

Skanska USA Building Inc.

221 Yale Ave N. Suite 400

Seattle, WA 98109 Phone 206-726-8000 Fax 206-328-9235

Web www.skanskausa.com

February 20, 2015

Colorado State University

Project: ASC 2015- Sustainable Building & LEED Problem Statement

Subject: Final Scoring Detail

Dear David,

Congratulations on competing in the ASC 2015 Sustainable Building & LEED Problem Statement, I hope you found the experience both educational and enjoyable. We understand how much effort goes into preparing for the competition every year and to your credit the level of preparation showed, the judges were extremely impressed with the level of competition this year:

<u>Team</u>	Score
University of Florida	78.08
Colorado State University	76.40
University of Washington	71.80
University of New Mexico	63.51

Attached is a scoring summary sheet detailing how well your team performed on: the prequalification, each of the five problems and the addendum. The median and average scores of each problem are given for comparison. The total median and average scores for the written portion of the problem statement are shown at the top of the sheet along with your team's total score. In the upper right of the sheet your team's rank against the other competitors is shown for both the written and oral portions of the competition. The last pages detail a breakdown of how the judges scored your team on each written problem.

The Skanska problem statement team enjoyed the competition this year and we hope to see you all back for next year's event. If you have any questions please feel free to contact me at Anthony.spinelli@skanska.com.

Very Truly,

Anthony J. Spinelli Project Manager

Skanska USA Building

www.skanska.com

Phone +1 206 726 8000 Mobile +1 206 406 2361 Fax +1 866 457 5286

Anthony J. Spinelli

cc: ASC 2015 Problem Scoring

		Median Score	Average Score	Colorado State
83	Totals	50.95	48.30	60.02

Prequalification

Number of AP on Team
Format
Sustainable Thoughts
Green Achievements
Page Count

	Maximum Possible	Median Score	Average Score	Colorado State
	1			0.00
	1			1.00
	1			1.00
	1			1.00
	1			1.00
Prequalificat	ion Totals	3.25	3.13	4.00

Rank Against Other Teams

Written Response:	Top Third
Oral Presentation:	Top Third
Overall Score:	Top Third

LEED Credit Comparison

10

0
Overall Project Review
Materials Category
Recommendation of Rating System

	Maximum Possible	Median Score	Average Score	Colorado State
	3			1.82
	2			1.75
	5			2.70
LEED Credit Co	omparison	4.45	4.86	6.27

On-Site Renewable

20

Solar Panel Design
Additional Renewable
Alternate Energy Sources

	Maximum	Median	Average	Colorado
	Possible	Score	Score	State
	12			6.75
	6			4.50
	2			2.00
On-Site F	Renewable	14.00	13.03	13.25

Life Cycle Analysis

Annual Energy Use Life Cycle Analysis Subcontractor Selection Incentives & Rebates Fixture Recommendation

15



	Maximum	Median	Average	Colorado
	Possible	Score	Score	State
	2			2.00
	6.5			6.50
	2			2.00
	3.5			1.50
	1			1.00
Life Cycl	e Analysis	10.00	9.50	13.00

Carbon Footprint

15



Bid Comp	arison	
Local vs.	Out of	Town

	Maximum Possible	Median Score	Average Score	Colorado State
	10			4.00
	5			5.00
Carbon	Footprint	10.50	9.17	9.00

Water Collection and Use

15



Irrigation Consumption Rain Water Collection Cistern

	Maximum Possible	Median Score	Average Score	Colorado State
	6			5.00
	6			4.00
	3			3.00
Vater Collection and Use		6.75	7.08	12.00

Addendum

3



Bonus Questions - Estimated Ridership 64000 Bonus Questions - Gallons Saved 11000 (27000)

polius Questions - Gallons Saveu 1100
Bonus Questions - Improve Ridership
Formatting
Exceeded Page Count

	Maximum Possible	Median Score	Average Score	Colorado State
00	1			1.00
7000)	1			0.50
	1			1.00
	-5			-
	-10			-
Addendum Totals		2.00	1.53	2.50

COLORADO STATE UNIVERSITY

10 Total Points Possible

10 Total Points Possible)	
PART 1: Overall Project Review	3 Pts Possible	1.82	
SS - 2009	0.2	0.05	
WE - 2009	0.2	0.15	
EA - 2009	0.2	0.1	
MR - 2009	0.2	0.1	
IEQ - 2009	0.2	0.05	
IDP - 2009	0.2	0.2	
RPC - 2009	0.2	0.2	
LT - v4	0.2	0.15	
SS - v4	0.2	0.02	
WE - v4	0.2	0.18	
EA - v4	0.2	0.1	
MR - v4	0.2	0.02	
IEQ - v4	0.2	0.1	
Innovation - v4	0.2	0.2	
RP - v4	0.2	0.2	
Comments		PROVIDE REASONINGS!	
PART 2: Materials Category	2 Pts Possible	1.75	
Credits of the future: do they mention all 3 credits and fully describe what each entails?	1	1	
Did they research what needs to happen to accomplish credits of the future (EPDs, 3rd party certified products, "USGBC approved program")	0.25	0	
Mention of MR credits being combined	0.75	0.75	
Comments		Didn't mention the crucial information on how it i nearly impossible to attain EPD credits	
PART 3: Recommendation of Rating System	5 Pts Possible	2.7	
Two or More Innovative Ideas	2	1.5	
Are the innovative ideas realistic/attainable?	1	0.5	
Were the innovative ideas explained well, easily understood?	1	0.5	
		0.2	
Convincing	1	0.2	
Comments	1	DO not go for a gold if you can only get 60. only go for a certification if you can comfortably attain it with a few credits over for safety	

Problem # 2 - Life Cycle Sustainability Analysis - Lighting		
#1.a Correct light fixture take-off QTY	1	1
#1.b Use correct LA County power/cost formula (22.3)	0.5	0.5
#1.c Answer	0.5	0.5
#2.a Complete detailed life cycle analysis	3	3
#2.b Identify criteria and formaula used	3	3
#2.c Organization of answer/data	0.5	0.5
#3.a Select correct subcontractor	2	2
#4.a Quality of incentives/rebates (1 pt ea max of 3)	3	1
#4.b Organization of answer/findings	0.5	0.5
#5.a Correct selection of light fixture	1	1
·	15	13

Incentive program seemed weak and copied

		15 Total Points Possible	Colorado State
Problem #3	- 4th St. Station Carbon Footprint		
Part I #1	Takeoff of Concrete CY	1.5	0.5
Part I #2	Bid comparison / least expensive	2.5	1.5
Part I #3	Carbon Footprint of each supplier / lowest	4	1.5
Part I #4	Best value supplier	2	0.5
Part II #1	Carbon footprint of crew	2	2
Part II #2	Carbon footprint of crew - local	1.5	1.5
Part II #3	Carbon footprint of crew - carpool	1.5	1.5
	Total	15	9

Notes Pt I # 1 - did not show work

Pt I # 2 - did not state unit prices used Pt I # 3 - not well organized well and did not account for material quantity.

Assumptions were well stated

Pt I # 4 - did not use manufacturing assumption correctly Pt II - should not show so many significant figures in answer

Colorado State

		•
Problem #4 - Water Usage and Collection		
#1. a) Forumula	2	1
#1 b) ET _o	1	1
#1.c) Landscaped Areas	1	1
#1.d) Answer	1	1
#1.e) Organization	1	1
#2.a) Rainfall data by month	1	1
#2.b) Rainwater Collection Formula	1.5	1
#2.c) Collection Area	1.5	0
#2.d) Answer - Size of Cistern	1	1
#2.e) Organization	1	1
#3.a) Volume Calculation	0.5	0.5
#3.c) Graph/Method	1.5	1.5
#3.a) Answer & Organization	1	1

15 12

Used incorrect collection area

Didn't use cumulative water collection calculating supplemental water for dry months

20 Total Points Possible

	Problem #5 - Onsite Renewable Energy			
#1.a '	Correct quantities	2	1	
	Work is shown, correct equation is used	2	1	n
	Marked up drawing is accurate and realistic	1	0.25	C e
	Work is shown and is correct	1	0.5	N
#1.b	Acknowledged factors other than initial cost	1	1	1
	Narrative is clear and illustrates the rationale	2	1	1
	i. Correct direction	1	1	
	ii. Correct angle	1	0.5	
#1.c	iii. Correct dates	0.5	0	
	iii. Correct angles	0.5	0.5	
#2a.	Product chosen, with cost and quantity	2	2	
#2.b.	cost of panel support structure	1	1	
#2.c	payback period, and cost assumptions	2	1	P
#2.d	Projected cost of maintenance	1	0.5	N n
#3.a	Response is clear, concise, and realistic	0.5	0.5	┨
#3.b	Response is clear, concise, and realistic	0.5	0.5	1
#3.c	Response is clear, concise, and realistic	0.5	0.5	1
#3.d	Response is clear, concise, and realistic	0.5	0.5	
	+	20	42.25	-

need better formatting on the charts

Doesn't account for mechanical

equipment and is only on one roof

Need references for the graphs

Payback period too high

No reference to how cost of maintenanced was calculated