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February 20, 2015

Brigham Young University, Idaho

Project: ASC 2015- Sustainable Building & LEED Problem Statement

Subject: Final Scoring Detail

Dear Chris,

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>	<u>Score</u>
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

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Anthony J. Spinelli

CC: ASC 2015 Problem Scoring

		Median Score	Average Score	BYU - Idaho
83	Totals	50.95	48.30	49.40

Prequalification

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

	Maximum Possible	Median Score	Average Score	BYU - Idaho
	1			0.00
	1			1.00
	1			0.25
	1			0.00
	1			1.00
Prequalificat	ion Totals	3.25	3.13	2.25

Rank Against Other Teams

Written Response:	Middle Third
Oral Presentation:	Bottom Third
Overall Score:	Middle Third

LEED Credit Comparison

Overall Project Review
Materials Category
Recommendation of Rating System

	Maximum Possible	Median Score	Average Score	BYU - Idaho
	3			1.15
	2			2.00
	5			3.00
LEED Credit Comparison		4.45	4.86	6.15

On-Site Renewable

20

Solar Panel Design
Additional Renewable
Alternate Energy Sources

	Maximum Possible	Median Score	Average Score	BYU - Idaho
	12			6.00
	6			6.00
	2			2.00
On-Site R	tenewable	14.00	13.03	14.00

Life Cycle Analysis

15

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

	Maximum Possible	Median Score	Average Score	BYU - Idaho
	2			1.50
	6.5			4.00
	2			2.00
	3.5			1.50
	1			1.00
Life Cycl	e Analysis	10.00	9.50	10.00

Carbon Footprint

15

Bid Comp	pariso	n
Local vs.	Out	of Town

	Maximum Possible	Median Score	Average Score	BYU - Idaho
	10			5.50
	5			5.00
Carbon	Footprint	10.50	9.17	10.50

Water Collection and Use

15



Irrigation Consumption Rain Water Collection Cistern

	Maximum	Median	Average	BYU -
	Possible	Score	Score	Idaho
	6			0.50
	6			2.00
	3			1.50
Water Collection and Use		6.75	7.08	4.00

Addendum

3

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

Formattin	g	
Exceeded	Page	Count

	Maximum Possible	Median Score	Average Score	BYU - Idaho
00	1			1.00
7000)	1			0.50
	1			1.00
	-5			-
	-10			-
Addend	um Totals	2.00	1.53	2.50

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10 Total Points Possible		BRIN
PART 1: Overall Project Review	3 Pts Possible	1.15
SS - 2009	0.2	0.05
WE - 2009	0.2	0.2
EA - 2009	0.2	0.15
MR - 2009	0.2	0.15
IEQ - 2009	0.2	0.1
IDP - 2009	0.2	0
RPC - 2009	0.2	0
LT - v4	0.2	0.1
SS - v4	0.2	0.2
WE - v4	0.2	0.05
EA - v4	0.2	0.05
MR - v4	0.2	0
IEQ - v4	0.2	0.1
Innovation - v4	0.2	0
RP - v4	0.2	0
Comments		
PART 2: Materials Category	2 Pts Possible	2
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	0.25
accomplish credits of the future (EPDs, 3rd party	0.25	0.25
accomplish credits of the future (EPDs, 3rd party certified products, "USGBC approved program")		
accomplish credits of the future (EPDs, 3rd party certified products, "USGBC approved program") Mention of MR credits being combined Comments		0.75
accomplish credits of the future (EPDs, 3rd party certified products, "USGBC approved program") Mention of MR credits being combined	0.75	0.75 great, men
accomplish credits of the future (EPDs, 3rd party certified products, "USGBC approved program") Mention of MR credits being combined Comments PART 3: Recommendation of Rating System	0.75 5 Pts Possible	0.75 great, men
accomplish credits of the future (EPDs, 3rd party certified products, "USGBC approved program") Mention of MR credits being combined Comments PART 3: Recommendation of Rating System Two or More Innovative Ideas	0.75 5 Pts Possible 2	0.75 great, men
accomplish credits of the future (EPDs, 3rd party certified products, "USGBC approved program") Mention of MR credits being combined Comments PART 3: Recommendation of Rating System Two or More Innovative Ideas Are the innovative ideas realistic/attainable? Were the innovative ideas explained well, easily	0.75 5 Pts Possible 2	0.75 great, men 3 1
accomplish credits of the future (EPDs, 3rd party certified products, "USGBC approved program") Mention of MR credits being combined Comments PART 3: Recommendation of Rating System Two or More Innovative Ideas Are the innovative ideas realistic/attainable? Were the innovative ideas explained well, easily understood?	0.75 5 Pts Possible 2 1	0.75 great, men 3 1 0.5

Problem # 2 - Life Cycle Sustainability Analysis - Lighting		
#1.a Correct light fixture take-off QTY	1	0.5
#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	2
#2.b Identify criteria and formaula used	3	1.5
#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 10

Question 2- good walkthru of the question, but no formula provided

Payoff was wrong but they want LED's for Green Council.

15 Total Points Possible BYU Idaho

Problem #3 -	4th St. Station Carbon Footprint		
Part I #1	Takeoff of Concrete CY	1.5	1
Part I #2	Bid comparison / least expensive	2.5	1.5
Part I #3	Carbon Footprint of each supplier / lowest	4	2.5
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 10.5

Notes Pt I # 1 - did not include 7% waste

Pt I # 2 - math error in sales tax amount

Pt I # 3 - did not show enough calcs or assumptions to support

answer

Pt I # 4 - did not state answer

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

15 4

missing landscape areas
no equations or assumptions for part 1
Didn't analyze water usage/collection by month
didn't use collection factor
never provided a volume of cistern

	Problem #5 - Onsite Renewable Energy			
	Correct quantities	2	1	
#1.a	Work is shown, correct equation is used	2		No work shown
	Marked up drawing is accurate and realistic	1	0.5	Does not account for the mechanical equipment on the roof
	Work is shown and is correct	1	0.5	
#1.b	Acknowledged factors other than initial cost	1	0	
	Narrative is clear and illustrates the rationale	2	1	
	i. Correct direction	1	1	
	ii. Correct angle	1	0	
#1.c	iii. Correct dates	0.5	0.5	
	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	Good detail
#2.c	payback period, and cost assumptions	2	2	
#2.d	Projected cost of maintenance	1	1	
#3.a	Response is clear, concise, and realistic	0.5	0.5	†
#3.b	Response is clear, concise, and realistic	0.5	0.5	
#3.c	Response is clear, concise, and realistic	0.5	0.5	
#3.d	Response is clear, concise, and realistic	0.5	0.5	