected,
- 2. the specific details of design reviews,

- 3. the testing or metrics necessary to verify achievement of the Sustainable Measure, and
- 4. a description of the Sustainability Documentation required to submit for the Sustainable Measure.

Item	Sustainable Measure		t or C			Resp	onsib	le Par	ty	Sustainable Measure Description
Number	List each Sustainable Measure required to achieve the Sustainable Objective. Where the Sustainable Objective includes achievements of a Sustainability Certification, the list may include a	Indica status or cre Susta	s of eac edit list inable nn and	ents value d ch point ed in th Measur as defi	ie res	respo P Par for the S Prov Sustai descri	ate each nsibilit ty prima Sustain vides sup nable Mo bed in th	y as fol rily resp able Med port for easure (d e Sustain	lows: consible asure the as	Describe the Sustainable Measure, including (1) implementation strategies selected to achieve the Sustainable Measure; (2) the specific details about design reviews, testing or metrics to verify achievement of the Sustainable Measure; and (3) the Sustainability Documentation required. Insert a description below or in an exhibit
	description of each credit or point available toward the Sustainability Certification.	Available	Expected Rejected Contingent				Arthur and ide attached to this document and ide		attached to this document and identified below.	

Completed Examples

LEED. LEED has "Prerequisites" and "Credits". To apply any credits for a particular category, one must first satisfy the Prerequisite. Prerequisites don't get credits—one either qualifies or one does not. Thus, designating Yes (Y) or No (N) as a check-off indicates that one can or cannot meet the Prerequisite requirement. Indicate "Y" (Yes) for Prerequisites where required and where the parties intend to pursue points or credits. If "N" is marked, the credits for that category should all be blank to indicate that no points or credits are available for that category.

Item	Sustainable Measure	Poin	t or Cı	redit		Resp	onsib	le Par	ty	Sustainable Measure Description		
Number	Measure required to achieve the Sustainable Objective. Where the Sustainable Objective includes achievements of a Sustainability Certification, the list may include a description of each credit or		uiremente the state the state of each edit liste inable in and state in an and state in an and state in an and state in an analysis in analysis in an analysis	value a h point ed in th Measur	ie res	respo P Par for the S Prov Sustain describ	ate each nsibility ty prima Sustaine ides sup nable Me bed in th re Descr	v as fol rily resp able Me port for easure (de Sustai	llows: consible casure the as	Describe the Sustainable Measure, including (1) implementation strategies selected to achieve the Sustainable Measure; (2) the specific details about design reviews, testing or metrics to verify achievement of the Sustainable Measure; and (3) the Sustainability Documentation required. Insert a description below or in an exhibit		
	description of each credit or point available toward the Sustainability Certification.	Available	Expected	Rejected	Contingent	Owner	Architect	Contractor	Other: CM, D-B, etc.	attached to this document and identified below.		
	Sustainable Sites											
Prereq 1	Construction Activity Pollution prevention	Y	Y					P		See LEED Reference Guide for Green Building Design and Construction.		
Credit1	Site Selection	1	1			P				See LEED Reference Guide for Green Building Design and Construction.		
Credit 2	Development Density and Community Connectivity	5 5							See LEED Reference Guide for Green Building Design and Construction.			

WELL. For WELL, the "P" in the Point or Credit Requirements column indicates that the credit is a Prerequisite and one must achieve it; however, there are no points awarded for achieving it. In the example below, "No current action items" in the Sustainable Measure Description column associated with the Prerequisite means that the design currently meets the criteria for the credit and no action is needed by any party.

Item Number	Sustainable Measure List each Sustainable Measure required to achieve the Sustainable Objective. Where the Sustainable Objective includes achievements of a Sustainability Certification, the list may include a	Indic status or cre Susta	s of eac edit list inable mn and		e es	Indicates responsible P Para for the S Provident Sustainates responsible Providence Prov	ate eac nsibilit ty prima Sustain vides sup nable M	h party y as fol arily resp able Med port for easure (d e Sustain ription)	is lows: consible asure the	Sustainable Measure Description Describe the Sustainable Measure, including (1) implementation strategies selected to achieve the Sustainable Measure; (2) the specific details about design reviews, testing or metrics to verify achievement of the Sustainable Measure; and (3) the Sustainability Documentation required. Insert a description below or in an exhibit		
	description of each credit or point available toward the Sustainability Certification.	Available	Anticipated	Not Attempted	Maybe	Owner	Architect	Contractor	Other: CM, D-B, etc.	attached to this document and identified below.		
	Sustainable Sites											
Air - 01.1	Fundamental Air Quality - Meet Thresholds for Particulate Matter	P					P			No current action items		
Air - 01.2	Fundamental Air Quality - Meet Thresholds for Organic Gases	P				P	S			Owner to contract preliminary testing to determine current air quality levels		
Air - 05.1	Enhanced Air Quality - Meet Enhanced Thresholds for Particulate Matter	2			2		P			Dependent on final AQ testing results - Maintaining construction IAQ will help achieve high levels of AQ		
Air - 05.3	Enhanced Air Quality - Meet Enhanced Thresholds for Inorganic Gases	1			1		P			Dependent on final AQ testing results - Maintaining construction IAQ will help achieve high levels of AQ		
Air - 08.1	Air Quality Monitoring & Awareness - Implement Indoor Air Monitors	1	1			P				No action required until construction completion. Owner to review potential monitors and determine if credit is pursued.		

IgCC. Notice that the column labeled "Point or Credit Requirements" has been changed to "Status of Code-Mandated Measure." This is necessary because the requirements of the IgCC, like other codes that have been legally adopted by a jurisdiction, are mandatory and not subject to selection by the parties.

Item Number	Mane Indica status or cre Susta	dated ate the s of eac edit list inable mn and	Code - Meast value a h point ed in th Measu as defi	ure and ne res	Indica respo P Par for the S Prov Sustain descri	oonsib ate eac. nsibilit ty prima s Sustain vides sup nable M. bed in th	h party y as fol urily resp able Me port for easure (de sustai	's 'lows: consible asure the	Sustainable Measure Description Describe the Sustainable Measure, including (1) implementation strategies selected to achieve the Sustainable Measure; (2) the specific details about design reviews, testing or metrics to verify achievement of the Sustainable Measure; and (3) the Sustainability Documentation required. Insert a description below or in an exhibit			
	description of each credit or point available toward the Sustainability Certification.	Available	Expected	Rejected	Contingent	Owner	Architect	Contractor	Other: CM, D-B, etc.	attached to this document and identified below.		
	Chapter 3 - Jurisdictional Requirements and Life Cycle Assessment											
302.1	Requirements determined by Jurisdiction (Table 302.1)						P			Confirm with Local Jurisdiction. Requires obtaining information from local jurisdiction regarding adoption of Table 302.1		
303.1	Whole Building life cycle assessment					P				Requirements for execution of a whole building life cycle assessment.		
	Chapter 4 - Site Development and Land Use											
401.2	Predesign site inventory and assessment						Р			An inventory and assessment of natural resources and baseline conditions of the building site shall be submitted with the construction documents.		
402.2.1	Flood hazard area prevention, general					P	s			Confirm with Local Jurisdiction. Prohibits development in flood hazard areas established pursuant to local land use authority.		

Owner Approved Sustainable Measures (non-code, non-Sustainability Certification)

Item Number	Sustainable Measure List each Sustainable Measure required to achieve the Sustainable Objective. Where the Sustainable Objective includes achievements of a Sustainability Certification, the list may include a	Indic status or cre Susta	s of eac edit list inable mn and		ie res	Indice respo P Par for the S Prov Sustain descrip	nte each nsibility ty prima Sustain vides sup nable Mo bed in the	h party y as fol rily resp able Me port for easure (d e Sustai	is lows: consible asure the	Sustainable Measure Description Describe the Sustainable Measure, including (1) implementation strategies selected to achieve the Sustainable Measure; (2) the specific details about design reviews, testing or metrics to verify achievement of the Sustainable Measure; and (3) the Sustainability Documentation required. Insert a description below or in an exhibit
	description of each credit or point available toward the Sustainability Certification.	Available	Expected	Rejected	Contingent	Owner	Architect	Contractor	Other: CM, D-B, etc.	attached to this document and identified below.
1	Air Quality						P	S		Utilize low VOC paints, flooring, sealants and coatings
2	Sustainable/Low Carbon Footprint Materials						P	S		Materials that have recycled content and are manufactured locally
3	Waste Control						P	P		Waste Management during construction
4	Energy efficient systems						S		Highly efficient HVAC and plumbing systems	
5	Building orientation					S				Site building for maximum solar benefit

Owner's Approval

This section requires the Owner to sign and date the document to approve the Sustainability Plan as of the designated design phase.

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Example of a Sustainability Plan

PROJECT: (Name and location	n and detailed description)
THE OWNER: (Name, legal status, address, a	nd other information)
THE ARCHITECT: (Name, legal status, address, a	nd other information)
The SUSTAINABLE OBJECT (Insert a description of the Sus	TIVE for the Project: tainable Objective for the Project.)
ARTICLE 1 DESIGN PHASE	
Select the design phase for whi	ich this Sustainability Plan is submitted for review and approval by the Owner.
	nly be submitted for approval at the conclusion of design phases subsequent to the inges are made that require approval by the Owner in accordance with the Owner-
	Schematic Design
	Desing Development
	Construction Documents
ARTICLE 2 SUSTAINABLE	MEASURES
In the table below:	
1	Number each Sustainable Measure;
2.	List each Sustainable Measure applicable to the Project;

- 3. Where the Sustainable Objective includes achieving a Sustainability Certification, identify the total points available for each Sustainable Measure and the number of points the parties expect to achieve for that Sustainable Measure;
- 4. Designate the Responsible Party for each Sustainable Measure; and
- 5. Provide a detailed description of the Sustainable Measure.

When the Sustainable Objective includes a Sustainability Certification, the parties may list all points or credits available under the Sustainability Certification program, including those points or credits considered and rejected, and those points and credits identified as contingent and which the parties may choose to pursue later.

(Complete the following table.)

Item Number	Sustainable Measure List each Sustainable Measure required to achieve the Sustainable Objective. Where the Sustainable Objective includes achievements of a Sustainability Certification, the list may include a description of each credit or point available toward the Sustainability Certification.	Indica status or cre Susta	s of eac edit list inable nn and		e res ned	Indicates responsible P Parafor the S Province Sustain description	oonsib ate eac nsibilit ty prima Sustain vides sup nable M bed in th	h party y as fol arily resp able Me port for easure (de Sustai	's Flows: consible asure the as nable	Sustainable Measure Description Describe the Sustainable Measure, including (1) implementation strategies selected to achieve the Sustainable Measure; (2) the specific details about design reviews, testing or metrics to verify achievement of the Sustainable Measure; and (3) the Sustainability Documentation required. Insert a description below or in an exhibit attached to this document and identified below.
		Available	Expected	Rejected	Contingent	Owner	Architect	Contractor	Other: CM, D-B, etc.	

Item Number	Sustainable Measure List each Sustainable Measure required to achieve the Sustainable Objective. Where the Sustainable Objective includes achievements of a Sustainability Certification, the list may include a description of each credit or point available toward the Sustainability Certification.	Indic status or cre Susta	of eace edit list inable nn and		e es	Indicates responsible P Parafor the S Provential Sustainates described in the second responsible Provential Pr	oonsib ate each nsibilit ty prima Sustain vides sup nable Mo bed in th tre Descr	h party y as fol rily resp able Med port for easure (d e Sustain	is ilows: consible asure the	Sustainable Measure Description Describe the Sustainable Measure, including (1) implementation strategies selected to achieve the Sustainable Measure; (2) the specific details about design reviews, testing or metrics to verify achievement of the Sustainable Measure; and (3) the Sustainability Documentation required. Insert a description below or in an exhibit attached to this document and identified below.
		Available	Expected	Rejected	Contingent	Owner	Architect	Contractor	Other: CM, D-B, etc.	
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This Sustainability Plan is approved.

OWNER:	
By (Signature)	(Date)
(Printed name and title)	