

Value Engineering Session – March 31, 2009

Design Development Summary



Morris Memorial Building Renovation

- 9,800 SF partial First Floor Interior Renovation
- Estimated Const Cost of \$1.714 million
- Estimated Bid Date January 2010
- Program Components:
 - Health Services
 - Student Success / Trio / Tutoring
 - Facilities / Mailroom

New Building

- 22,280 SF 2-Story Type VB Sprinklered
- Estimated Const Cost of \$10.892 million
- Estimated Bid Date May 2011
- Program Components:
 - Admissions / Records / Evaluation / Financial Aid
 - Welcome Center
 - Veterans
 - DSPS (Disabled Student Programs and Services)
 - EOPS (Extended Opportunities Programs and Services)
 - Counseling
 - Shared Assembly Spaces

Site Work

- Nestled between Existing Trees
- Estimated Const Cost of \$1.368 million



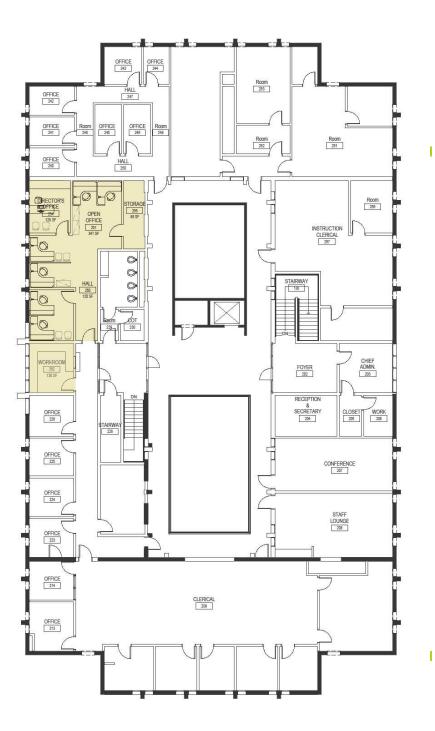
1st Floor – Morris Building



- SHARED PROGRAM
- STUDENT SUCCESS / SSS(TRIO) / SPECIAL PROJECTS / TUTORING
- HEALTH SERVICES
- MAILROOM / FACILITIES

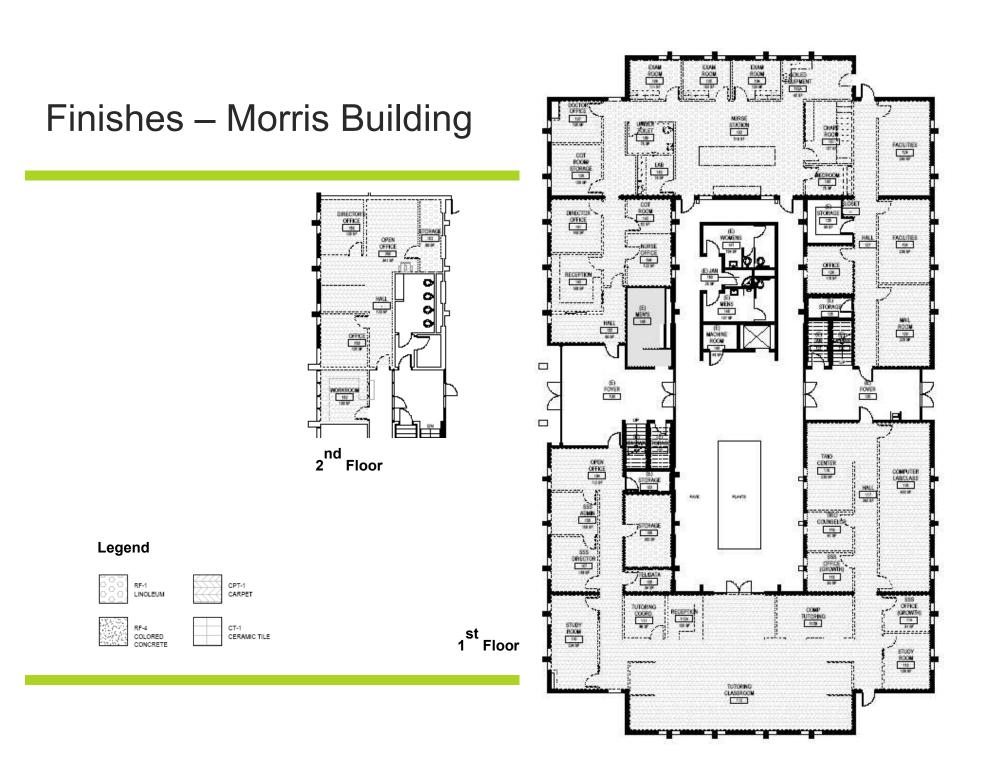
2nd Floor – Morris Building

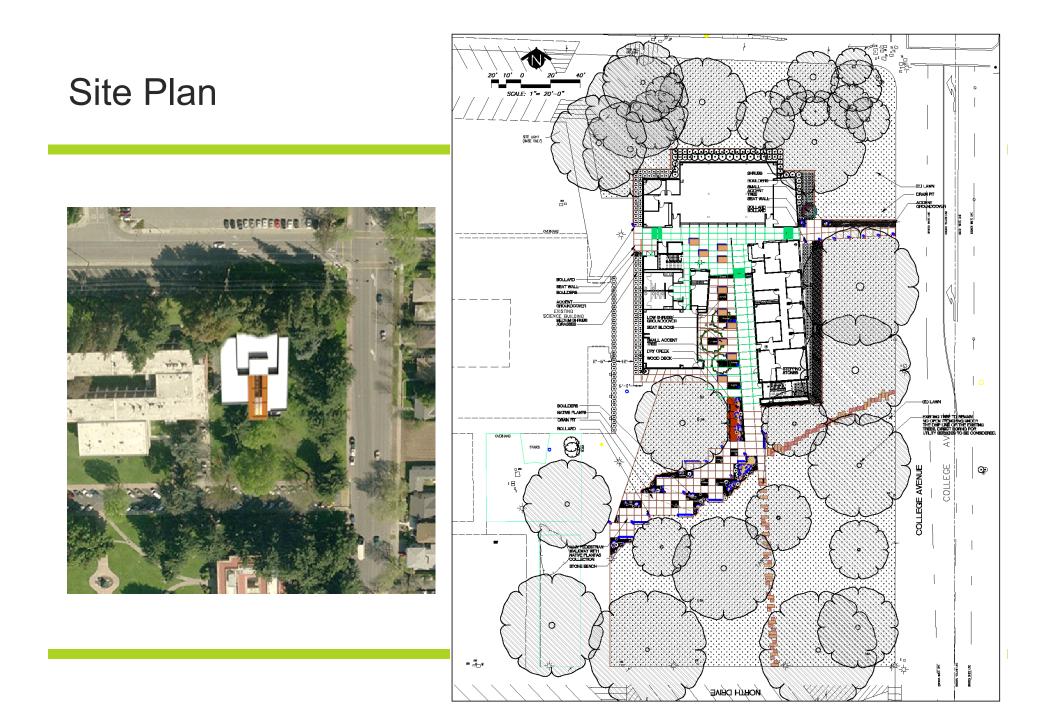
NOTE: Not in scope of construction budget.



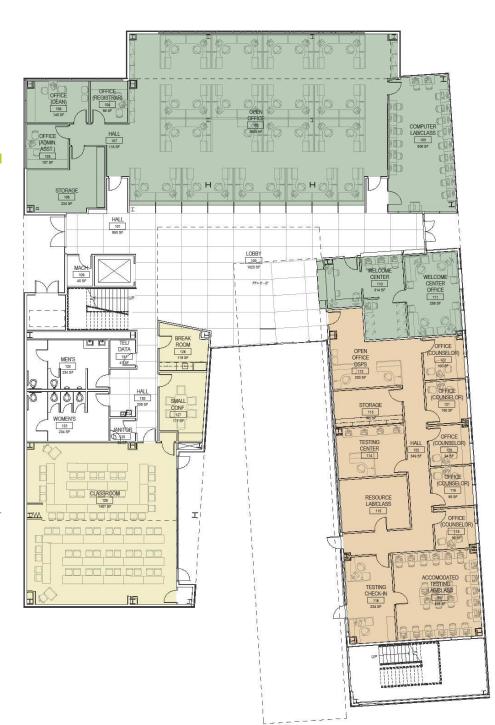
LEGEND

PRE COLLEGE





1st Floor – New Building



LEGEND

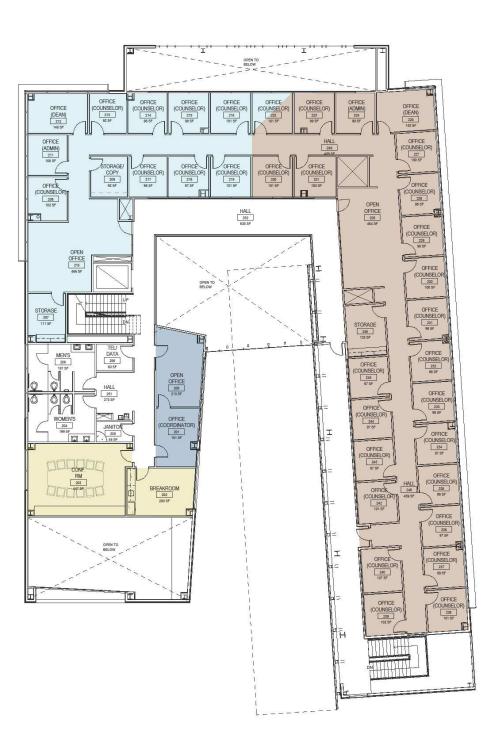


ADMISSIONS/RECORDS/EVALUATION/ FINANCIAL AID/WELCOME CENTER

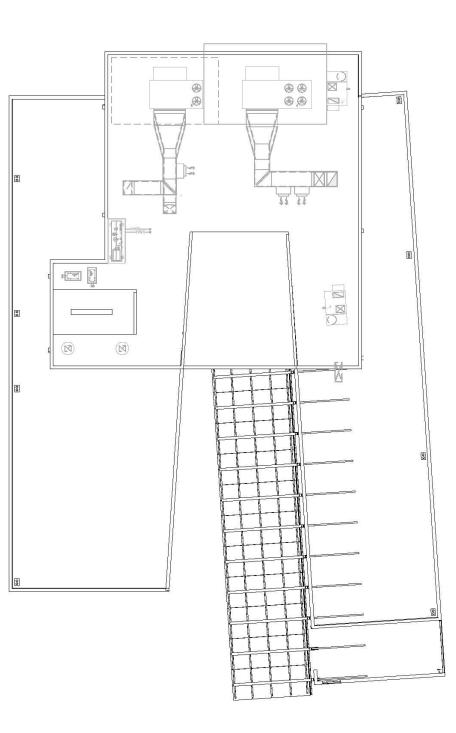
SHARED PROGRAM

DSPS

2nd Floor – New Building

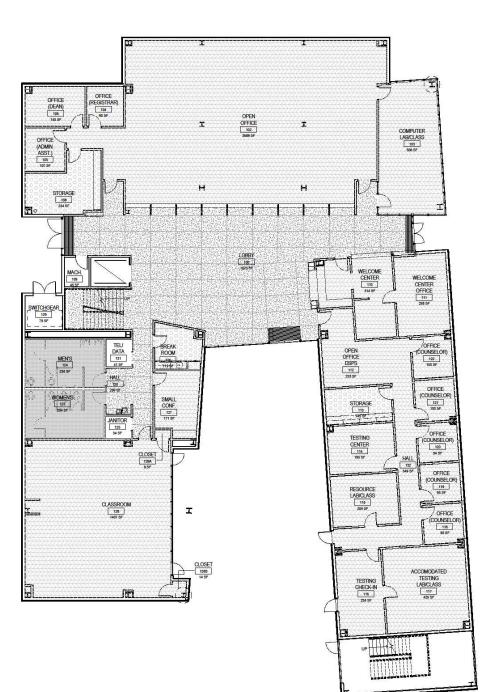




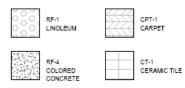


Roof Plan – New Building

Finishes – New Building

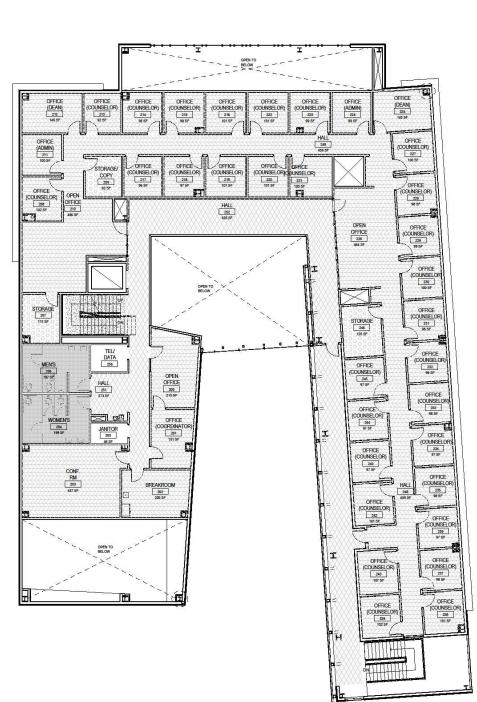


Legend

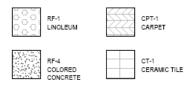


1 Floor

Finishes – New Building



Legend





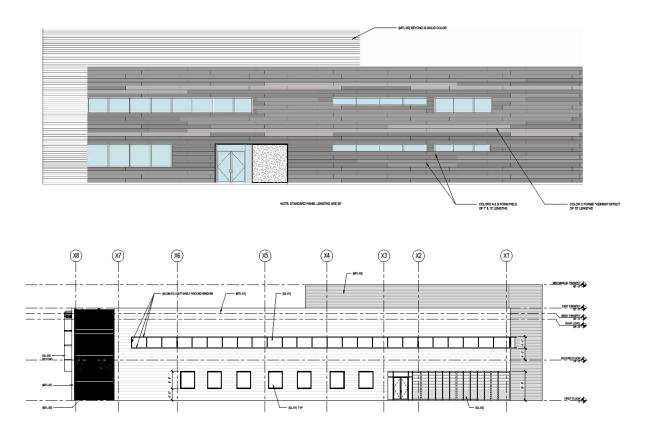
New Building – Courtyard Welcome



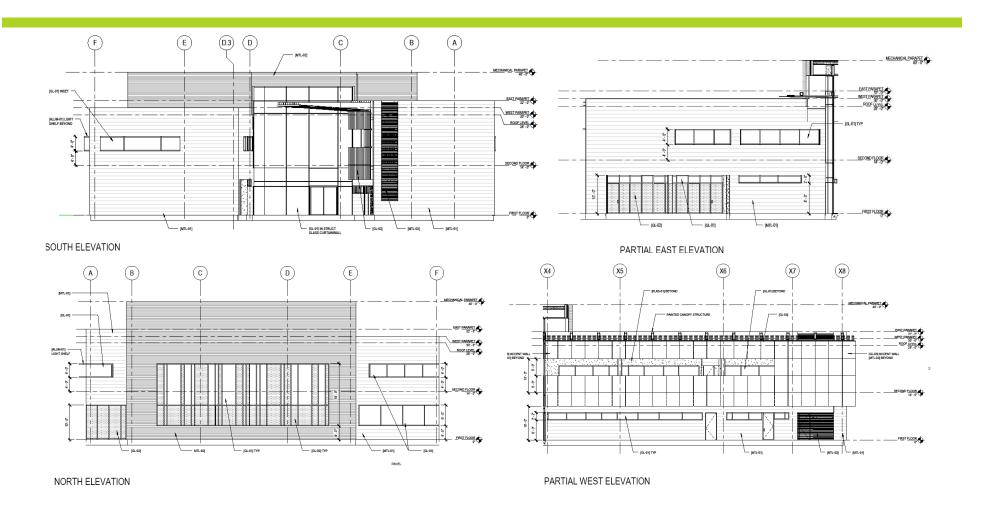
New Building – Coldwell Beacon



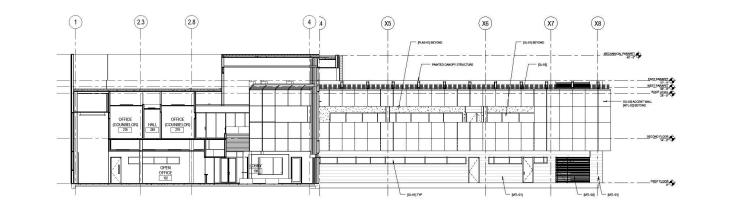
Finishes – Exterior Elevations

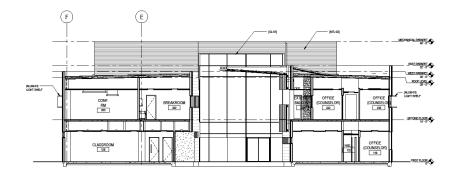


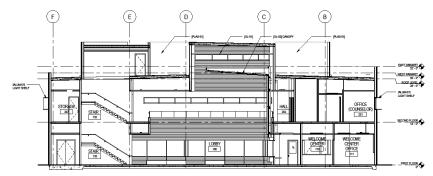
Finishes – Exterior Elevations



Finishes – Building Sections







Bullpen Considerations



Bullpen Considerations – Feedback

Key Functions

- Central Location
- Provide Direction
- Distribute Information
- Waiting & Queuing for Services
- Providing Services

Key Issues

- Visibility of Welcome Center
- Demarcation of Bullpen & Administrative Area
- Security of Spaces adjacent to Bullpen After Hours
- Waiting, Queuing & Wayfinding
- Relative Privacy of Student-Advisor Interactions
- Acoustics: Noise Level, Privacy & Reverberation



Bullpen – Vertical Circulation & Seating



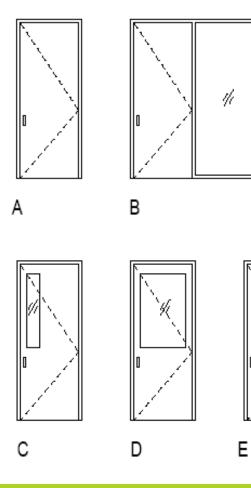
Bullpen – Welcome Center



Bullpen – Admissions Service Stations



Other Interior Considerations





• Interior Vision Lights

- ^o Natural Light
- ^o Privacy
- ^o Supervision

Acoustical Conditions

- ^o Counseling Offices
- ^o Computer/Testing Labs

• Furnishings

- ° Built-in Cabinetry
- ° FF&E
- Special Wall Coverings
 - ^o Acoustical absorption
 - ^o Tack boards
 - ^o White/Marker boards
- **Special Lighting**
 - ^o Overhead vs. Task/Desk Fixtures

LEED Considerations – NC v2.2

Yes 7 No 8 3 3 Sus	tainable Sites	14 Points
Y Prereq 1	Construction Activity Pollution Prevention	Required Civil
1 Credit 1	Site Selection	1 Arch/Owr
1 Credit 2	Development Density & Community Connectivity	1 Arch/Owr
1 Credit 3	Brownfield Redevelopment	1 Arch/Owr
1 Credit 4.1	Alternative Transportation, Public Transportation Access	1 Arch/Owr
1 Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1 Arch/Owr
1 Credit 4.3	Alternative Transportation, Low-Emitting & Fuel-Efficient Vehicles	1 Owner
1 Credit 4.4	Alternative Transportation, Parking Capacity	1 Arch/Owr
	Site Development, Protect or Restore Habitat	1 Land
	Site Development, Maximize Open Space	1 Land
	Stormwater Design, Quantity Control	1 Civil
	Stormwater Design, Quality Control	1 Civil
1 Credit 7.1 1 Credit 7.2	Heat Island Effect, Non-Roof	1 Civil/Land
	Heat Island Effect, Roof	1 Arch
Credit 8	Light Pollution Reduction	1 Elect
	er Efficiency	5 Points
Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1 Land
1 Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1 Land
1 Credit 2	Innovative Wastewater Technologies	1 Civil/Plum
Credit 3.1	Water Use Reduction, 20% Reduction	1 Plumb
1 Credit 3.2	Water Use Reduction, 30% Reduction	1 Plumb
4 4 10 Ene	rgy & Atmosphere	17 Points
4 4 10 Ene Y Prereg 1		17 Points Required Mech
_	Fundamental Commissioning of the Building Energy Systems	
Prereq 1		Required Mech
Prereq 1 Prereq 2 Prereq 3 one for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management inv Construction projects registered after June 28 th , 2007 are regulated to achieve at least two (2) points of	Required Mech Required Mech Required Mech nder EAc1.
Prereq 1 Prereq 2 Prereq 3	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management www.commution.projects registered siture Jacobie 2007 are regulated to achieve at least two (2) points or Optimize Energy Performance	Required Mech Required Mech Required Mech
Prereq 1 Prereq 2 Prereq 3 one for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management www.contrustor projects registered and value 20 ⁴ , 2007 are regated to exhive at least two (2) points us Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations	Required Mech Required Mech Required Mech nder EAc1.
Prereq 1 Prereq 2 Prereq 3 one for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management we construction projects registered after June 28 th , 2007 are regulated to achieve at least two (2) points or Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14% New Buildings or 7% Existing Building Renovations	Required Mech Required Mech Required Mech nder EAct. 1 to 10 Mech
Prereq 1 Prereq 2 Prereq 3 one for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management ww contuston projects agaited attractice 2%, 2007 as regulated to achieve at least two (2) points Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14% New Buildings or 10.5% Existing Building Renovations 17.5% New Buildings or 10.5% Existing Building Renovations	Required Mech Required Mech Required Mech nder EAct. 1 to 10 Mech 1
Prereq 1 Prereq 2 Prereq 3 one for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management we Construction projects registered alar June 28 th , 2007 are regated to achieve at least two (2) points an Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14% New Buildings or 10.5% Existing Building Renovations 4 21% New Buildings or 11.5% Existing Building Renovations	Required Mech Required Mech Required Mech I to 10 Mech 1 2
Prereq 1 Prereq 2 Prereq 3 One for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14% New Buildings or 7% Existing Building Renovations 17.5% New Buildings or 10.5% Existing Building Renovations 21% New Buildings or 11% Existing Building Renovations 24.5% New Buildings or 15% Existing Building Renovations 24.5% New Buildings or 51.5% Existing Building Renovations	Required Mech Required Mech Required Mech 1 to 10 Mech 1 2 3
Prereq 1 Prereq 2 Prereq 3 One for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management ww contruston projects address driv June 2%, 2007 as regarded to advises at least two (2) points Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14.% New Buildings or 10.5% Existing Building Renovations 4.21% New Buildings or 10.5% Existing Building Renovations 4.21% New Buildings or 17.5% Existing Building Renovations 24.5% New Buildings or 17.5% Existing Building Renovations 28% New Buildings or 21% Existing Building Renovations	Required Mech Required Mech Required Mech 1 to 10 Mech 1 2 3 4
Prereq 1 Prereq 2 Prereq 3 one for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14% New Buildings or 7% Existing Building Renovations 17.5% New Buildings or 10.5% Existing Building Renovations 21% New Buildings or 11% Existing Building Renovations 24.5% New Buildings or 15% Existing Building Renovations 24.5% New Buildings or 51.5% Existing Building Renovations	Required Mech Required Mech Required Mech 1 to 10 Mech 2 3 4 5
Prereq 1 Prereq 2 Prereq 3 one for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management ww contruston projects address driv June 2%, 2007 as regarded to advises at least two (2) points Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14.% New Buildings or 10.5% Existing Building Renovations 4.21% New Buildings or 10.5% Existing Building Renovations 4.21% New Buildings or 17.5% Existing Building Renovations 24.5% New Buildings or 17.5% Existing Building Renovations 28% New Buildings or 21% Existing Building Renovations	Required Mech Required Mech Required Mech 1 to 10 Mech 1 2 3 4 5 6
Prereq 1 Prereq 2 Prereq 3 one for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management Workstudies rejects registered also July 2007 are regated to achieve at least two (2) paths at Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14% New Buildings or 7% Existing Building Renovations 17.5% New Buildings or 10.5% Existing Building Renovations 24 New Buildings or 11.5% Existing Building Renovations 24.5% New Buildings or 21% Existing Building Renovations 28% New Buildings or 21% Existing Building Renovations 28% New Buildings or 24.5% Existing Building Renovations 31.5% New Buildings or 24.5% Existing Building Renovations	Required Mech Required Mech Required Mech 1 to 10 Mech 1 2 3 4 5 6 7
Prereq 1 Prereq 2 Prereq 3 one for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management wordstuding projects registed start June 26 ⁹ , 2007 as registed to achieve at least two (2) points wordstuding program and the start of t	Required Mech Required Mech Required Mech 1 to 10 Mech 2 3 4 5 5 6 7 8
Prereq 1 Prereq 2 Prereq 3 one for EAct: All LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management We Contruston projects addited the Jack 2007 as regarded to achieve at least two (2) paths a Optimize Energy Performance 10.5% New Buildings or 7% Existing Building Renovations 14% New Buildings or 10% Existing Building Renovations 24% New Buildings or 11% Existing Building Renovations 24% New Buildings or 17% Existing Building Renovations 34.5% New Buildings or 17% Existing Building Renovations 33.5% New Buildings or 24% Existing Building Renovations 33.5% New Buildings or 31.5% Existing Building Renovations 33.5% New Buildings or 31.5% Existing Building Renovations 33.5% New Buildings or 31.5% Existing Building Renovations	Required Mech Required Mech Required Mech Ito 10 Mech 1 2 3 4 5 6 7 8 9
Prereq 1 Prereq 2 Prereq 3 obs for EAct Al LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management Wordstudin prejets registred thr Jane 24°, 2007 we regulad to solver at least two (2) points at Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14% New Buildings or 7% Existing Building Renovations 17.5% New Buildings or 10.5% Existing Building Renovations 24.5% New Buildings or 11.5% Existing Building Renovations 24% New Buildings or 21% Existing Building Renovations 31.5% New Buildings or 24.5% Existing Building Renovations 33.5% New Buildings or 32% Existing Building Renovations 33.5% New Buildings or 32% Existing Building Renovations 33.5% New Buildings or 32% Existing Building Renovations 33.5% New Buildings or 31% Existing Building Renovations 34.5% New Buildings or 34% Existing Building Renovations	Required Mech Required Mech Required Mech 1 to 10 Mech 1 2 3 4 5 6 7 8 9 10
Prereq 1 Prereq 2 Prereq 3 Ode for EAst Al LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management ww contuston projects agaited attriates 20, 2007 as regulated to ableve at least two (2) poths Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14% New Buildings or 7% Existing Building Renovations 14% New Buildings or 1.5% Existing Building Renovations 21% New Buildings or 1.5% Existing Building Renovations 24.5% New Buildings or 1.5% Existing Building Renovations 31.5% New Buildings or 21% Existing Building Renovations 33% New Buildings or 24% Existing Building Renovations 34.5% New Buildings or 35% Existing Building Renovations 35% New Buildings or 35% Existing Building Renovations 36% New Buildings or 35% Existing Building Renovations 36% New Buildings or 35% Existing Building Renovations 37% New Buildings or 35% Existing Building Ren	Required Mech Required Mech Required Mech I to 10 Mech 2 3 4 5 5 6 7 8 9 10 3 Arch/Owr
Prereq 1 Prereq 2 Prereq 3 Ode for EAst Al LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management two Contrustion projects agateed and June 20, 2007 as regulated to adverse at least two (2) paths of Optimize Energy Performance 10.5% New Buildings or 7.5% Existing Building Renovations 14% New Buildings or 7.5% Existing Building Renovations 17.5% New Buildings or 10.5% Existing Building Renovations 21% New Buildings or 10.5% Existing Building Renovations 24.5% New Buildings or 7.5% Existing Building Renovations 31.5% New Buildings or 24.5% Existing Building Renovations 31.5% New Buildings or 24.5% Existing Building Renovations 33.5% New Buildings or 24.5% Existing Building Renovations 33.5% New Buildings or 31% Existing Building Renovations 32.5% New Buildings or 31% Existing Building Renovations 32.5% New Buildings or 31% Existing Building Renovations 32.5% Renewable Energy 2.5% Renewable Energy 7.5% Renewable Energy 7.5% Renewable Energy	Required Mech Required Mech Required Mech I to 10 Mech 1 2 3 4 5 6 7 8 9 10 10 Arch/Own 1
Prereq 1 Prereq 2 Prereq 3 obs for EAct Al LEED for 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management two contruston practices data with the 20 points Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14% New Buildings or 3.5% Existing Building Renovations 17.5% New Buildings or 10.5% Existing Building Renovations 4 21% New Buildings or 12% Existing Building Renovations 24.5% New Buildings or 11% Existing Building Renovations 31.5% New Buildings or 21% Existing Building Renovations 33.5% New Buildings or 24% Existing Building Renovations 33% New Buildings or 31% Existing Building Renovations 33% New Buildings or 31% Existing Building Renovations 33% New Buildings or 31% Existing Building Renovations 33.5% New Buildings or 31% Existing Building Renovations 33.5% New Buildings or 31% Existing Building Renovations 32% New Buildings or 31% Existing Building Renovations 32% New Buildings or 31% Existing Building Renovations 2.5% Renewable Energy 2.5% Renewable Energy 7.5% Renewable Energy 7.5% Renewable Energy 7.5% Renewable Energy 7.5% Renewable Energy	Required Mech Required Mech Required Mech 1 to 10 Mech 1 2 3 4 5 5 6 7 7 8 9 10 1 to 3 Arch/Own 1 2
Prereq 1 Prereq 2 Prereq 3 over for EAct, AI LEEO for 1 1 2 5 Credit 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management Wordstudien prejets registered the Jace 24 ⁹ , 2007 we regulated to schewe at least two (2) peters of Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14% New Buildings or 71% Existing Building Renovations 24% New Buildings or 11.5% Existing Building Renovations 24% New Buildings or 11.5% Existing Building Renovations 24% New Buildings or 12% Existing Building Renovations 33.5% New Buildings or 24.5% Existing Building Renovations 33.5% New Buildings or 24.5% Existing Building Renovations 33.5% New Buildings or 32% Existing Building Renovations 33.5% New Buildings or 35% Existing Building Renovations 34.5% New Buildings or 35% Existing Building Renovations 35% New Buildings or 35% Existing Building Renovations 35% New Buildings or 35% Existing Building Renovations 32.5% New Buildings or 35% Existing Building Renovations 32.5% Renewable Energy 2.5% Renewable Energy	Required Mech Required Mech Required Mech 1 to 10 Mech 1 2 3 4 5 6 7 7 8 9 10 1 to 3 Arch/Own 1 2 3
Prereq 1 Prereq 2 Prereq 3 Ide for EAct Al LEED for 1 4 2 5 Credit 1	Fundamental Commissioning of the Building Energy Systems Minimum Energy Performance Fundamental Refrigerant Management two contruston practices data with the 20 points Optimize Energy Performance 10.5% New Buildings or 3.5% Existing Building Renovations 14% New Buildings or 3.5% Existing Building Renovations 17.5% New Buildings or 10.5% Existing Building Renovations 4 21% New Buildings or 12% Existing Building Renovations 24.5% New Buildings or 11% Existing Building Renovations 31.5% New Buildings or 21% Existing Building Renovations 33.5% New Buildings or 24% Existing Building Renovations 33% New Buildings or 31% Existing Building Renovations 33% New Buildings or 31% Existing Building Renovations 33% New Buildings or 31% Existing Building Renovations 33.5% New Buildings or 31% Existing Building Renovations 33.5% New Buildings or 31% Existing Building Renovations 32% New Buildings or 31% Existing Building Renovations 32% New Buildings or 31% Existing Building Renovations 2.5% Renewable Energy 2.5% Renewable Energy 7.5% Renewable Energy 7.5% Renewable Energy 7.5% Renewable Energy 7.5% Renewable Energy	Required Mech Required Mech Required Mech 1 to 10 Mech 1 2 3 4 5 5 6 7 8 9 10 1 to 3 Arch/Owr 1 2 3 1 Owner

Yes 7 No		
5 2 6 Mater	rials & Resources	13 Points
Prereg 1	Storage & Collection of Recyclables	Required Arch
1 Credit 1.1	Building Reuse, Maintain 75% of Existing Walls, Floors & Roof	1 Arch
1 Credit 1.2	Building Reuse, Maintain 100% of Existing Walls, Floors & Roof	1 Arch
1 Credit 1.3	Building Reuse, Maintain 50% of Interior Non-Structural Elements	1 Arch
1 Credit 2.1	Construction Waste Management, Divert 50% from Disposal	1 Arch
1 Credit 2.2	Construction Waste Management, Divert 75% from Disposal	1 Arch
1 Credit 3.1	Materials Reuse, 5%	1 Arch
1 Credit 3.2	Materials Reuse 10%	1 Arch
1 Credit 4.1	Recycled Content, 10% (post-consumer + ½ pre-consumer)	1 Arch
1 Credit 4.1	Recycled Content, 20% (post-consumer + ½ pre-consumer)	1 Arch
1 Credit 5.1	Regional Materials, 10% Extracted, Processed & Manufactured Regional	1 Arch
1 Credit 5.2	Regional Materials, 20% Extracted, Processed & Manufactured Regional	1 Arch
1 Credit 5	Rapidly Renewable Materials	1 Arch
1 Credit 7	Certified Wood	1 Arch
m 7 No	Cerdined Hood	17441
1 2 2 Indoc	or Environmental Quality	15 Points
1.0		
Prereq 1	Minimum IAQ Performance	Required Mech
Prereq 2	Environmental Tobacco Smoke (ETS) Control	Required Owner
Credit 1	Outdoor Air Delivery Monitoring	1 Mech
1 Credit 2	Increased Ventilation	1 Mech
Credit 3.1	Construction IAQ Management Plan, During Construction	1 Mech
Credit 3.2	Construction IAQ Management Plan, Before Occupancy	1 Mech
Credit 4.1	Low-Emitting Materials, Adhesives & Sealants	1 Arch
Credit 4.2	Low-Emitting Materials, Paints & Coatings	1 Arch
Credit 4.3	Low-Emitting Materials, Carpet Systems	1 Arch
Credit 4.4	Low-Emitting Materials, Composite Wood & Agrifiber Products	1 Arch
Credit 5	Indoor Chemical & Pollutant Source Control	1 Arch/Mech
Credit 6.1	Controllability of Systems, Lighting	1 Elect
1 Credit 6.2	Controllability of Systems, Thermal Comfort	1 Mech
1 Credit 7.1	Thermal Comfort, Design	1 Mech
1 Credit 7.2	Thermal Comfort, Verification	1 Mech/Owr
Credit 8.1	Daylight & Views, Daylight 75% of Spaces	1 Arch
Credit 8.2	Daylight & Views, Views for 90% of Spaces	1 Arch
	vation & Design Process	5 Points
- Innov	autor a Design Flocess	or onno
Credit 1.1	Innovation in Design: Green Education	1
Credit 1.2	Innovation in Design: Provide Specific Title	1
1 Credit 1.3	Innovation in Design: Provide Specific Title	1
Credit 1.3		
1 Credit 1.3 1 Credit 1.4	Innovation in Design: Provide Specific Title	1
	Innovation in Design: Provide Specific Title LEED [®] Accredited Professional	1 1 Arch
	LEED® Accredited Professional	1 Arch
1 Credit 1.4 1 Credit 2 (m 7 No	LEED® Accredited Professional	

*New Building tracking LEED Silver

New Building – Courtyard Welcome



Canopy Options – Panels



Canopy Options – Slats

