

Juneau Commission on Sustainability

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April 14, 2019

To: Rorie Watt, City Manager

From: Duff Mitchell, Chair Juneau Commission on Sustainability

Regarding JCOS recommendations on Airport Board request for exemption from CBJ Ordinance 2010-42. An Ordinance Amending the Land Use Code to Require Construction and Renovation of Municipal Public Facilities to Meet a Sustainable Building Standard.

Dear City Manager Watt,

After a thorough review and consideration, the Juneau Commission on Sustainability (JCOS) recommends that the airport terminal project not be exempted from the requirements of LEED certification as set out in CBJ code 49.35.800(c). At our April 3, 2019 meeting we concluded that a waiver was not justified, and voted against recommending it to you and the Assembly.

The JCOS's task is specified in 49.35.800(c):

"Exception Procedure. If the Manager, with the consent of the Assembly, after consideration of the recommendation of the Sustainability Commission, determines that it would not be economically feasible to satisfy the prerequisites for LEED Certification in the case of a specific project, that project shall be exempt from the requirement for LEED Certification." [Highlight added.]

JCOS believes this is the first time that a Project has asked for an exemption to the land use code with all public buildings (schools and library) making at least the minimum certification of LEED standards.

Over the past several months the Juneau Commission on Sustainability (JCOS) reviewed the background of this Ordinance, documents from the U.S. Green Building Council, the Airport Sustainability Master Plan 2018, and how LEED has been used at other U.S. Airports. We consulted with CDD and Engineering/ Public Works Department staff to understand how this Ordinance has been implemented with past CBJ projects and met with CBJ International Airport Management and Board members on several occasions.

Our due diligence in this matter has confirmed to the Commissioners that the North Terminal Expansion Project deserves community support and will benefit our community in our role as a regional hub and the State Capital. We appreciated the cooperation and assistance of the Airport management and Board and

found them informed, resourceful, sincere and responsible in their pursuit of creating an exceptional North terminal for our community.

Our analysis focused on two components of the Ordinance: the meaning of LEED prerequisites and economically feasible. Our determination of what is a prerequisite came from the U.S. Green Building Council website, "While project managers can pick and choose the credits that they want to pursue, prerequisites set the minimum requirements that all buildings need to meet in order to achieve LEED certification. Additionally, fulfilling the requirements of prerequisites will not earn points."

The Airport submitted to the JCOS their LEED v4 New Construction and Major Renovation Project Checklist and all prerequisites are checked Y for Yes. Therefore, under that narrow definition of the CBJ land use code and the U.S. Green Building Council for prerequisites, the Airport does not meet the bar for an exception to the Ordinance. It is our recommendation for your consideration that the Airport Terminal Reconstruction Project meets the prerequisites for LEED and under the narrowest of interpretation renders the Airport request moot.

However, we also struggled with the second component addressing "economic feasibility" as written in 49.35.800(c). Although the Commission was not unanimous, our recommendation for consideration is that it is economically feasible for the Airport to satisfy the prerequisites for LEED certification. Although the Airport suggests that attainment of LEED would require an expenditure of \$1,011,000 to achieve the minimum standard of 40 LEED points, we did not consider it wise for the Airport to pursue the Construction & Demolition Waste Management for 2 points of certification. The cost-benefit for these points does not appear justified. Juneau does not have the requisite landfill and recycling capabilities for LEED standards and therefore obtaining these 2 points would inflate the cost of obtaining LEED certification, we felt unnecessary, by \$483,281.

However, the Commission did recognize, based on the Airport's memo, that obtaining LEED certification would add an estimated \$527,695 to the \$22.5 million dollar estimate of the project (2.34%). The Airport in their March 29, 2019 exception request memo suggests that it would cost \$135,591 (not including consultant fees or staff time) to meet the prerequisites. The JCOS made a second motion to recommend to you for consideration that it is our recommendation that you recommend to the Assembly an additional CBJ contribution of \$135,591 to assist the Airport in meeting LEED certification. We also ask that the CBJ Engineering staff review the LEED certification analysis conducted by the Airport and their consultant in order to provide an independent review that assists the Airport in meeting the minimum standards of LEED certification.

We would also like to commend the Airport Management and the Airport Board in this process that was conducted with the JCOS regarding LEED.

Below, I have highlighted the key components of the land use code for this recommendation.

49.35.800 Sustainable building standards for construction and renovation of buildings.

(a) New construction and renovation of existing buildings and facilities by the City and Borough. The City and Borough shall construct and renovate its public facilities and buildings to sustainable building standards through the use of the U.S. Green

Building Council's Leadership in Energy and Environmental Design (LEED) rating system, and shall be responsible for ensuring that public facilities and buildings meet the requirements as set out in this section and are operated accordingly.

(1) LEED shall be the quantitative measurement for how well standards are

- (1) LEED shall be the quantitative measurement for how well standards are met;
- (2) All public facilities and buildings utilizing municipal funds and costing over \$5,000,000 (either general or bonded), including new private construction for Municipal leasing or renting, shall be designed and constructed in such a fashion as to achieve a minimum level of LEED Certified:
- (A) The City and Borough Engineering Department shall determine if attainment of specific LEED credits will be required within the credits pursued for LEED Certification. These required credits shall be documented in CBJ policy and shall be reviewed and updated each time a new version of the LEED standard is issued. Such update shall occur within three months of the issuance of a new LEED standard.
- (b) *Application*. The sustainable building standards for municipal buildings and facilities, including but not limited to, the Juneau School District, *the Juneau International Airport*, and Bartlett Regional Hospital, shall apply to facilities and buildings where the principal use is regularly occupied space, including, but not limited to, buildings occupied for office, retail, classroom, healthcare, or assembly purposes.
- (1) As used in this section, occupied means a facility or building whose primary purpose is for people to work, assemble, or intend to remain within to perform functions (other than routine maintenance) of the principal use of the building. Industrial facilities, such as maintenance, warehouse, and vehicle storage, are excluded from this section.
- **(c)** Exception Procedure. If the Manager, with the consent of the Assembly, after consideration of the recommendation of the Sustainability Commission, determines that it would not be economically feasible to satisfy the prerequisites for LEED Certification in the case of a specific project, that project shall be exempt from the requirement for LEED Certification.

In addition, we are attaching as background the following documents developed and reviewed during our analysis:

- 1. Airport Request for LEED Ordinance exception dated March 29, 2019.
- 2. LEED v4 New Construction and Major Renovation project checklist dated March 29, 2019.
- 3. U.S. Green Building Council, "LEED credits, prerequisites and points: How are they different? March 6, 2017.
- 4. JCOS background document December 6, 2018.
- 5. CBJ Memo dated October 27, 2010, Proposed LEED Ordinance with supporting documents.
- 6. Planning Commission Regular Meeting Minutes Dated December 28, 2010, discussing the proposed LEED Ordinance.

JCOS hopes our recommendation and background materials are helpful to you in making your determination.

Attachments



ATTACHMENT #2 MEMORANDUM

TO: Duff Mitchell, Chair DATE: March 29, 2019

Juneau Commission on Sustainability (JCOS)

THRU: Patty Wahto, JNU Airport Manager

FROM: Catherine Fritz, JNU Airport Architect

RE: JNU Terminal Reconstruction Project LEED certification update

The Airport requests a recommendation from JCOS that supports the use of the LEED ordinance exception for the JNU Terminal Reconstruction Project:

49.35.800 (c) "Exception procedure. If the Manager, with the consent of the Assembly, after consideration of the recommendation of the Sustainability Commission, determines that it would not be economically feasible to satisfy the prerequisites for LEED Certification in the case of a specific project, that project shall be exempt from the requirement for LEED Certification."

As you requested, the design consultants have completed the initial Project Checklist, attached, that identifies expected achievable points for LEED certification. LEED certification requires a minimum of 40 points out of the 110 possible, and requires collaboration from the project's design team, the Contractor, and the Owner. The consultants strongly recommend that more than 40 points be indentified during the design process because it is very unusual for the actual construction project to result in the specific points that were initially identified. Some points may seem achievable during design, but turn out to not be achieved during construction. It is recommended that 4 to 5 points be added to the minimum 40. The Project Checklist indicates 44 points "Yes" (achievable), 18 points "Maybe" (achievable), and 47 "Not" (achievable). The estimated cost to achieve LEED certification is \$1,011,000; costs associated with specific points are summarized in the attachment, as well.

The checklist identifies a significant cost in the category of Construction & Demolition Waste Management. LEED requires that a Waste Management Plan be developed by the Contractor (the cost of developing this plan is estimated at \$10,600), but implementing the plan is optional. The cost associated with implementing the plan is \$483,281 and it achieves 2 points. If this item is removed from the cost impact analysis, the LEED certification estimate would reduce to \$527,695. Reducing the "Yes" (achievable) points to 42 increases the risk that LEED certification will not be achieved. Alternately, one or more of the "Maybe" (achievable) items could be added.

Differing opinions have been voiced in recent weeks about the use of the term "prerequistes" in the ordinance. If interpreted narrowly, the term may refer only to the items listed on the LEED checklist. The cost of these items (without LEED fees, consultant fees, or staff time charges) is \$135,591. If interpreted broadly, the term may refer to all of the items on the checklist. The full cost (with fees and staff time charges) is \$527,695 (or greater if additional points are needed to achieve certification). The Airport requests that JCOS' recommendation considers both of these interpretations. This will allow the Assembly to consider JCOS' opinion of "economically feasibile" without assuming a specific interpretation.

The Airport wants to emphasize its committment to a high performance building. The basis of our terminal project (and all projects at the airport) is to continue to demonstrate leadership, efficiency, and responsive design that serves our community for the long term. The JNU Airport Board unanimously supported this

request for exception at their November 13, 2018 meeting. The following excerpt is reiterated from the November 19, 2018 memo presented to JCOS:

"The Airport fully supports the intent behind the LEED ordinance - that is, to have Juneau's public buildings be high performing and reflect the CBJ's sustainability goals. The Airport has embraced the available technologies and building systems to create durable, long lasting public buildings that are efficient, cost effective, and are positive contributions to CBJ's future. Completion of Phase 1 of the terminal renovation resulted in direct energy savings of more than \$130,000 per year. Once Phase 2 is complete, such savings are expected to increase substantially. Additionally, existing hazardous materials will be removed, mechanical and electrical systems will be replaced, and new interior finishes will replace aged, worn out surfaces. The planned (and budgeted) scope of work will meet the intent of the LEED ordinance without the need to pursue certification.

The Airport has gone beyond minimum requirements by extending high performance design into all of its buildings, as well as applications on the airfield such as replacing the runway lights with LED fixtures. Attaining LEED certification for phase 2 of the Terminal Reconstruction project adds no value to a project budget that is already tight and making compromises to its program. As a self-sustaining enterprise that receives no operational funding from the CBJ, the Airport is constantly balancing costs with fees it assesses tenants. Cost over-runs for this project will have to be made by the fees charged to tenants (or provided by the CBJ), since available federal funding has already been maximized. The LEED certification process is also an extra layer of design and administration that distracts from other critical elements of the project that must be completed by project staff on a very demanding schedule."

The current design incorporates many high performance features that do not necessarily achieve LEED points. These include:

- Decreasing the terminal square footage while increasing layout efficiencies and responding to modern operational needs.
- Geothermal System, including electric Heat Pumps. This will make the terminal a fully renewable energy facility by eliminating the use of diesel boilers.
- Builling Envelope Efficiency. Strategic, cost effective R Values of roof, walls, under slab, windows and vestibule entries.
- Modern Electrical devices, including LED lighting throughout and motion-activated controls.
- Mechanical sSstem automated controls for continual monitoring, adjustment and efficiencies; and improved air quality.
- Low Water use toilets and motion activated faucets.
- Increased Natural Daylighting to offset lighting load and increase human comfort.
- Low-VOC construction materials.
- New Escalator, Elevators have much higher efficiencies than current ones.



LT-1

LT-2

LEED v4 for BD+C: New Construction and Major Renovation

1

Project Checklist

1 Credit Integrative Process

Green Vehicles

 4
 2
 23
 Location and Transportation
 16

 16
 Credit
 LEED for Neighborhood Development Location
 16

 1
 Credit
 Sensitive Land Protection
 1

 1
 Credit
 High Priority Site
 2

LT-3 1 1 Credit High Priority Site

LT-4 2 3 Credit Surrounding Density and Diverse Uses

LT-5 1 2 Credit Access to Quality Transit

LT-6 1 Credit Bicycle Facilities

LT-7 1 Credit Reduced Parking Footprint

	3	0	7	Susta	ninable Sites	10
SS-1	Υ			Prereq	Construction Activity Pollution Prevention	Required
SS-2	1			Credit	Site Assessment	1
SS-3			2	Credit	Site Development - Protect or Restore Habitat	2
SS-4			1	Credit	Open Space	1
SS-5			3	Credit	Rainwater Management	3
SS-6	2			Credit	Heat Island Reduction	2
SS-7			1	Credit	Light Pollution Reduction	1

	2	3	6	Water	Efficiency	11
WE-1	Υ			Prereq	Outdoor Water Use Reduction	Required
WE-2	Υ			Prereq	Indoor Water Use Reduction	Required
WE-3	Υ			Prereq	Building-Level Water Metering	Required
WE-4	2			Credit	Outdoor Water Use Reduction	2
WE-5	0	2	4	Credit	Indoor Water Use Reduction	6
WE-6			2	Credit	Cooling Tower Water Use	2
WE-7		1		Credit	Water Metering	1

	10	5	7	Energ	y and Atmosphere	33
EA-1	Υ			Prereq	Fundamental Commissioning and Verification	Required
EA-2	Υ			Prereq	Minimum Energy Performance	Required
EA-3	Υ			Prereq	Building-Level Energy Metering	Required
EA-4	Υ			Prereq	Fundamental Refrigerant Management	Required
EA-5	4		2	Credit	Enhanced Commissioning	6
EA-6	5	2		Credit	Optimize Energy Performance	18
EA-7		1		Credit	Advanced Energy Metering	1
EA-8			2	Credit	Demand Response	2
EA-9			3	Credit	Renewable Energy Production	3
EA-10	1			Credit	Enhanced Refrigerant Management	1
EA-11		2		Credit	Green Power and Carbon Offsets	2

Project Name: JNU Airport Ph 2 Terminal Reconstruction

Date: 3/29/2019

6	5	2	Mater	ials and Resources	13
Υ			Prereq	Storage and Collection of Recyclables	Required
Υ			Prereq	Construction and Demolition Waste Management Planning	Required
	3	2	Credit	Building Life-Cycle Impact Reduction	5
2			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
	2		Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
2			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2
	Y Y 2 2 2	Y Y Y 3 2 2 2	Y Y 3 2 2 2	Y Prereq Y Prereq Prereq Prereq Credit Credit Credit Credit Credit Credit	Y Prereq Storage and Collection of Recyclables Y Prereq Construction and Demolition Waste Management Planning 3 2 Credit Building Life-Cycle Impact Reduction Building Product Disclosure and Optimization - Environmental Product Declarations Credit Building Product Disclosure and Optimization - Sourcing of Raw Materials Building Product Disclosure and Optimization - Material Ingredients

	8	3	2	Indoor	Environmental Quality	16
IE-1	Υ			Prereq	Minimum Indoor Air Quality Performance	Required
IE-2	Υ			Prereq	Environmental Tobacco Smoke Control	Required
IE-3	1	1	0	Credit	Enhanced Indoor Air Quality Strategies	2
IE-4	3			Credit	Low-Emitting Materials	3
IE-5	1			Credit	Construction Indoor Air Quality Management Plan	1
IE-6			2	Credit	Indoor Air Quality Assessment	2
IE-7	1			Credit	Thermal Comfort	1
IE-8		1		Credit	Interior Lighting	2
IE-9		1		Credit	Daylight	3
IE-10	1			Credit	Quality Views	1
IE-11	1			Credit	Acoustic Performance	1

_ 0	U	U	innovation	0
5			Credit Innovation	5
1			Credit LEED Accredited Professional	1
4	0	0	Regional Priority	4
1			Credit Regional Priority: Specific Credit	1
1			Credit Regional Priority: Specific Credit	1
1			Credit Regional Priority: Specific Credit	1

	4.0				
1		Credit	Regional Priority: Specific Credit		1
1		Credit	Regional Priority: Specific Credit		1
			3 , 1		

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

JUNEAU AIRPORT PHASE 2 TERMINAL RECONSTRUCTION LEED SUMMARY

Indicates "Maybe" points; cost not included in total

CREDIT (Italicized credits are maybes)	POINTS	ADD COST	Comments
Integrative Process	1		Requires identifying and evaluating oppurtunities for sustainability through out the design. The design team is already engaged in this process.
			team is already engaged in this process.
LOCATION & TRANSPORTATION			
Sensitive Land Protection	1	i ·	Requires building on land that was previously occuppied
Surrounding Density & Diverse Uses	2	\$0	Requires minimum of 8 businesses withing 1/2 mile
			walking distance of entrance - this encompasses Fed
			EX, businesses south of Glacier Hwy between Shell
			Simmons and Jordan Creek; Wells Fargo Bank
Access to Quality Transit	1	\$0	
Bicycle Facilities	1	\$0	covered structure north end for racks
Green Vehicles	1	\$0	Also need to designate 5% of parking spaces for
			electric cars; add two; one for employees and one in
			short term lot
SUSTAINABLE SITES			
Construction Activity Pollution Prevention	Pre-Req	I	Existing scope inclues a SWPP which will cover this requirement.
Heat Island Reduction	2	\$1,643	Use of white roof membrane instead of black
WATER EFFICIENCY			
Outdoor water use reduction	Pre-Req	\$0	No irrigtaion is planned
Indoor water use reduction	Pre-Req	\$3,816	Requires 20% Reduction from baseline; assumes low
			flow urinals
Building level water metering	Pre-Req	\$0	Measure for potable water use; CBJ meters water
	ļ		into the building; once JNU is off of the boilers this
			should suffice. Report to USGBC for 5 years.
Outdoor Water use reduction	2	\$0	No irrigation is planned

JUNEAU AIRPORT PHASE 2 TERMINAL RECONSTRUCTION LEED SUMMARY

CREDIT (Italicized credits are maybes)	POINTS	ADD COST	Comments
Indoor water use reduction	2	0	Requires 30% reduction; it is possible that the efforts
			recommended in the prereq will amount to 30% but
			we should not count on it
ENERGY & ATMOSPHERE			
Fundamental Commissioning and Verification	Pre-Req	\$63,600	Tests and verifies that all systems related to energy
			use are installed and functioning as designed
Minimum Energy Performance	Pre-Req	\$0	Already meeting this requirement as designed
Building-Level Energy Metering	Pre-Req	\$42,205	Assume we define the LEED Boundary for only the
	j		addition so we do not have to meter the existing
			systems. Report to USGBC for 5 years
Fundamental Refrigerant Management	Pre-Req	\$0	No use of refrigerants planned for cooling
Enhanced Commissioning	3	\$133,560	Additional testing and monitoring; further
		i ! !	involvement in the design process;
Optimize Energy Performance	5	\$0	Additional testing and monitoring; further
			involvement in the design & construction process
			than fundamental Commissioning
Enhanced Refrigerant Management	1	\$0	No use of refrigerants planned for cooling
MATERIALS & RESOURCES			
	Pre-Req	\$15,370	Extension of existing program; effectiveness depend
Storage and Collection of Recyclables			on people's behaviour
	Pre-Req	\$10,600	The contractor to establish goals for project to
		i !	recover, re-use or recycle waste materials.
Construction and Demolition Waste Management Planning			
	3	\$0	Math may work for 10% reduction of listed items
			such as green house gases and depletion of non
	ļ		renewable resources in existing desgin but we cannot
Building Life-Cycle Impact Reduction			count on it
Building Product Disclosure and Optimization -	2	\$0	Design currently includes materials that meet this
Environmental Product			requirement
Declarations			

JUNEAU AIRPORT PHASE 2 TERMINAL RECONSTRUCTION LEED SUMMARY

CREDIT (Italicized credits are maybes)	POINTS	ADD COST	Comments
	2	\$0	This is acheivable but it is difficult to truly measure
Building Product Disclosure and Optimization - Sourcing of			the costs prior to completion of design and
Raw Materials			construction
	2	\$0	Design currently includes materials that meet this
Building Product Disclosure and Optimization - Material			requirement
Ingredients			
ingredients	2	\$483 201	May require contractor to ship waste to seattle for
		103,201	recycling or diversion as there are not facilities to
	İ	į	recycle building materials in juneau
Construction and Demolition Waste Management			inceyere building materials in juneau
INDOOR ENVIRONMENTAL QUALITY	<u> </u>		
Minimum Indoor Air Quality Performance	Pre-Req	\$0	Design currently meets minimum standards for
200.0, Tollow			comfort regarding room ventilation and heating
			l l l l l l l l l l l l l l l l l l l
Environmental Tobacco Smoke Control	Pre-Req	\$0	Current Airport practices conform with this
			requirement
Enhanced Indoor Air Quality Strategies	1	\$27,046	Extend Walk off mats 10 ft; exhaust for copy areas
			and janitor closets meet prerequiste with seals and
			closers at doors;
Enhanced Indoor Air Quality Strategies	1	\$0	An extra point can be added to this credit if CO2
			monitors are added to the project
Low-Emitting Materials	3	\$0	Design currently includes materials that meet this
			requirement
Construction Indoor Air Quality Management Plan	1	\$26,034	requires filters for grilles/diffusers during costruction
		į	OR prohibits use of new systems with ductwork
			during construction
Thermal Comfort	1	\$0	Design currenlty follows required USGBC standard
Interior Lighting	1	\$0	Upgrades to light fixtures and controls
Daylight	1	\$0	Requires running computer simulations to measure
			light levels; it is possible to achieve this point but not
			probable. Additional Design cost; no additional
			construction cost

JUNEAU AIRPORT PHASE 2 TERMINAL RECONSTRUCTION LEED SUMMARY

CREDIT (Italicized credits are maybes)	POINTS	ADD COST	Comments
Quality Views	1	\$0	Easy requirement to meet at this location
Acoustic Performance	1	\$72,902	Requires minimizing sound from HVAC and meeting
			sound ratings for walls between offices. Sound rated
		 	walls
INNOVATION		i I	
Innovation	5	\$5,000	Meet one pilot credit and add strategies for achieving
			the credit. Other projects in Alaska have qualified for
			points in this manner.
LEED Accredited professional	1	\$0	
REGIONAL PRIORITY	İ		
Regional Priority: Specific Credit	1	\$2,500	Anticipate points for difficulties in implementing
Regional Priority: Specific Credit	1	\$2,500	LEED requirements in a remote community in Alaska
Regional Priority: Specific Credit	1	\$2,500	
Regional Priority: Specific Credit	1	\$2,500	
ADDITIONAL COSTS			
USGBC Fees		\$6,000	
Design Team Fees for LEED		\$65,000	
JNU Administrative Costs		\$45,000	
	TOTAL COST	\$1.010.976	Exclude cost of "maybe" points

* All costs include mark up for contingency & escalation

Indicates "Maybe" points; cost not included in total



LEED credits, prerequisites and points: How are they different?

Rukesh Samarasekera Mar 06, 2017

Learn how the components of LEED work to make certification possible.

This article is part of a series that provides an overview of the fundamental components of *LEED*.

LEED points, <u>LEED credits</u>, LEED prerequisites—they all contribute to certification, but how are they different? These three fundamental elements help you achieve LEED certification for your project. In the articles to come, we'll provide more detailed information about what these look like in each of the LEED rating systems: <u>BD+C</u>, <u>O+M</u>, <u>ID+C</u>, and <u>ND</u>. We'll also do a special edition on <u>Homes</u>.

Prerequisites

<u>LEED certification</u> means healthier, more productive places for us to live, learn, work and play, as well as less stress on the environment, by encouraging energy- and resource-efficient buildings. While project managers can pick and choose the credits they want to pursue, prerequisites set the minimum requirements that all buildings need to meet in order to achieve LEED certification.

Additionally, fulfilling the requirements of prerequisites will not earn points. Think of them as the foundation—without it, you can't construct a building.

Credits

These are what truly set your building apart from the rest. You are free to go for <u>any credit you</u> want within your chosen rating system, as long as it applies to your project type. Certain credits

pair well with certain prerequisites or even other credits—we call that an <u>integrated process</u>—which amounts to synergistic benefits.

If prerequisites are the foundation, then credits are everything else. That is also why credits earn you points.

Points

The more points, the higher the reward. With LEED, there are many rewards, ranging from healthier spaces to buildings that save money and resources. The number of points a project earns determines the level of LEED certification it receives. There are four levels of certification:

- Certified (40–49 points)
- Silver (50–59 points)
- Gold (60–79 points)
- Platinum (80+ points)

Credits earn points, but prerequisites do not. Check out all of the credits and prerequisites in the <u>LEED credit library</u>.

In the next article, we'll review the prerequisites and credits that make up the LEED for Building Design and Construction (<u>LEED BD+C</u>) rating system.

 $\underline{https://www.usgbc.org/articles/whats-difference-between-leed-credit-leed-prerequisite-and-leed-point}$

December 6, 2018

Airport Board and Manager Request to Waive Leadership in Energy and Environmental Design (LEED) Certification for Northern Terminal Expansion

Background.

The airport reconstruction began before the CBJ's LEED requirement, but it has taken numerous steps to enhance sustainability, reduce energy and maintenance costs, and deserves recognition for these key improvements and notably the geothermal heating system which has been nationally recognized.

The Juneau Airport and Board (Airport) has been working on the Northern Terminal Expansion plan and design for just under a year in which the project is called the Terminal Reconstruction Phase 2. Airport management and board recently found out that the expansion project would require LEED approval as it was considered a stand-alone project. The Airport did not plan or budget for LEED certification. The CBJ Ordinance adopting LEED certification for CBJ buildings was adopted in 2010. The Juneau International Airport is specifically cited in the Ordinance.

CBJ Ordinance 2010-42 An Ordinance Amending the Land Use Code To Require Construction and Renovation of Municipal Public Facilities to Meet a Sustainable Building Standard.

states under section 2 that the amendment of Chapter CBJ 49.35 Public Improvements **49.35.800 Sustainable building standards for construction and renovation of buildings.**

- (a) New construction and renovation of existing buildings and facilities by the City and Borough. The City and Borough shall construct and renovate its public facilities and buildings to sustainable building standards through the use of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system, and shall be responsible for ensuring that public facilities and buildings meet the requirements as set out in this section and are operated accordingly.

 (1) LEED shall be the quantitative measurement for how well standards are met;
- (2) All public facilities and buildings utilizing municipal funds and costing over \$5,000,000 (either general or bonded), including new private construction for Municipal leasing or renting, shall be designed and constructed in such a fashion as to achieve a minimum level of LEED Certified;
- (A) The City and Borough Engineering Department shall determine if attainment of specific LEED credits will be required within the credits pursued for LEED Certification. These required credits shall be documented in CBJ policy and shall be reviewed and updated each time a new version of the LEED standard is issued. Such update shall occur within three months of the issuance of a new LEED standard.
- (b) Application. The sustainable building standards for municipal buildings and

facilities, including but not limited to, the Juneau School District, the Juneau

International Airport, {emphasis added} and Bartlett Regional Hospital, shall apply to facilities and buildings where the principal use is regularly occupied space, including, but not limited to, buildings occupied for office, retail, classroom, healthcare, or assembly purposes.

(1) As used in this section, occupied means a facility or building whose primary purpose is for people to work, assemble, or intend to remain within to perform functions (other than routine maintenance) of the principal use of the building. Industrial facilities, such as maintenance, warehouse, and vehicle storage, are excluded from this section.

The Airport has asked the CBJ Juneau Commission of Sustainability (JCOS) for an Exemption stating that it is not economically feasible to satisfy the prerequisites for LEED Certification.

Section 3. Exception Procedure. If the Manager, with the consent of the Assembly, after consideration of the recommendation of the Sustainability Commission, determines that it would not be economically feasible to satisfy the prerequisites for LEED Certification in the case of a specific project, that project shall be exempt from the requirement for LEED Certification.

The Airport has supplied the JCOS with a Project Narrative memo dated November 19, 2018. CDD staff supplied JCOS with the CBJ Ordinance 2010-42; CBJ Memo Proposed LEED Ordinance dated 10-27-10; JCOS Memo supporting CBJ adopting LEED standard dated 4-29-10; CBJ Minutes excerpt related to CBJ Assembly discussion of proposed Ordinance 2010-42.

Since the Passage of CBJ Ordinance, four public buildings have been built to LEED standards and there have been no requests for exemption prior to the November 2018 request by the Airport.

US Green Building Council which maintains LEED states that there are over 250 airport and airport structures in the US that are LEED certified. Currently, there are both registered and certified airport projects in nearly all 50 U.S. states and in more than 40 countries and territories around the world. There are more than 201.4 million square feet of space at airports participating in LEED.

The JCOS met with the Airport team on Wednesday, November 28, 2018. This date was originally intended to be a work session, but JCOS was told that the Airport was under a tight schedule. JCOS accommodated by rearranging its previous agenda and noticing the work session to make it an official meeting.

The Airport and architect team made its presentation and reasons for an exception to the CBJ LEED ordinance. The reasons were primarily cost, but also that some of the LEED requirements did not fit well for Juneau such as using recycled materials, certified woods and water management. Costs were not only up front for registration and certification but that \$1.6M to the budget, but these were rough estimates. In addition, there would be a contractor burden to comply and management burden to administer. The memo did not have a spreadsheet breakdown of the Project costs and the additional amounts that would be required under LEED.

JCOS discussed some possible alternatives to discuss what the Airport could do to improve their request such as requiring 3rd party commissioning, focusing on applicable components of LEED. Airport felt that the Ordinance was not needed and that it might be better to have the Ordinance updated. JCOS Chair

2

stated that the Assembly, not the JCOS is the venue for any ordinance change request. JCOS would limit itself to following the Ordinance and its exception procedure.

In further discussion, Duff Mitchell, Chair sent the Airport the LEED Certification Checklist v4 and asked the Airport to respond at the next meeting of what they could and could not/would not be able to achieve under the LEED checklist.

JCOS met for a 2nd meeting on December 5, 2018 and the Airport team provided an additional memo with checklist v4. The Airport spent a bit of time on this and found that there was an overwhelming detail to LEED that they could only put so much into the task. A key point was made that since the Airport would not be submetering for tenants that they would be ineligible for registering and certifying for LEED since that was prerequisite. In the ensuing discussion, it was learned that the Airport charges the same for electricity to each tenant regardless of use. When questioned about the freezers that could cost many thousand dollars to operate in the summer, the Airport stated that those tenants with large freezers pay an additional \$1000 per month, but that the freezers would be moved out of the building upon renovation. When questioned on submetering, the answer was that it was too expensive to meet the prerequisite.

Due to time limitation, three options were posted. Accept the Airport recommendation for exception, deny the exception or conduct an additional meeting(s) on the matter. Due to holidays and the Airport need to arrive at a quick answer, the JCOS agreed to meet on an expedited process and noticed a meeting for December 7th at 10 AM at the airport.

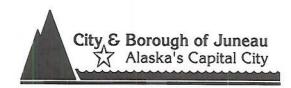
An additional meeting is scheduled for December 7, 2018 at 10 AM at the Juneau International Airport Alaska room

Discussion

- 1. All CBJ public buildings that fall under the ordinance have been LEED certified
- 2. No exceptions have been requested or approved.
- 3. Other buildings such as the Valley Library also had funding issues but did not decide to ask for a LEED exception.
- 4. Most recent Airport constructions and renovations with the number of a Million passengers a year are LEED certified in the US.
- 5. The Airport has been working on the Terminal Reconstruction Project a year but has requested expedited determination on the exception request.
- 6. JCOS has engaged in three meetings with the Airport on this matter.
- 7. JCOS has been provided a narrative and LEED v4 analysis that the Airport cannot register or become certified because it will not or cannot afford to submeter electricity as this would cost \$50,000 or more.
- Several LEED studies indicate that LEED facilities do not cost more than non-LEED facilities
 https://www.facilitiesnet.com/green/article/Measuring-The-Cost-To-Become-LEED-Certified--10057

Some additional information that would be useful:

- 1. Minutes outlining discussion with Airport Board stating the reasons why and rationale for not complying with LEED and asking for the exception to the CBJ Ordinance.
- 2. Cost breakdown of Major Items with a Work Breakdown Schedule of the Project to see what components would fall into the LEED checklist categories.
- 3. Record of public meetings related to discussion on the Terminal Reconstruction Phase 2 (northern terminal).



City and Borough of Juneau Engineering Department 155 South Seward Street Juneau, Alaska 99801

Telephone: 586-0800 Facsimile: 463-2606

DATE:

10/27/2010

TO:

Bob Doll, Chair

Public Works and Facilities Committee

FROM:

Rorie Watt, P.E., Director

Engineering Department

RE:

Proposed LEED Ordinance

As has been discussed in Committee, The Juneau Commission on Sustainability has forwarded a request that a draft ordinance requiring LEED certification on CBJ projects be considered. Their draft ordinance is attached to this memorandum.

We've talked about this quite a bit at the staff level, as well as with local architects and builders. Generally, there is plenty of support for the construction of high performance buildings, for the construction of lower maintenance buildings and for the use of building materials and heating and ventilation products that improve the indoor air quality.

On a policy level, it is our intent to pursue the points that allow energy efficiency, reduction in energy consumption and building environment controls. To a large degree, we already follow this approach.

We still have not achieved LEED certification for the Harborview and Glacier Valley Renovation projects; it is a slow process and quite frankly, it is easy to prioritize other pressing issues. Requiring certification on our larger building projects will ensure that the process is followed and will send a positive conservation message to the community. If the certification process is successful, the Assembly could consider expanding the approach at a later date.

As for additional costs, we can roughly expect about \$50,000 for certification of a \$5-10M building project. Most, if not all, of the construction costs will go towards items that are good ideas (insulation, better windows, more efficient mechanical systems) or towards widely supported betterments (low VOC adhesives and sealants, re-use of materials, etc).

Recommendation:

I recommend that the Committee forward the draft ordinance to the full Assembly for consideration with the following changes:

- A. Require certification for building projects costing greater than \$5M.
- B. Delete automatic increase to LEED Silver.



Presented by: The Manager

Introduced:

Drafted by:

J.W. Hartle

ORDINANCE OF THE CITY AND BOROUGH OF JUNEAU, ALASKA

Serial No. 2010-LEED

An Ordinance Amending Building Code (or Land Use Code) To Require Construction and Renovation of Municipal Public Facilities to Meet a Sustainable Building Standard and to Provide Incentives for Public and Privately Developed Facilities:



WHEREAS, the City and Borough anticipates that it will be facing unprecedented increases in fuel and electricity rates in the future; and

WHEREAS, in the United States, buildings account for 12.2% of freshwater use, 38% of CO2 emissions, 40% of material use, and 39% of energy use; and

WHEREAS, the City and Borough desires to reduce building operating and maintenance costs, provide a healthy and productive indoor work environment for its employees and the public, promote the community's ongoing economic vitality, and support energy efficiency; and

WHEREAS, the City and Borough recognizes that the practice of sustainability, as it relates to buildings, is the use of key resources like energy, water, materials and land in a more efficient manner than simply constructing buildings to code; and

25

26

Ord. 2010-LEED

1	WHEREAS, building sustainability creates healthier work, learning, and living
2	environments with more natural light and cleaner air, contributing to improved
3	employee and student health, comfort, and productivity; and
4	
5	WHEREAS, the LEED (Leadership in Energy and Environmental Design) Rating
6	System is a third-party certification system developed by the United States Green
7	Building Council. This system quantifies sustainable design, and awards rankings
8	based on achievement; and
9	
10	WHEREAS, these third-party certification systems are not expected to significantly
11	impact CBJ staffing; and
12	
13	WHEREAS, government is ultimately responsible for leading by example and setting
14	a community standard for the sustainable planning, design, construction, renovation
15	and operation of buildings to support economic, social, and environmental
16	sustainability.
17	
18	Now, Therefore, Be it Enacted by the Assembly of the City and Borough of
19	Juneau, Alaska:
20	
21	Section 1. Classification. This ordinance is of a general and permanent nature
22	and shall become a part of the City and Borough Code.
23	
24	Section 2. New Section. CBJ 19 (or 49), is
25	amended to add a new section to read as follows:
26	

1	19.01 (or 49) Sustainable building standards for construction					
2	and renovation of buildings.					
3						
4	(a) New construction and renovation of existing buildings and facilities by the City					
5	and Borough. The City and Borough shall construct and renovate its public facilities					
6	and buildings to sustainable building standards through the use of the U.S. Green					
7	Building Council's Leadership in Energy and Environmental Design (LEED) rating					
8	system, and shall be responsible for ensuring that public facilities and buildings meet					
9	the requirements as set out in this section and are operated accordingly.					
10						
11	(1) LEED shall be the quantitative measurement for how well standards are					
12	met;					
13	met; And costure 7 \$5N					
14	(2) All public facilities and buildings utilizing municipal funds (either general					
15	or bonded), including new private construction for Municipal leasing or					
16	renting, shall be designed and constructed in such a fashion as to achieve					
17	a minimum level of LEED Certified;					
18						
19	(A) The City and Borough Engineering Department shall determine if					
20	attainment of specific LEED credits will be required within the credits					
21	pursued for LEED Certification. These required credits shall be					
22	documented in CBJ Policy and shall be reviewed and updated each					
23	time a new version of the LEED standard is issued. Such update shall					
24	occur within three months of the issuance of a new LEED standard.					
25						
26						

1	(B) Beginning July 1, 2012, the minimum level is increased from LEED						
2	Certified to LEED Silver.						
3							
4	(b) Application. The sustainable building standards for municipal buildings and						
5	facilities, including the Juneau School District, the Juneau International Airport, and						
6	Bartlett Regional Hospital, shall apply to facilities and buildings where the principal						
7	use is regularly occupied space including, but not limited to, buildings occupied for						
8	office, retail, classroom, healthcare, or assembly purposes.						
9							
10	(1) As used in this section, occupied means a facility or building whose						
11	primary purpose is for people to work, assemble, or intended to remain						
12	within to perform functions (other than routine maintenance) of the						
13	principal use of the building. Industrial facilities, such as maintenance,						
14	warehouse, and vehicle storage, are excluded from this section.						
15							
16	Section 3. Exception Procedure. If the Manager, with the consent of the						
17	Assembly, after consideration of the recommendation of the Sustainability Commission,						
18	determines that it would not be economically feasible to satisfy the prerequisites for						
19	LEED Certification in the case of a specific project, that project shall be exempt from						
20	the requirement for LEED Certification.						
21	<i>II</i>						
22	<i>II</i>						
23	<i>II</i>						
24	<i>II</i>						
25	//						
26							

1	Section 4. Effective Date.	. This ordinar	nce shall be	come effect	ive on J	July 1,
2	2010. Existing projects with contr					
3	exempt from this ordinance.					
4	Adopted this day of	2010.				
5						
6						
7			Bruce I	Botelho, Ma	yor	
8	Attest:					
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10	Laurie J. Sica, Clerk					
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Public Works and Facilities Committee Meeting Minutes Monday, November 1, 2010 – 12:00 p.m. Page 2 of 8

tried to help and we put a lateral down on the beach where we thought he might be able to work out a deal. That's not an easy thing to do and there are other options that entail going through other people's yards, but those are longer distances and longer runs for digging and the cost of doing that isn't any less than this current situation. What we've done in the past – and this goes back to the early1990s – we've acknowledged that pumpers pay more to connect and we've reduced assessments by \$1,000. It is true that that \$1,000 doesn't cover the cost of a pump, but what is also true in North Douglas and West Valley, we globally lowered the assessments. Mr. Goldstein, do you know what the rate of your assessment is right now?

Goldstein – Our current assessment rate is \$2,600.

Watt – So the lion's share of the cost for the Goldsteins clearly is the connection charges.

Doll – If CBJ attempted to deal with the little challenges that are different for each property, we would really have a chore on our hands.

Goldstein – I understand that. But when you do have an unusual and/or singular case that Mr. Watt just mentioned, I think that there might be some opportunities then to work with residents of the City and Borough, because the difference between my neighbor and I is a solid \$8,000. Justifiably, fairness is not the only reason. We have a fully functional and SOA-DEC septic system that we're being requested to decommission and replace with a system that costs \$10,000 for the installation of a pump station. That just doesn't seem reasonable. I'm hoping that there's some leniency or some way to measure or adjust the cost for this singular unique case.

Doll – Mr. Watt, in a circumstance like this, the native allotment owner may not legally encumber his property. But is there any reason that he would not be able to allow the trench to get down to the line and let the property owner who's using it take the risk at some time in the future that the native allotment owner may no longer allow Mr. Goldstein to pump downhill or take advantage of that line. Are those extra-legal methods available?

Watt – I'm sure something like that is available. Typically, we at CBJ try not get in between adjacent property owners who have issues, hoping that both owners can reach an amicable solution.

IV. ITEMS FOR ACTION

A. LEED Ordinance

Watt – Discussion ensued regarding packet materials - the letter addressed to the PWFC Chair, and the attached draft of the ordinance from the Juneau Commission on Sustainability.

A less restrictive ordinance format may not impact most projects, but it would benefit the JSD, and we've been voluntarily monitoring their progress already. There are good reasons to support that, but it's easy to bypass certification if it's not required.

Sanford – What if there's a better plan that an architect has learned in the process of attending meetings and conferences? Would they be able to substitute that as long as it was better than the LEED Standard?

Watt – On page 4, Section 3, there's an Exception Procedure. If the Manager, with the consent of the Assembly, and after consideration of the recommendation, the Sustainability Commission determines that it's not feasible to do the LEED certification, I think that this Committee would follow that. If there was a different process, we would use that and we would try to apply common sense and practicality considerations.

Sanford – So if a designer or architect said that this is better than LEED, let's go to that. Right now, we're locked into LEED all by itself. I would think that we would like to leave that open somehow to make sure that we can get

Public Works and Facilities Committee Meeting Minutes Monday, November 1, 2010 – 12:00 p.m. Page 3 of 8

the best idea out there to do the job that we wanted to do. As long as you think that this is good to be that locked in, I'm fine with that.

On page 4, under exceptions, the Sustainability Commission would review what ever came before them and make sure that the authority sequence was followed. Then the City Manager and Assembly would look at it and give the final order. The Sustainability Commission's opinion would be considered along with other available evidence.

Sanford – I would move Staff's recommendation on the letter dated 10/27/2010 which recommends that the Committee forward a draft ordinance to the full Assembly for consideration with the following changes: A.) Require certification for building projects costing greater than \$5M; and B.) Delete automatic increase to LEED Silver level, and ask for unanimous consent.

Doll – Hearing no objection, the motion is approved.

B. LID 91 – North Douglas Sewer, Phase V – Informal Ballot Results

Anderson – What is the process for following up initial notification?

Watt – The general practice is to:

- Hold the neighborhood meeting. We advertise in the paper and we mail out a letter to every property owner affected.
- Meet with people and answer questions.
- Send out a certified letter, ballot, and return envelope, and include a description of the LID process and the proposed property assessment.

Anderson – Of the 54%, were some envelopes with "Certified-Return Requested" cards attached, returned to the Engineering Department from the Post Office indicating that either the property owner refused receipt, or that the address was not complete and/or accurate?

Watt – Yes. We sent out the ballot to the property owner's address of record, gleaned from the CBJ Assessors Office. That's the same address used for tax assessments.

Mannix – Four or five property owners received a notice either in their post office box or at their physical address but refused to claim it at their respective post office. A few were returned due to insufficient addresses. Between now and when we do the public hearing notice, we'll try to find the correct addresses. We trust that the Assessor's office should have the latest address, but sometimes they don't.

Watt – I'm always amazed that the unclaimed or undeliverable return rate is as low as it is on LIDs. We're essentially taxing people individually and directly. The results of this poll are in the normal range.

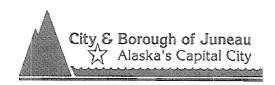
Sanford – I would move Staff's request that this Committee recommend the formation of LID #91 to the full CBJ Assembly for approval, and ask for unanimous consent.

Doll – Hearing no objection, the motion is adopted.

C. BRH Roof Project Appropriation

Watt – The \$0.5M requested is to start the roofing project for areas that were not completed in the 2005 project.

Sanford – What about the rest of the funds necessary to complete this project?



City and Borough of Juneau Engineering Department 155 South Seward Street Juneau, Alaska 99801

Telephone: 586-0800 Facsimile: 463-2606

DATE:

10/27/2010

TO:

Bob Doll, Chair

Public Works and Facilities Committee

FROM:

Rorie Watt, P.E., Director

Engineering Department

RE:

Proposed LEED Ordinance

As has been discussed in Committee, The Juneau Commission on Sustainability has forwarded a request that a draft ordinance requiring LEED certification on CBJ projects be considered. Their draft ordinance is attached to this memorandum.

We've talked about this quite a bit at the staff level, as well as with local architects and builders. Generally, there is plenty of support for the construction of high performance buildings, for the construction of lower maintenance buildings and for the use of building materials and heating and ventilation products that improve the indoor air quality.

On a policy level, it is our intent to pursue the points that allow energy efficiency, reduction in energy consumption and building environment controls. To a large degree, we already follow this approach.

We still have not achieved LEED certification for the Harborview and Glacier Valley Renovation projects; it is a slow process and quite frankly, it is easy to prioritize other pressing issues. Requiring certification on our larger building projects will ensure that the process is followed and will send a positive conservation message to the community. If the certification process is successful, the Assembly could consider expanding the approach at a later date.

As for additional costs, we can roughly expect about \$50,000 for certification of a \$5-10M building project. Most, if not all, of the construction costs will go towards items that are good ideas (insulation, better windows, more efficient mechanical systems) or towards widely supported betterments (low VOC adhesives and sealants, re-use of materials, etc).

Recommendation:

I recommend that the Committee forward the draft ordinance to the full Assembly for consideration with the following changes:

- A. Require certification for building projects costing greater than \$5M.
- B. Delete automatic increase to LEED Silver.

MEMORANDUM

ATTACHMENT #2

CITY/BOROUGH OF JUNEAU

155 South Seward Street, Juneau, Alaska 99801

Date:

April 29, 2010

To:

Bruce Botelho, Mayor

Members of the Juneau Assembly

Rod Swope, City Manager

Sean Lynch, Chaff

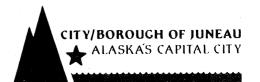
From: The Juneau Commission on Sustainability

For some time now the CBJ Engineering Department has been considering various drafts of an ordinance adopting LEED as the CBJ standard for design and construction of public buildings. The Commission applauds this effort and encourages the submission of a completed draft to the Assembly for its action.

We believe that LEED is the best standard yet published to achieve the benefits of energy conservation and operating cost reduction. Moreover, LEED offers a review process to insure that the objectives set for any construction project have in fact been achieved.

The Commission is aware that the field of sustainable construction standards is rapidly evolving. Newer standards are in draft that CBJ may wish to review in the future for potential adoption by ordinance. Until such standards are available, we consider the staff's adaptation of LEED to be a useful method for reducing operating costs, one which we understand is already widely used in the design and construction community of Juneau.

The Commission commends the Engineering Department on its LEED initiative and recommends that a draft ordinance be prepared for submission to the Assembly.



1 Presented by: The Manager Introduced: 2 Drafted by: J.W. Hartle 3 4 ORDINANCE OF THE CITY AND BOROUGH OF JUNEAU, ALASKA 5 Serial No. 2010-42 6 An Ordinance Amending the Land Use Code To Require 7 Construction and Renovation of Municipal Public Facilities to Meet a Sustainable Building Standard. 8 9 WHEREAS, the City and Borough anticipates that it will be facing unprecedented 10 increases in fuel and electricity rates in the future; and 11 12 WHEREAS, in the United States, buildings account for 12.2 percent of freshwater 13 use, 38 percent of carbon dioxide (CO2) emissions, 40 percent of material use, and 39 14percent of energy use; and 15 16 WHEREAS, the City and Borough desires to reduce it's building operating and 17 maintenance costs, provide a healthy and productive indoor work environment for its 18 employees and the public, promote the community's ongoing economic vitality, and 19 support energy efficiency; and 20 21WHEREAS, the City and Borough recognizes that the practice of sustainability, as 22 it relates to buildings, is the use of key resources like energy, water, materials and land 23 in a more efficient manner than simply constructing buildings to code; and 24 25 26

-1-

1	WHEREAS, building sustainability creates healthier work, learning, and living
2	environments with more natural light and cleaner air, contributing to improved
3	employee and student health, comfort, and productivity; and
4	
5	WHEREAS, the LEED (Leadership in Energy and Environmental Design) Rating
6	System is a third-party certification system developed by the United States Green
7	Building Council. This system quantifies sustainable design, and awards rankings
8	based on achievement; and
9	
10	WHEREAS, these third-party certification systems are not expected to significantly
11	impact CBJ staffing; and
12	
13	WHEREAS, government is ultimately responsible for leading by example and setting
14	a community standard for the sustainable planning, design, construction, renovation
15	and operation of buildings to support economic, social, and environmental
16	sustainability.
17	
18	Now, Therefore, Be it Enacted by the Assembly of the City and Borough of
19	Juneau, Alaska:
20	
21	Section 1. Classification. This ordinance is of a general and permanent nature
22	and shall become a part of the City and Borough Code.
23	
24	
25	
26	

-2-

Ord. 2010-42

Section 2. Amendment of Chapter. CBJ 49.35 Public Improvements, is amended to add a new section, CBJ 49.35.800 Sustainable building standards for construction and renovation of buildings, to read:

49.35.800 Sustainable building standards for construction and renovation of buildings.

(a) New construction and renovation of existing buildings and facilities by the City and Borough. The City and Borough shall construct and renovate its public facilities and buildings to sustainable building standards through the use of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system, and shall be responsible for ensuring that public facilities and buildings meet the requirements as set out in this section and are operated accordingly.

26

- (1) LEED shall be the quantitative measurement for how well standards are met;
- (2) All public facilities and buildings utilizing municipal funds and costing over \$5,000,000 (either general or bonded), including new private construction for Municipal leasing or renting, shall be designed and constructed in such a fashion as to achieve a minimum level of LEED Certified;
 - (A) The City and Borough Engineering Department shall determine if attainment of specific LEED credits will be required within the credits pursued for LEED Certification. These required credits shall be documented in CBJ policy and shall be reviewed and updated each

1	time a new version of the LEED standard is issued. Such update shall
2	occur within three months of the issuance of a new LEED standard.
3	
4	(b) Application. The sustainable building standards for municipal buildings and
5	facilities, including but not limited to, the Juneau School District, the Juneau
6	International Airport, and Bartlett Regional Hospital, shall apply to facilities and
7	buildings where the principal use is regularly occupied space, including, but not limited
8	to, buildings occupied for office, retail, classroom, healthcare, or assembly purposes.
9	
10	(1) As used in this section, occupied means a facility or building whose
11	primary purpose is for people to work, assemble, or intend to remain
12	within to perform functions (other than routine maintenance) of the
13	principal use of the building. Industrial facilities, such as maintenance,
14	warehouse, and vehicle storage, are excluded from this section.
15	
16	Section 3. Exception Procedure. If the Manager, with the consent of the
17	Assembly, after consideration of the recommendation of the Sustainability Commission,
18	determines that it would not be economically feasible to satisfy the prerequisites for
19	LEED Certification in the case of a specific project, that project shall be exempt from
20	the requirement for LEED Certification.
21	//
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24	<i>II</i>
25	<i>II</i>
26	//

1	Section 4.	Effective Date	. This ordina	ance shall become effective on July	1,				
2	2011. Existing p	rojects with fully	executed contr	racts for design services on the effecti	ve				
3	date shall be exempt from this ordinance.								
4	Adopted this	s day of	2010.						
5									
6									
7				Bruce Botelho, Mayor					
8	Attest:								
9									
10	Lauri	e J. Sica, Clerk							
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There being no objection, AME2010 0006 was recommended for approval to the Assembly by the PC, as it is further modified by staff per the discussion of the Commissioners in relation to subsection (4)(B) at this meeting.

AME2010 0010

An Ordinance requiring Leadership in Energy and Environmental Design (LEED) certification on certain CBJ projects.

Applicant: CBJ Engineering Location: Boroughwide

Staff report

Mr. Pernula said this proposal is to adopt LEED certification standards for certain CBJ building projects that would cost greater than \$5 million, which originates from the Juneau Commission on Sustainability (JCOS). He explained that this ordinance requiring LEED certification on certain CBJ projects would reside in Title 49, so the PC is required to review this before the proposed ordinance is presented to the Assembly. He explained that LEED certification includes energy standards, materials, maintenance, etc. He said an estimate was provided that they can roughly expect to pay about \$50,000 for LEED certification of a \$5-\$10 million building project. He noted that these costs should be able to be recouped over the long term by reducing the maintenance cost of buildings. He stated that this is just for LEED certification, not for an automatic increase to LEED Silver, and the CBJ Engineering is requesting that section to be deleted.

Public testimony - None

Commission discussion

Chair Gladziszewski stated that the Municipality of Anchorage approved LEED certification, although they set a higher goal to immediately become fully certified by 2012 for all buildings within Anchorage over a preset dollar amount and square footage threshold, which she believes the CBJ should do so as well, including for all other large buildings being constructed in this community.

Mr. Miller said he built the first LEED certified home in the State of Alaska here in Juneau, and there is a lot to learn undergoing that process. He explained that attempting to become LEED certified beyond the basic level to Silver, or Gold, etc. is very difficult in Southeast Alaska because so many points in the LEED Rating System are water conservation related, such as irrigation, etc., which is in general for the nation so it does not specifically relate to Juneau. He said requiring the basic level of LEED certification for certain CBJ buildings is a great idea, including that the \$50,000 cost for LEED certification on a \$5 million job is probably fairly accurate, but only because there are now already more energy-efficient buildings being constructed in Juneau than is required. He said the cost for the CBJ to construct a building to code, plus the cost to LEED certify it would end up totaling much more than the expected \$50,000 listed in the report. He explained that the Public Works Facility Building was a \$4.5 million job, which was just to build it to code, with no extra insulation, etc., but if that building would have been LEED certified it would have cost \$1.5 to do so, although even so the CBJ still should have required that it be done. He said the report states that the CBJ is already following this LEED approach, i.e., the airport expansion project is being built per many of the LEED standards, but they have not achieved LEED certification for the Harborview and Glacier Valley Renovation projects. Therefore, he intends to support the proposed LEED ordinance, although he does not believe this is the answer, but it is important for the CBJ to do so for a couple of projects because they have a lot to learn. He also believes that eventually the CBJ will end up not requiring LEED certification of its buildings, and instead, will probably do away with it because they might devise a better method later on to build energy-efficient buildings that works better in Southeast Alaska.

Chair Gladziszewski explained that when she previously worked for the CBJ, they held discussions regarding LEED certification of CBJ buildings, and they talked about many issues involved with doing so, including possibly devising their own method in which to build more energy-efficient buildings. However, in the end they became overwhelmed as to how they might attempt build energy-efficient buildings on their own since the LEED Rating System was already in place, which they all agreed is not perfect but it is better than nothing, which might be easier to implement because they are somewhat already doing so.

Mr. Watson said the Public Works & Facilities Committee (PWFC) held previous discussions about possibly requiring higher certification levels of LEED than the standard, but doing so would be very difficult for the CBJ to achieve in Juneau, including possibly not being able to recoup construction costs if they did.

Ms. Grewe said the JCOS discussed this, and decided that having the CBJ institute their own LEED system did not seem practical. In addition, she recalls that the JCOS was initially presented with the requirement of LEED certification for CBJ building projects costing greater than \$3 million, not \$5 million as Rorie Watt of CBJ Engineering later presented to the JCOS. She explained that the JCOS requested Mr. Watt to explain the rationale for increasing the projects costing greater than \$5 million because the JCOS intended to contest it, as they preferred the \$3 million threshold. She noted that Mr. Watt ended up presenting to the JCOS justification for the \$5 million figure by providing a vague dollar-and-sense rationale, so she still prefers to retain the \$3 million threshold. Chair Gladziszewski said she has not been working for the CBJ for two years, but she recalls back then that the CBJ discussed the \$3 million threshold as well. She noted that the Public Works Building ended up costing \$4.5 million, which the CBJ should have made LEED certified, and this would have had to take place if the threshold level was preset at \$3 million prior to it being constructed.

Mr. Miller said to go through the LEED certification process is going to cost the same, whether it is for a \$1 million, or a \$5 million job. He explained that most homeowners who are in it for the long term are typically not willing to include money for energy-conservation measures, but it provides for immediate payback. He explained that the very first month the homeowners would have a much lower fuel bill, including less maintenance costs over the long term. Even so, he said it is fairly difficult to get homeowners to voluntarily commit to paying for energy-saving costs upfront, which is why the CBJ has to start this process. He said he is not opposed to lowering the required certification for building projects costing greater than \$3 million from \$5 million.

Mr. Pernula said this proposed ordinance has already been introduced to the Assembly, and they are scheduled to hold a public hearing at their next meeting in a couple of weeks.

<u>Staff recommendation</u>: that the PC forward the draft ordinance to the full Assembly for consideration with the following changes:

A. Require certification for building projects costing greater than \$5M.

B. Delete automatic increase to LEED Silver.

Commission action

<u>MOTION</u>: by Mr. Miller, that the PC adopts the Director's analysis and findings and forwards the draft ordinance, AME2010 0010, with a recommendation for approval to the Assembly. The approval would require LEED certification on certain CBJ projects, with a revision to the costing threshold listed below in A, and also on page 3, line 18 of the proposed ORD. 2010-42, and retain B as is:

- A. Require certification for building projects costing greater than \$53M.
- B. Delete automatic increase to LEED Silver.

FRIENDLY AMENDMENT: by Chair Gladziszewski, that the PC amends the proposed ordinance on page 4, line 17 to revise "Sustainability Commission" to "Juneau Commission on Sustainability."

Mr. Miller accepted Chair Gladziszewski's friendly amendment.

Mr. Satre said in terms of the motion, noting that it is fairly rare when he states this, although he notices that there is not one paragraph in the proposed ordinance that he is able to support. Instead, he believes it is the "flavor of the day" and "feel-good stuff." He also believes CBJ Engineering, the PC, the Assembly, and others involved should find methods to properly engineer CBJ's public buildings to take into consideration life-cycle costs, etc., not just in relation to cost-effective ways to construct buildings. He said the CBJ has to assure that all City public infrastructures are built and those dollars are wisely invested, so he is unable to support this motion.

Mr. Watson spoke against the motion, stating that he supports Mr. Satre's position.

Mr. Miller said he somewhat agrees with Mr. Satre, stating that there is an option for the CBJ to take this on themselves, but he does not see that happening at this time. As he said before, he does not believe that this ordinance will last, and instead, he feels that it will be in effect for a little while. Therefore, with the PC forwarding it with a recommendation for approval to the Assembly, and if it is approved then the CBJ will gain valuable information and tools so the City might later have the ability to figure out how to do this on their own. He noted that since he has undergone the LEED certification process one time, he knows that he will never do so again, but it was an incredibly valuable experience. He said he had to pay for that type of education, but it was important, which he believes has made him a better builder, so it should likewise make the engineers of CBJ better builders of projects in the future as well, which is why he supports the motion.

Chair Gladziszewski said there are many issues with the LEED certification process, although if the CBJ did as Mr. Satre is suggesting regarding life-cycle costing, etc., but the CBJ has only partially done so, including that it always turns out that the CBJ ends up not having the funding to make sure that buildings are constructed as being energy efficient, so the CBJ ends up paying for this later on. She said the proposed ordinance is definitely not perfect, but it is a step forward in the right direction for the CBJ.

Roll call vote

Ayes: Grewe, Bennett, Taug, Miller, Gladziszewski

Nays: Watson, Satre

Motion passes: 5:2; and AME2010 0010 was forwarded to the Assembly with a recommendation for approval per the revisions made by the PC.

VIII. <u>UNFINISHED BUSINESS</u> - None

X. <u>BOARD OF ADJUSTMENT</u> - None

XI. OTHER BUSINESS - None

BREAK: 8:54 to 8:59 p.m.

XII. <u>DIRECTOR'S REPORT</u>

Alaska Commercial Fishermen's Memorial (ACFM) in Juneau regarding the Proposed Cruise Ship Dock

Mr. Pernula said he previously provided via e-mail to the PC a letter from the ACFM, which is addressed to him regarding the Cruise Ship Dock Concept 16B, dated December 13, 2010. He said another letter addressed to him is included, which is also from the ACFM, dated June 25, 2003. He said a third letter from the ACFM is addressed to Mayor Botelho and the Assembly, dated November 26, 2007, and the Assembly has passed a resolution that was introduced on September 20, 2010, by the CBJ Manager for approval of a design concept for replacing the CBJ Cruise Ship Docks in Downtown Juneau, while working with the ACFM for an acceptable location for the memorial, and how it would interact with the new docks. Furthermore, he included a write-up by Docks & Harbors regarding options the ACFM might pursue.

He said representatives of the ACFM are now stating that they are not interested in any other site then where the memorial is, which they want to remain open for when they conduct the Blessing of the Fleet ceremony so all of the boats travel through in single file in front of it, but Concept 16B does not allow for this. He said the end of the ACFM letter dated December 13, 2010, addressed to him states, "The Memorial's Board requests that the Plan" meaning the Long Range Waterfront Plan (LRWP), "be amended by the City to formally list our concerns and that CDD acknowledge receipt and understanding of this letter and of our previous unanswered letter." Therefore, he asked if the PC wishes to reopen the LRWP to address these issues. Chair Gladziszewski stated that the last ACFM letter was provided to Mr. Pernula on December 13, 2010, which was after the Assembly approved design Concept 16B per Res. 2542 on September 20, 2010, so the ACFM obviously knew what the Assembly did, which was to support Docks & Harbors design Concept 16B and to work closely with the ACFM, so this seems to answer Mr. Pernula's question. In addition, Res. 2542 states that the Assembly "...expresses its approval of the Docks and Harbors Board recommendation for improving the CBJ cruise ship docks..." Mr. Pernula said this is correct, but he believes what the ACFM are upset about is that there was not sufficiently strong language in the original LRWP to protect the interest of the ACFM regarding the memorial. Chair Gladziszewski said she understands, but she does not know what point there might be to amend the LRWP, which is given that the Assembly already approved Res. 2542. Mr. Pernula asked if he should request the ACFM representatives to appear before the PC; Chair Gladziszewski said not particularly.