Integrative Design Process Summary

Energy Discovery- Interior Fit-out (IFO) Projects

School: LLW:

Date of IDP Workshop:

Sustainability Consultant:

## Energy Use

The school performance energy target is 20% improvement over the minimum requirements of the NYC Energy Conservation Code baseline, as per Local Law 86/2005.

Site Conditions

### Site Shading

1. **One Layout Option:**

Describe how the program layout may be optimized based on site shading. Consider the effects on daylight, glare, and solar gains.

1. **More Than One Layout Option:**

Compare the program layouts with respect to site shading. Consider the effects on daylight, glare, and solar gains.

### Adjacent Site Conditions

1. **One Layout Option:**

Describe how the program layout has been optimized based on the adjacent site conditions. Consider minimizing the effects of unwanted noise.

1. **More Than One Layout Option:**

Compare the program layouts with respect to the adjacent site conditions. Consider the minimizing the effects of unwanted noise.

Massing, Envelope and Façade Elements

### Layout

Consider how the following energy saving strategies have been incorporated into the program layout(s).

* Locating classrooms and offices in areas with adequate daylight
* Locating spaces that do not require daylighting- such as mechanical, storage and kitchen- in the interior of the building
* Locating mechanical space such that the piping and duct run lengths and bends are limited

If more than one layout option is presented, summarize the pros and cons of each layout with respect to these strategies.

**Option 1**

*Locating classrooms and offices in areas with adequate daylight*

Pros:

Cons:

*Locating spaces that do not require daylighting in the interior of the building*

Pros:

Cons:

*Locating mechanical space such that the piping and duct run lengths and bends are limited*

Pros:

Cons:

**Option 2**

*Locating classrooms and offices in areas with adequate daylight*

Pros:

Cons:

*Locating spaces that do not require daylighting in the interior of the building*

Pros:

Cons:

*Locating mechanical space such that the piping and duct run lengths and bends are limited*

Pros:

Cons:

**Option 3**

*Locating classrooms and offices in areas with adequate daylight*

Pros:

Cons:

*Locating spaces that do not require daylighting in the interior of the building*

Pros:

Cons:

*Locating mechanical space such that the piping and duct run lengths and bends are limited*

Pros:

Cons:

# MEP Layout Optimization

1. **Describe the HVAC system(s) under consideration**
2. **Describe what opportunities and limitations exist compared to the SCA standard HVAC design**
3. **Describe how the following will be addressed in the design. Both architectural and HVAC disciplines should be considered:**
4. **Limiting air duct pressure drop**
5. **Limiting piping pressure drop**
6. **Other**

# Daylight

Describe daylight access for the gymnasium, if present.