

Westwood Public
Schools

Hanlon Elementary
School Building
Project

School Building
Committee

06.12.2020



Agenda

- **Purpose**
- **Sustainability Subcommittee Recommendation**
- **Other Considerations**

PURPOSE

What should be included in Budget with Preferred Schematic Option

- 1. Review recommendations from sustainability subcommittee**
- 2. Discuss other considerations**

Sustainability Subcommittee: Recommendation

Proceeding into Schematic Design (SD) Phase:

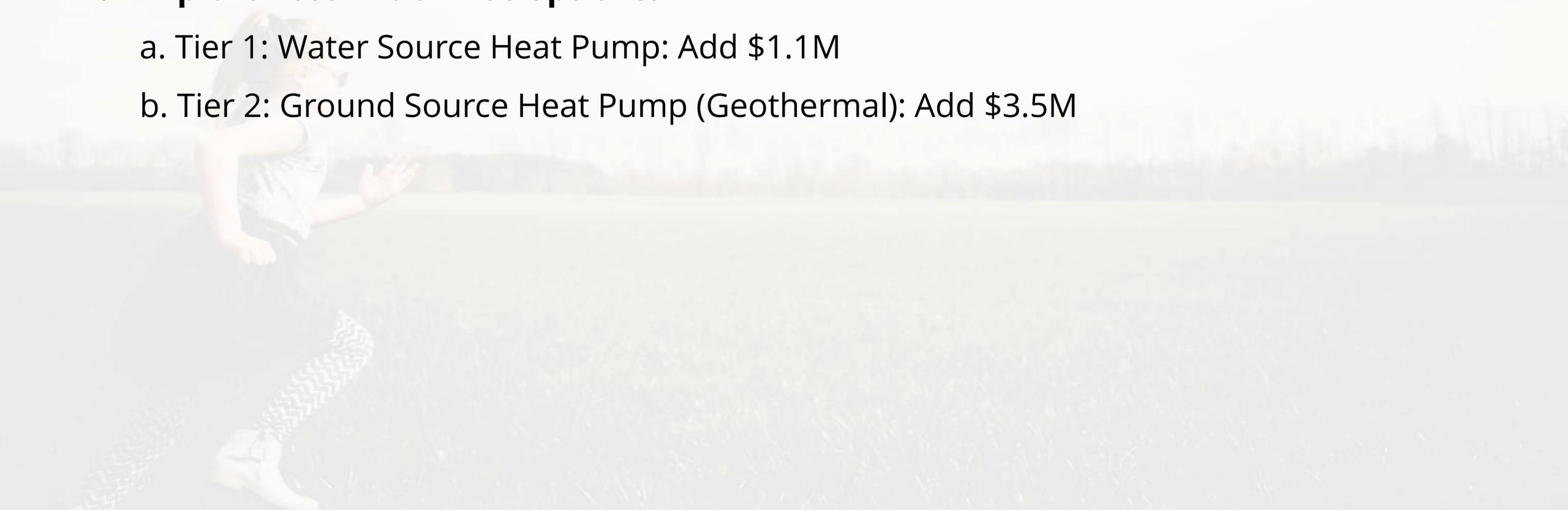
- 1. Priority: 20% above new energy code to achieve 2% points from MSBA**



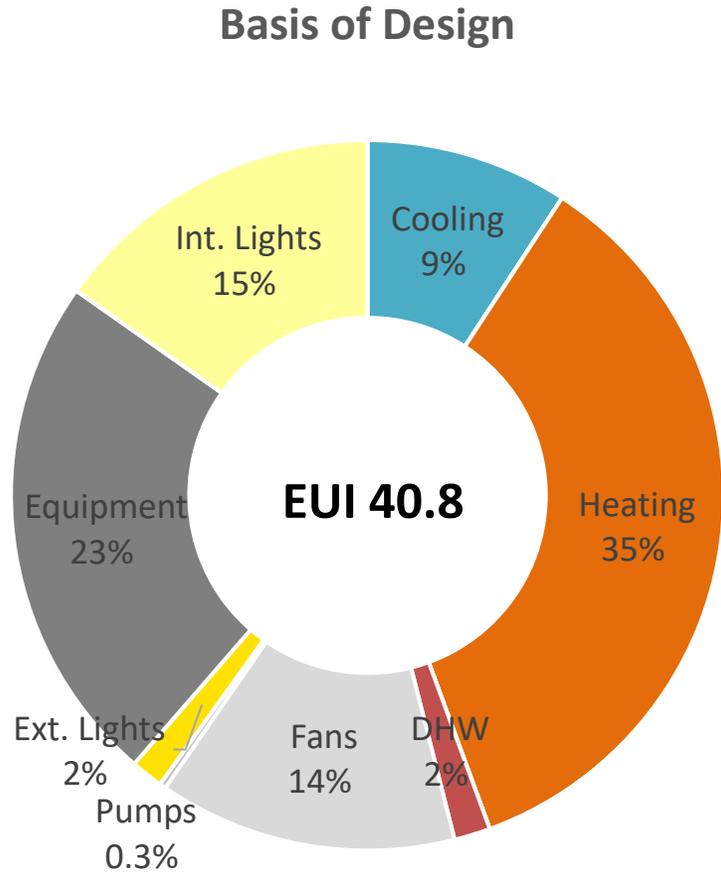
Sustainability Subcommittee: Recommendation

Proceeding into Schematic Design (SD) Phase:

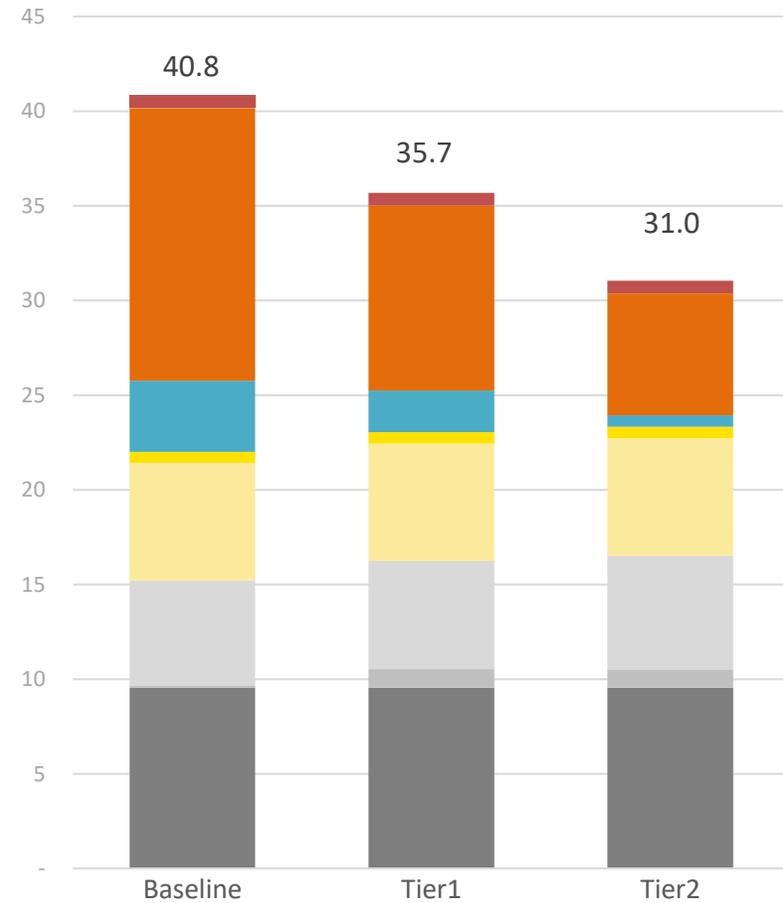
1. **Priority: 20% above new energy code to achieve 2% points from MSBA**
2. **Explore Fossil Fuel Free options:**
 - a. Tier 1: Water Source Heat Pump: Add \$1.1M
 - b. Tier 2: Ground Source Heat Pump (Geothermal): Add \$3.5M



ENERGY USE COMPARISON



EUI (kBtu/sf-yr)



	Baseline	Tier1	Tier2
DHW	0.7	0.7	0.7
Heating	14.4	9.8	6.4
Cooling	3.8	2.2	0.6
Ext. Lights	0.6	0.6	0.6
Int. Lights	6.2	6.2	6.2
Fans	5.5	5.7	6.0
Pumps	0.1	1.0	0.9
Equipment	9.6	9.6	9.6
Total	40.8	35.7	31.0
Savings from baseline		12.5%	24.0%

Sustainability Subcommittee: Recommendation

Proceeding into Schematic Design (SD) Phase:

1. **Priority: 20% above new energy code to achieve 2% points from MSBA**
2. **Explore Fossil Fuel Free options**
3. **Explore Timber Framing to reduce embodied carbon**
 - a. Partial Timber Framing (Entry, corridor, cafeteria): Add \$300k
 - b. Comprehensive: Classroom Wings: Add \$2.0M

Timber Framing: Partial vs. Comprehensive

PARTIAL – Entry, Corridor, Cafeteria

COMPREHENSIVE – All Classroom wings



Brightwater Center, Woodinville, WA – Mithun Architects



Cascade Academy, Bend, OR- Heneberry Eddy Architects



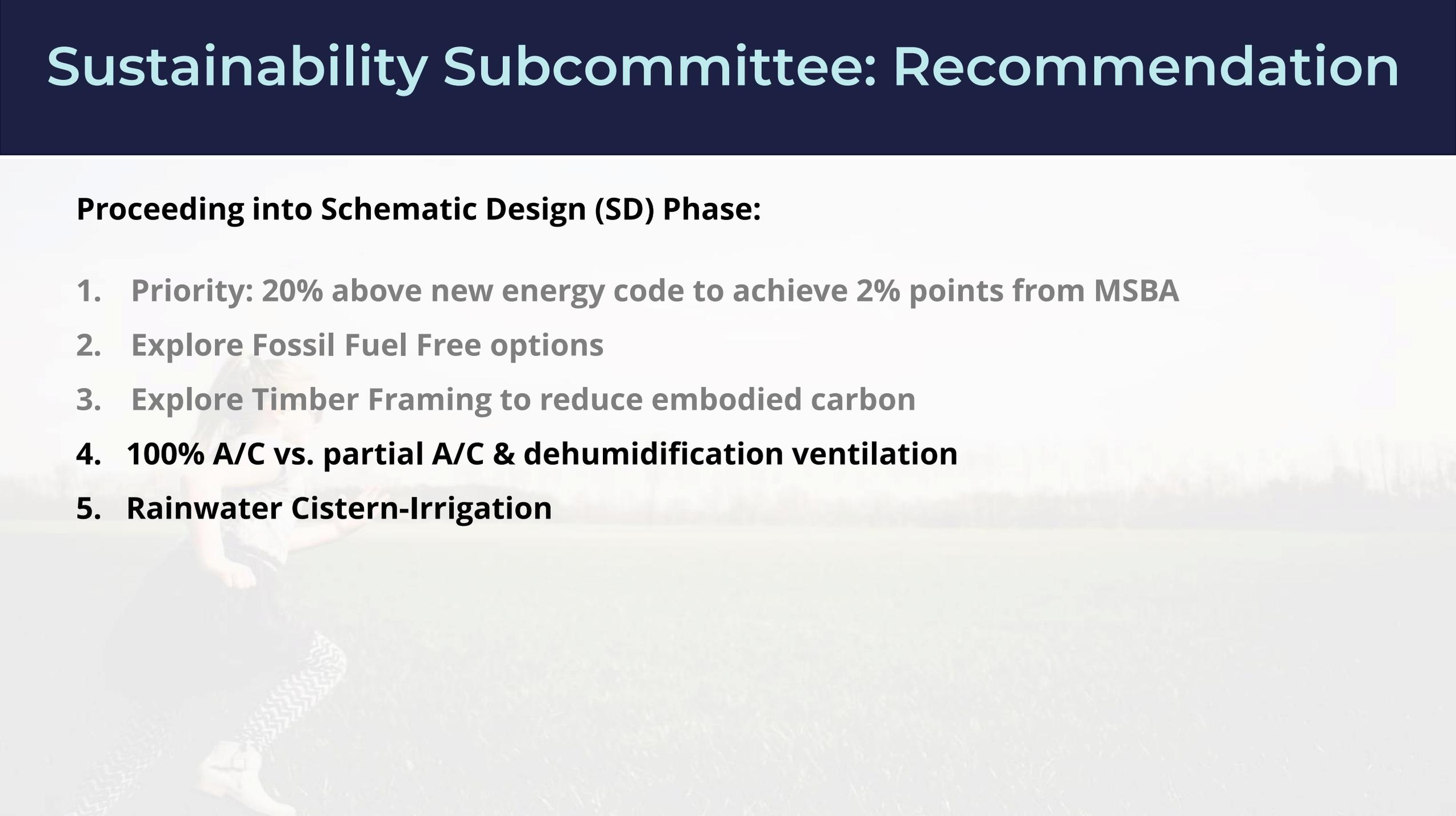
Athenian School, Danville, CA – Mithun Architects



Cambridge School of Weston, Weston, MA – Architerra Architects

Sustainability Subcommittee: Recommendation

Proceeding into Schematic Design (SD) Phase:

1. **Priority: 20% above new energy code to achieve 2% points from MSBA**
 2. **Explore Fossil Fuel Free options**
 3. **Explore Timber Framing to reduce embodied carbon**
 4. **100% A/C vs. partial A/C & dehumidification ventilation**
 5. **Rainwater Cistern-Irrigation**
- 
- A young girl with blonde hair, wearing a patterned dress and white shoes, is running through a grassy field. The background is a soft-focus landscape with trees and a bright sky. The image is overlaid with a semi-transparent white box containing the text.

Sustainability Subcommittee: Recommendation

Proceeding into Schematic Design (SD) Phase:

1. **Priority: 20% above new energy code to achieve 2% points from MSBA**

2. **Explore Fossil Fuel Free options:**

Include Geothermal in budget - Re-evaluate after Life Cycle Cost Analysis

June 19th – decision on Geothermal test well

Aug 25th- decision on Nat Gas vs. Fossil Fuel Free

3. **Explore Timber Framing to reduce embodied carbon:**

Include Comprehensive in budget – re-evaluate in SD July 23rd - decision

4. **100% A/C vs. partial A/C & dehumidification ventilation:**

Include 100% A/C in budget with further evaluation and visit schools in SD

Aug 25th – decision; could be an alternate

5. **Rainwater Cistern-Irrigation:**

Include in budget Aug 25th – decision; could be an alternate

Sustainability Subcommittee: Recommendation

Proceeding into Schematic Design (SD) Phase:

- 1. Priority: 20% above new energy code to achieve 2% points from MSBA.... \$83.0 M**
 - 2. Explore Fossil Fuel Free options: \$ 3.5 M**
Include Geothermal in budget - Re-evaluate after Life Cycle Cost Analysis
June 19th – decision on Geothermal test well
Aug 25th- decision on Nat Gas vs. Fossil Fuel Free
 - 3. Explore Timber Framing to reduce embodied carbon: \$ 2.3 M**
Include \$300k partial + \$2M classroom in budget – re-evaluate in SD July 23rd - decision
 - 4. 100% A/C vs. partial A/C and dehumidification ventilation:..... \$ 1.3 M**
Include 100% A/C in budget with further evaluation and visit schools in SD
Aug 25th – decision; could be an alternate
 - 5. Rainwater Cistern-Irrigation: \$ 0.2 M**
Include in budget Aug 25th – decision; could be an alternate
- \$90.3 M Total**

Other Considerations

Proceeding into Schematic Design (SD) Phase:

- | | |
|----------------------------------|-----------------|
| 6. Add 7 v. 7 Soccer Field..... | \$ 0.3 M |
| 7. Add District Bus Parking..... | <u>\$ 0.8 M</u> |

Potential Additional Add \$1.1 M



Next Steps

- ❑ **June 19: School Building Committee:** Preferred Option and PSR Vote
- ❑ **July 23: School Building Committee:** SD Kick-Off