RESOLUTION 17-36

TO WAIVE THE REQUIREMENTS OF BLOOMINGTON MUNICIPAL CODE 2.29, GREEN BUILDING PROGRAM, FOR THE DIMENSION MILL, 335. W. 11TH STREET

- WHEREAS, in 2009, the Common Council of the City of Bloomington ("Council") passed <u>Ordinance 09-04</u>, known as the Green Building Program, and codified as Chapter 2.29 of the Bloomington Municipal Code; and
- WHEREAS, the purpose of the Green Building Program is to "further the city's commitment to environmental, economic and social stewardship; yield cost savings to city taxpayers through reduced operating costs; provide healthy work environments for staff and visitors; reduce local greenhouse gas emissions; and prepare for a current period of reduced supply of oil and natural gas"; and
- WHEREAS, in addition to other requirements, the Green Building Program provides that "major renovations" to existing and subsequently acquired City of Bloomington buildings, which include buildings owned by the Bloomington Redevelopment Commission ("RDC") "shall be designed, contracted and built to achieve LEED®-NC Silver certification standards in the renovated portion of the building" BMC § 2.29.030(b)(1); and
- WHEREAS, however, BMC § 2.29.050(c) of the Green Building Program also provides for exemptions from the requirements of the ordinance where:
 - (c) If, due to specific circumstances, compliance with [the Green Building Program] would defeat the intent of the Green Building Program or create an unreasonable burden on the city department operating under this Chapter, the department may request a waiver from the requirements of this Chapter from the Common Council. The Council may grant a waiver from the requirements of this Chapter upon a finding that the city department requesting the waiver has:
 - (1) documented the circumstances and burdens at issue; and
 - (2) developed a reasonable plan to maximize the number of LEED points attainable; and
- WHEREAS, in 2012, the RDC purchased approximately 12 acres of property from Indiana University, including the Dimension Mill, located at 335 W. 11th; and
- WHEREAS, the RDC completed a Master Plan after its purchase of the aforementioned 12 acres, which identified the "preservation and adaptive reuse of the contributing historic structures of the Tech Park conserving the cultural and historic industrial fabric of Bloomington for future generations" as one of the Master Plan's Guiding Principles, p. 10; and
- WHEREAS, more specifically, "adaptive reuse" of the Dimension Mill was identified as one objective of the Master Plan, p. 18 and 35; and
- WHEREAS, pursuant to this objective, the RDC and the Economic and Sustainable Development Department ("ESD Staff") have worked with architects and the local technology community to identify how to activate the Dimension Mill as tech office space, in accordance with the vision of the Master Plan; and

- WHEREAS, after working with the RDC's architects and consultants, ESD Staff does not believe it is possible to both meet the LEED® Silver designation and maintain the desired historic character inside the Dimension Mill; and
- WHEREAS, moreover, ESD Staff believes that meeting the LEED® Silver designation will come at a significant cost and which will take at least thirty (30) years to pay back; and
- WHEREAS, ESD Staff has prepared a detailed memorandum ("ESD Staff Memo") outlining the financial and qualitative challenges posed by meeting the LEED® Silver designation and presenting the City's plan to emphasize sustainability in the renovation process, a copy of which is attached to this Resolution as "Exhibit 1;" and
- WHEREAS, ESD Staff respectfully requests the Council waive the application of the Green Building Program to the Dimension Mill;

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

SECTION 1. The Council finds that due to the specific circumstances outlined in the ESD Memo, compliance with the Green Building Program would create an unreasonable burden on Economic and Sustainable Development Department and the Redevelopment Commission.

SECTION 2. The Council has reviewed the Memo submitted by the Economic and Sustainable Development Department on behalf of the Redevelopment Commission, attached hereto as "Exhibit 1," and finds that the Department has documented the circumstances and burdens at issue with renovating the Dimension Mill to LEED® Silver standards and that the Economic and Sustainable Development Department has developed a reasonable plan to maximize the number of LEED® points attainable.

SECTION 3. The Council hereby grants a waiver from the requirements of the Green Building Program pursuant to 2.29.050(c) for the renovation of the Dimension Mill, 335 W. 11th, as technology-sector office space.

SECTION 4. The Economic and Sustainable Development Department shall take all reasonable steps to maximize the number of LEED® points attained, and shall provide a report to the Council upon the completion of the renovation documenting the number of LEED® points attained.

PASSED by the Common Council of the City of Bloomington, Monroe County, Indiana, upon this _______, day of ________, 2017.

SUSAN SANDBERG, President Bloomington Common Council

ATTEST:

NICOLE BOLDEN, Clerk City of Bloomington

PRESENTED by me to the Mayor of the City of Bloomington, Monroe County, Indiana,
upon this day of <u>September</u> , 2017.
NBIder-
NICOLE BOLDEN, Clerk
City of Bloomington
SIGNED and APPROVED by me upon this 2151 day of Septem, 2017.
HOUNTHAMILTON Mayor
JOHN HAMILTON, Mayor
City of Bloomington

SYNOPSIS

Among other requirements, the City's Green Building Program (BMC 2.29) requires that major renovations to City-owned buildings to achieve LEED® Silver designation. However, the Green Building Program provides that a City department may petition the Council for a waiver from the requirements of the Program where compliance with the Program would create an "unreasonable burden" on the petitioning department and where such department documents the burdens at issue and develops a reasonable plan to maximize LEED® points. This resolution finds that the Economic and Sustainable Development Department has satisfied the waiver requirements for the Dimension Mill, located at 335 W. 11th and grants the requested waiver for this property.



MEMORANDUM

To: Common Council Members

Cc: Jeffrey Underwood, Controller

Thomas Cameron, Assistant City Attorney

Alex Crowley, Director, Economic and Sustainable Development

From: Brian Payne

Date: September 10, 2017

Re: Waiver from the Green Building Ordinance for the Dimension Mill Renovation Project

I. Introduction

Dimension Mill Project

The Dimension Mill is a historic building, more than a century old, originally built by the Showers Brothers Furniture Co. to house the design and creation of customized, unique furniture products by master carpenters and skilled laborers. Located at 335 W. 11th St., in the heart of Bloomington's Trades District and Certified Tech Park, it is a 19,000 ft² brick warehouse-style building featuring the signature sawtooth roof seen on Bloomington's City Hall. Since the Showers Brothers Furniture Co. dissolved in the 1950s, the Dimension Mill has been little used, mostly as a storage facility, and fallen into disrepair.

Pursuant to Indiana Code 36-7-32, the Redevelopment Commission (RDC) and the Common Council of the City of Bloomington (City) created a Certified Tech Park (CTP) in Downtown Bloomington and established the required CTP fund to support the project. The RDC purchased approximately 12 acres of property from Indiana University, including the Dimension Mill, for this purpose. In 2013, the City completed a Master Plan and Redevelopment Strategy for the Trades District, envisioning the Trades District as a mixed-use area to support Bloomington's growing technology and life science businesses, facilitate entrepreneurship, nurture start-ups, and provide an attractive, integrated area to drive commercial activity.

As part of this cohesive strategy, the Dimension Mill will be renovated into a business incubator with plentiful co-working space, flexible office space for lease, and a dramatic event venue for networking, professional events, and community use. The Dimension Mill is the lynchpin to the success of the certified tech park: a bustling hub of innovation and entrepreneurial activity that will help drive Bloomington's 21st century economy for generations to come. Ideally, it will be the crown jewel of the

1

Trades District, the centerpiece of the Certified Tech Park, and one of the City's signature buildings for years to come.

A common lament within Bloomington's tech community holds that despite the necessary components - world-class educational institutions, support from high-performing local anchor businesses, and an affordable, desirable place to live - the City's innovation economy is not firing on all cylinders. The Dimension Mill directly addresses this problem, aiming to unify and strengthen our entrepreneurial ecosystem. It will be a gathering place to connect the fragmented segments of Bloomington's innovation economy to learn from each other, collaborate, and thrive together. The Dimension Mill will also serve as a crucial tool to recruit and retain talent in Bloomington, evidence of our community's commitment to embracing a knowledge-based economy and supporting would-be entrepreneurs.

The Master Plan identified adaptive reuse of the Dimension Mill for business incubation and technology office space as a community objective. On September 6, 2016, the RDC approved the City's proposal to move forward with the Dimension Mill renovation. On February 9, 2017, the Historic Preservation Commission (HPC) approved the exterior renovation design, and Blackline Studios began work on creating a full schematic design and budget estimate. On July 10, 2017, the RDC contracted with Bloomington Economic Development Corporation to establish a nonprofit entity to manage the Mill, and on September 5, 2017, the RDC hired Pat East, CEO of Hanapin Marketing and local tech community leader, to serve as Executive Director of that entity.

We sit at a critical juncture in the progress of the Dimension Mill project. The RDC and the HPC have approved design proposals, and the Mayor has signed off and is ready to move forward. Contractors are already in place to handle remaining design needs, manage construction, and create and execute a strategic vision for the operation of the Mill. However, to finalize specific building plans, create construction documents, and solicit bids for work, the City must know the parameters of the project. This hearing will mark a decision point: whether the Dimension Mill renovation must secure LEED-NC Silver certification per the City's Green Building Ordinance, or whether Common Council will grant a waiver from the specific requirement to pursue LEED-NC Silver certification.

Legislative Backdrop: Green Building Ordinance

The City's Green Building Ordinance, Chapter 2.29 of the Bloomington Municipal Code requires, among other things, that major renovations to existing City Buildings "be designed, contracted and built to achieve LEED-NC Silver certification standards in the renovated portion of the building." However the ordinance further provides that the City may seek a waiver from Common Council if "compliance with this Chapter would defeat the intent of the Green Building Program or create an unreasonable burden on the city department operating under this Chapter."

The Council may grant such a waiver if they find that the City has:

(1) Documented the circumstances and burdens at issue; and

¹ Bloomington Municipal Code 2.29.030 § (b)(1).

² Bloomington Municipal Code 2.29.050 § (c).

(2) Developed a reasonable plan to maximize the number of LEED points attainable.³

According to Dan Sherman, such a waiver has not yet been formally considered by Common Council.

LEED-NC Silver Certification

Leadership in Energy and Environmental Design (LEED) is among the world's leading green building certification programs. It was developed by the nonprofit U.S. Green Building Council (USGBC) as a set of rating systems for the design, construction, operation, and maintenance of buildings, homes, and neighborhoods to help building owners and operators be environmentally responsible and use resources efficiently.⁴

LEED-NC is the rating system for new construction (NC) or major renovations to existing buildings. It allocates points based on the potential environmental impacts and human benefits of each credit, weighed by the environmental impact categories of the United States Environmental Protection Agency's Tools for the Reduction and Assessment of Chemical and Other Environmental Impacts (TRACI) and the environmental-impact weighting scheme developed by the National Institute of Standards and Technology (NIST).⁵

The LEED-NC checklist allocates a maximum 110 points. Buildings can qualify for four levels of certification:

Certified: 40–49 pointsSilver: 50-59 pointsGold: 60-79 points

• Platinum: 80 points and above

The USGBC registers applicants, processes fees, and completes final review of credit applications. Once an application is complete, the review process involves preliminary, final, and possibly appeal stages each taking 20-25 business days.

II. Burdens of LEED-NC Silver Certification for the Dimension Mill Renovation

Financial Costs of Achieving LEED-NC Silver Certification

It is difficult to ascertain the precise costs of securing each individual LEED credit prior to the final construction planning and bidding phase. However, we can estimate the added cost burden of pursuing LEED-NC Silver (hereafter LEED Silver) certification for the Dimension Mill by examining general resources on green building costs. In addition, we can consider the best available estimates provided by qualified individuals familiar with the Dimension Mill project.

³ *Id*.

⁴ U.S. Green Building Council, available at https://www.usgbc.org/leed.

⁵ *Id*, available at: http://www.usgbc.org/ShowFile.aspx?DocumentID=8868.

There are two types of costs associated with pursuing LEED certification: soft costs, which include expenses required to navigate the LEED process, and hard costs, or the actual increased cost of construction required to ensure LEED Silver certification.

- Soft costs, which include redesign effort by the architect and design engineers, commissioning the project, documenting compliance, energy modeling for the project, and LEED application fees. Estimates for the soft cost increases associated with LEED Silver certification range from 2% to 9%.⁶⁷
- Hard costs, which refer to the actual construction costs necessary to meet LEED Silver standards.
 Reports generated by construction consultants estimate the hard cost increases of LEED Silver certification from 5% to 15%, although those refer to new construction rather than the renovation of a historic building.⁸
- The U.S. Green Building Council estimates that LEED accreditation adds 5-10% to the hard costs of a new building project. (This does not include soft costs or account for historic building renovation.)

LEED-certified experts at Blackline Studios and Weddle Bros Construction contracted to assist in the planning, design, and construction of the Dimension Mill, all argue that the large, warehouse-style historic brick building is a particularly ill-suited candidate for LEED certification. The inability to start anew with modern materials, the difficulty of establishing a thermal envelope around the original brick building, and the relatively small scale of this project compared to most new construction LEED projects, among other factors, dramatically increase the relative cost of achieving LEED-NC Silver standards.

- Hard cost estimate from Craig McCormick at Blackline Studio, principal designer of Dimension Mill project, LEED-certified designer:
 - o "To attain LEED Silver Certification, we would need to engage a sustainability consultant, which is an upfront cost of \$25,000-\$30,000...In addition to the cost of the consulting firm, the USGBC States that pursuing LEED accreditation typically imposes a 5-10% increase in the construction budget of a project. MY assumption is that considering the unique factors of our renovation of a historic building, we will add at least a 10% construction budget increase."
- Hard cost estimate from Kelly Abel, Vice President, Weddle Bros. Construction:
 - \circ "In a historic building like [the Mill], I would say between 8 12% in hard construction costs."

⁶ "Analyzing the Cost of LEED Certification." Northbridge Environmental Consultants, available at https://greenbuildingsolutions.org/wp-content/uploads/2016/05/LEED-Cost-Analysis-Report.pdf

⁷ Mapp, Nobe, and Dunar (2012). "The Cost of LEED—An Analysis of the Construction Costs of LEED and Non-LEED Banks," Journal of Sustainable Real Estate. Available at: http://www.josre.org/wp-content/uploads/2012/09/Cost of LEED Analysis of Construction Costs-JOSRE v3-13.pdf

⁸ *Id* and http://www.hpac.com/archive/true-cost-leed-certified-green-buildings.

⁹ According to Platinum Earth, LLC, LEED-certified environmental consultants.

Based on these assumptions, without factoring in the historic building difficulties, projected total cost increases for a \$3,400,000 Dimension Mill renovation budget would be:

- Optimistic soft and hard cost estimates (9%) = \$306,000
- Mid-range soft and hard cost estimates (12.75%) = \$433,500
- High soft and hard cost estimates (15%) = \$510,000
- Expert consultants with project knowledge estimates (15-20%) = \$510,000 \$680,000

Financial Savings of LEED Silver Certification

The main financial benefit of achieving LEED Silver standards is reduced energy expenditure over time. A 2011 study of U.S. government LEED-certified buildings found LEED-certified buildings to have 25 percent lower energy use than the national average. These government buildings reduced operational costs overall by 19 percent compared to national averages. In one analysis that distinguished between new construction and retrofits, owners of green buildings reported that their ROI improved by 19 percent on average for existing building green projects. The same study found that operating costs for existing buildings declined 13 percent over five years.

Notably, these figures include LEED Gold and Platinum buildings, and do not distinguish between historic and newer structures.

Based on the U.S. Energy Information Administration's finding that office buildings typically spend $1.51/\text{ft}^2$ per year on energy consumption, LEED Silver certification would save the Dimension Mill (19,000 ft² = \$28690 annually):

- Low energy savings estimate (10%) = \$2869/year
- Moderate energy savings estimate (15%) = \$4305/year
- High energy savings estimate (25%) = \$7172/year
- Optimistic savings estimate for high-energy use per ft² building = \$10,000/year

Given its technology focus, the Dimension Mill may well be an above-average per/ft² energy consumer. Even if this is true, the most optimistic cost estimate and energy savings payback schedule combination would be approximately 30 years (\$300,000 cost increase at \$10,000/year in savings). This is well beyond the 10-year payback cutoff contemplated in § 2.29.040(a)(2)(B) of the Green Building Ordinance.¹³

¹⁰ U.S. Green Building Council - https://www.usgbc.org/articles/leed-facts.

¹¹ McGraw Hill Construction (2010). Green Outlook 2011: Green Trends Driving Growth.

¹² U.S. Energy Information Administration, 2013, available at: http://www.dvirc.org/how-much-energy-does-an-office-building-consume/

¹³ Bloomington Municipal Code § 2.29.040(a)(2)(B) – "In the interest of maintaining close control of the cost, the city shall pursue the LEED Silver standard only when the payback period is no more than 10 years." It is important to note that this provision is instructive, not dispositive, because a GBO Phase II analysis on the Dimension Mill has not been completed.

Qualitative Sacrifices of LEED Silver Certification

The success of the Dimension Mill depends on its desirability as a co-working space, office space, and event venue. To effectively serve as a cauldron of innovation, the space itself must be conducive to creativity. In short, it must a place that inspires people. In this respect, the historic character of the Dimension Mill provides an ideal environment. As seen in Appendix B, the proposed design maintains the original brick walls and sawtooth roof, utilizing natural light and exposed wood and metal to create a beautiful, industrial aesthetic.

According to each of the project's contractors, achieving LEED Silver certification would require sacrificing much of the interior character of the building. It would likely require covering the exposed brick walls and wood beams with drywall, and covering portions of the interior sawtooth roof with insulation. In essence, adherence to LEED Silver standards would defeat the purpose of locating this facility in the Dimension Mill.

According to their managers, similar facilities (Speakeasy in Indianapolis and Matchbox in Lafayette) derive roughly 1/3 of their revenue from reservations of their event space. Not only will such aesthetic compromises have real financial consequences, but reduced usage also hampers the Dimension Mill's utility as a networking and collaboration center. Finally, it would reduce its effectiveness as a selling point to recruit and retain talent in Bloomington.

Finally, LEED Certification would delay construction and activation of the Mill by at least 8 and up to 16 weeks, including redesign, documentation, Green Building Certification Institute review, and LEED approval phases, likely pushing the opening date from Fall 2018 to early 2019. This would result in at least two months of lost revenue from membership and rental agreements, and risk alienating stakeholders in the community who are considering whether to locate their business in Bloomington.

III. Plan to Emphasize Sustainability and Maximize Attainable LEED Points

50-59 points of a possible 110 are needed for LEED Silver status, 16 of which are unattainable to a project in this location (not in a LEED pre-certified neighborhood development zone). ¹⁴ According to Blackline Studios, applicants should aim for at least 65 points, because they may fall short of the intended total during the review process. After consulting with Weddle Bros., Schmidt Architects and Blackline Studios, we believe we can definitely achieve 26 LEED points without incurring significant cost additions or sacrificing the historic and aesthetic character of the Dimension Mill.

We are future-focused in the Dimension Mill's design and construction, but the marginal cost for the remaining LEED points needed for a Silver certificate is extremely high, notwithstanding the soft costs associated with the certification process. For a historic renovation like this, the pursuit of additional LEED points is beset by severely diminishing returns. While strict adherence to LEED Silver standards

¹⁴ U.S. Green Building Council - LEED Credit Library, available at https://www.usgbc.org/credits/new-construction/v4. Neighborhood development Zone credit explanation available at: https://www.usgbc.org/node/2615490?return=/credits.

would jeopardize the financial viability and intended purpose of the Dimension Mill project, waiving the requirement for LEED Silver certification does not mean abandoning the pursuit of sustainability and energy efficiency.

We plan to utilize the City's already-contracted consultants to achieve as many additional LEED points as possible, and to optimize energy efficiency wherever possible. This includes meeting LEED accreditation standards in energy efficient lighting, light pollution reduction, indoor air quality, water management, and public transit and bike accessibility. In addition, we are pursuing other initiatives to enhance the building's energy efficiency:

- In conjunction with Duke Energy, we are exploring opportunities to serve as a battery storage pilot project, which would offer free energy savings to the Mill and potentially yield research benefits in battery storage technology and practices for future citywide use.
- The Mayor is committed to adding vegetation to the roof wherever possible.
- We are also exploring the possibility of installing PV panels on the roof of the building, and will do so if feasible.

Conclusion

Due to the uniquely high costs of LEED Silver certification for this historic renovation, and the importance of maintaining the intended aesthetic for successful achievement of the Dimension Mill's purpose, the Administration requests a waiver from compliance with the Green Building Ordinance. We intend to continue to pursue sustainable and energy-efficient building practices throughout this project, and would be glad to update Common Council on the full suite of LEED points attained once the renovation is complete.