



2012 CICA Awards Adaptive Re-Use Category:

Joseph P. Mazzola Plumbers Union Training Center

September 14, 2012

PROJECT TEAM: NIBBI BROTHERS GENERAL CONTRACTORS
CAS ARCHITECTS
ENVIRONMENTAL BUILDING STRATEGIES



Table of Contents

A. Project Introduction

B. Evaluation Criteria Responses

1. Constructability Enhancements
2. Value Engineering
3. Schedule Revisions or Noteworthy Accomplishments
4. Project Innovation
5. Quality of Execution

** Please note that the architect has verified all of the above accomplishments.*



A. Project Introduction

The renovated Joseph P. Mazzola Plumbers Union Training Center, located in San Francisco, provides members of U.A. Local 38 with the opportunity to build their careers through hands-on experience working with the most advanced equipment currently used in the plumbing trade.





Hospital Gas System



Data Center Chillers



Boiler System



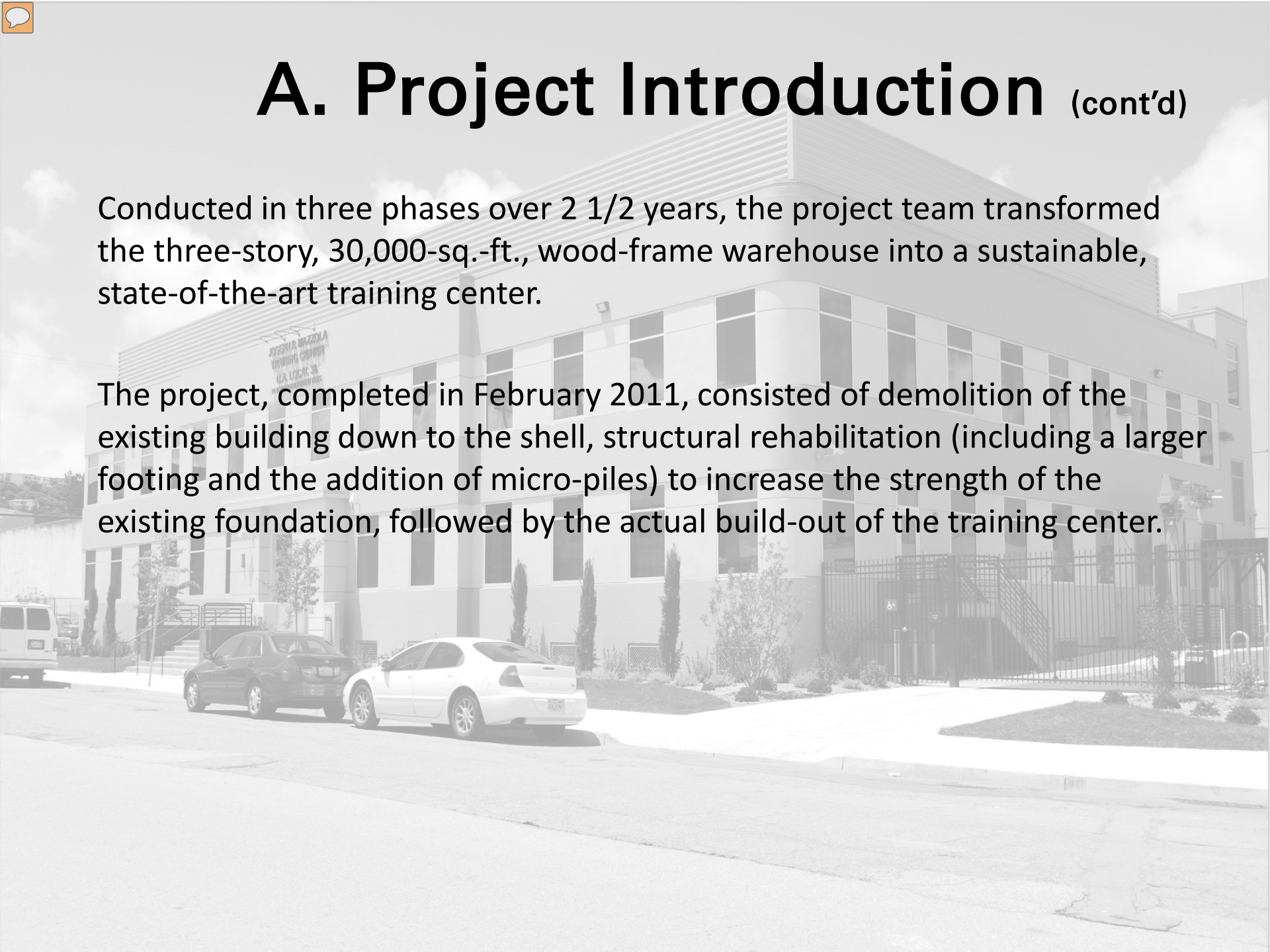
Chiller Room



A. Project Introduction (cont'd)

Conducted in three phases over 2 1/2 years, the project team transformed the three-story, 30,000-sq.-ft., wood-frame warehouse into a sustainable, state-of-the-art training center.

The project, completed in February 2011, consisted of demolition of the existing building down to the shell, structural rehabilitation (including a larger footing and the addition of micro-piles) to increase the strength of the existing foundation, followed by the actual build-out of the training center.





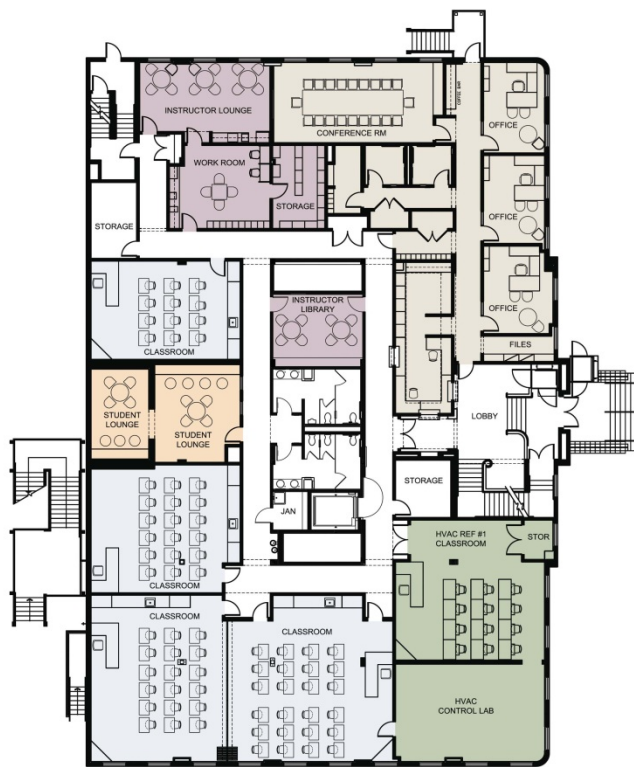
BASEMENT FLOOR PLAN

BASEMENT FLOOR AREA = 12,840 SF



LEGEND	
	HVAC CLASSROOM/LAB
	WELDING
	BOILER
	PLUMBING
	STEAMFITTERS SHOP

EQUIPMENT MATRIX	
①	WELDING BAY
②	STEEL WORKBENCH
③	BACKFLOW TROUGH
④	O2 ACETYLENE CUTTING BENCH
⑤	FLAMMABLE SAFETY BENCH
⑥	PREFAB CARRIER WORKSTATION
⑦	FIXTURE STAND



FIRST FLOOR PLAN

FIRST FLOOR AREA = 12,840 SF



LEGEND	
	INSTRUCTOR AREA
	OFFICE
	HVAC CLASSROOM/LAB
	CLASSROOM
	STUDENT AREA



SECOND FLOOR PLAN

SECOND FLOOR AREA = 12,840 SF



LEGEND	
	CLASSROOM
	HVAC CLASSROOM/LAB
	STUDENT AREA

JOSEPH P. MAZZOLA TRAINING CENTER

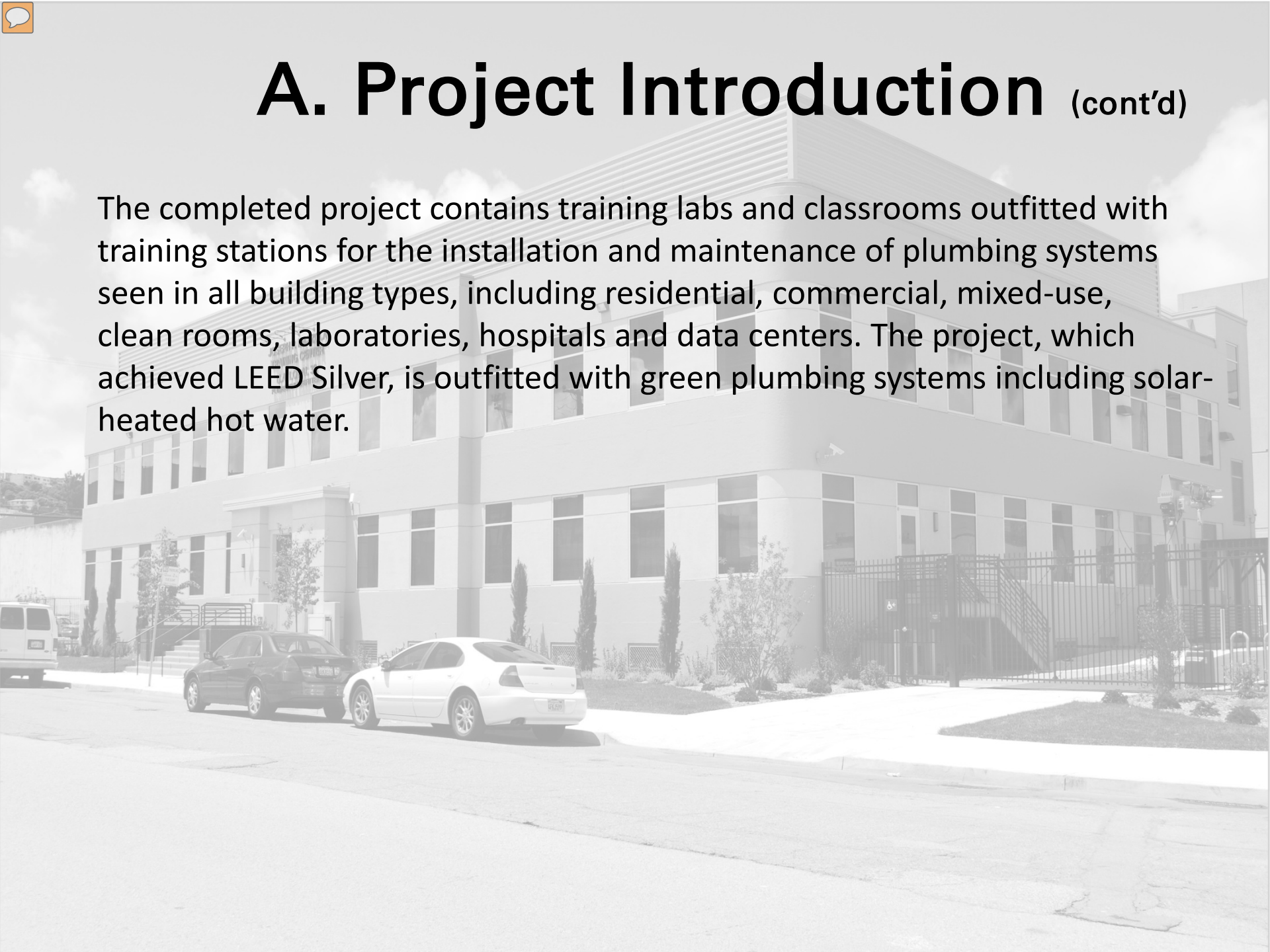
UA LOCAL 38 PLUMBERS AND PIPEFITTERS
2660 NEWHALL STREET, SAN FRANCISCO, CA 94124





A. Project Introduction (cont'd)

The completed project contains training labs and classrooms outfitted with training stations for the installation and maintenance of plumbing systems seen in all building types, including residential, commercial, mixed-use, clean rooms, laboratories, hospitals and data centers. The project, which achieved LEED Silver, is outfitted with green plumbing systems including solar-heated hot water.





HVAC Component Lab



Welding and Brazing Center



Backflow Test Lab



B. Evaluation Criteria

1. Constructability Enhancements

The project team provided insight into best practices, building code requirements, accessibility codes, exterior envelope integrity, and value engineering alternatives.

The team coordinated the mechanical and plumbing using Building Information Modeling (BIM), greatly improving the constructability of the project by minimizing change orders in the field.



B. Evaluation Criteria

2. Value Engineering

The project team provided a disciplined and systematic review of the project's methods, materials and systems to help reduce initial construction costs and long-term operating costs without compromising the project's quality or performance.

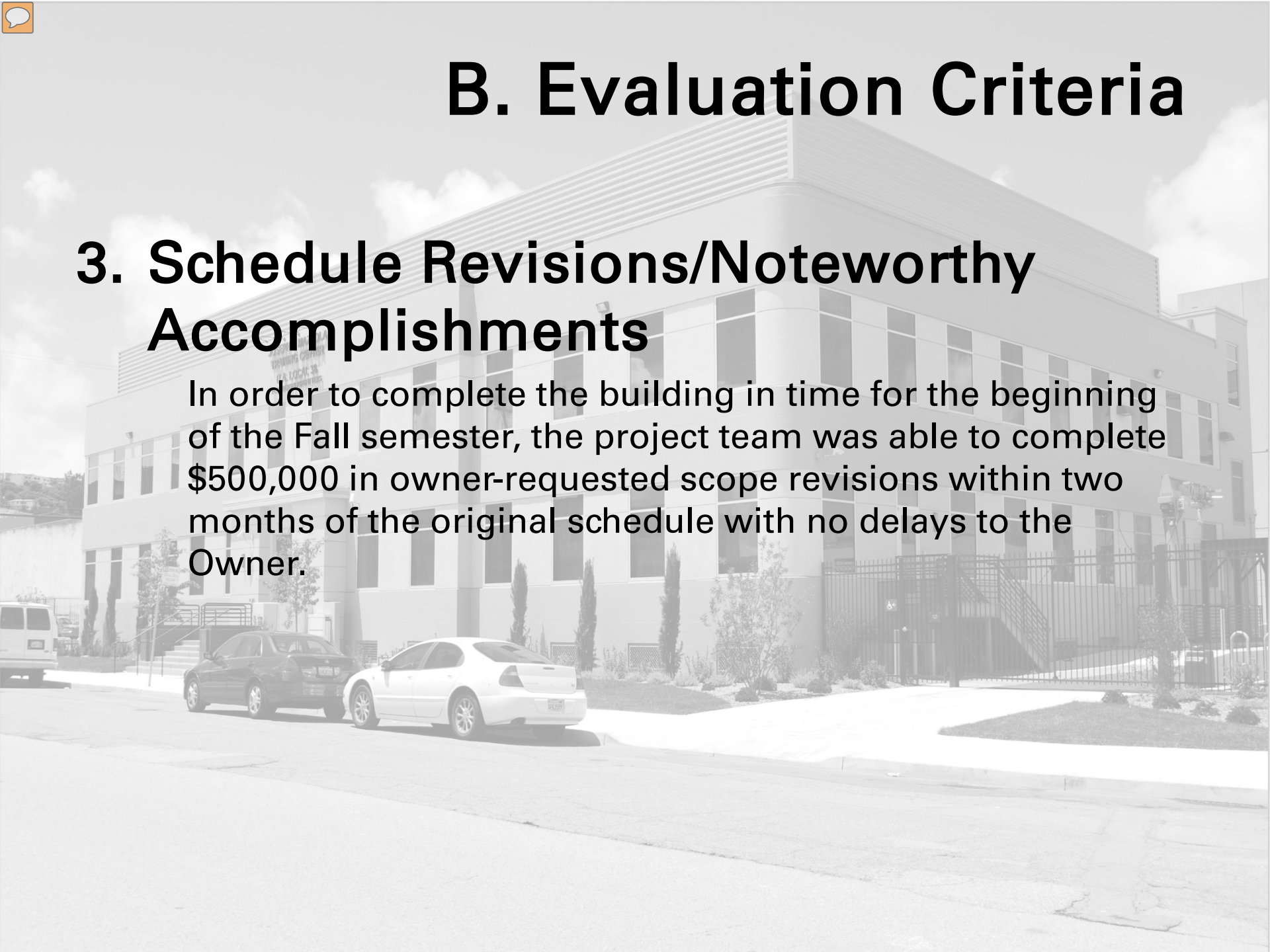
Additionally, given the financial constraints of the project, the team suggested that the Owner separate the job into multiple phases to maximize funding opportunities and help the Owner meet all of their building objectives. The Owner appreciated our willingness to work with them within their budgetary constraints. It also resulted in a project that met all, and even anticipated future, training needs.



B. Evaluation Criteria

3. Schedule Revisions/Noteworthy Accomplishments

In order to complete the building in time for the beginning of the Fall semester, the project team was able to complete \$500,000 in owner-requested scope revisions within two months of the original schedule with no delays to the Owner.

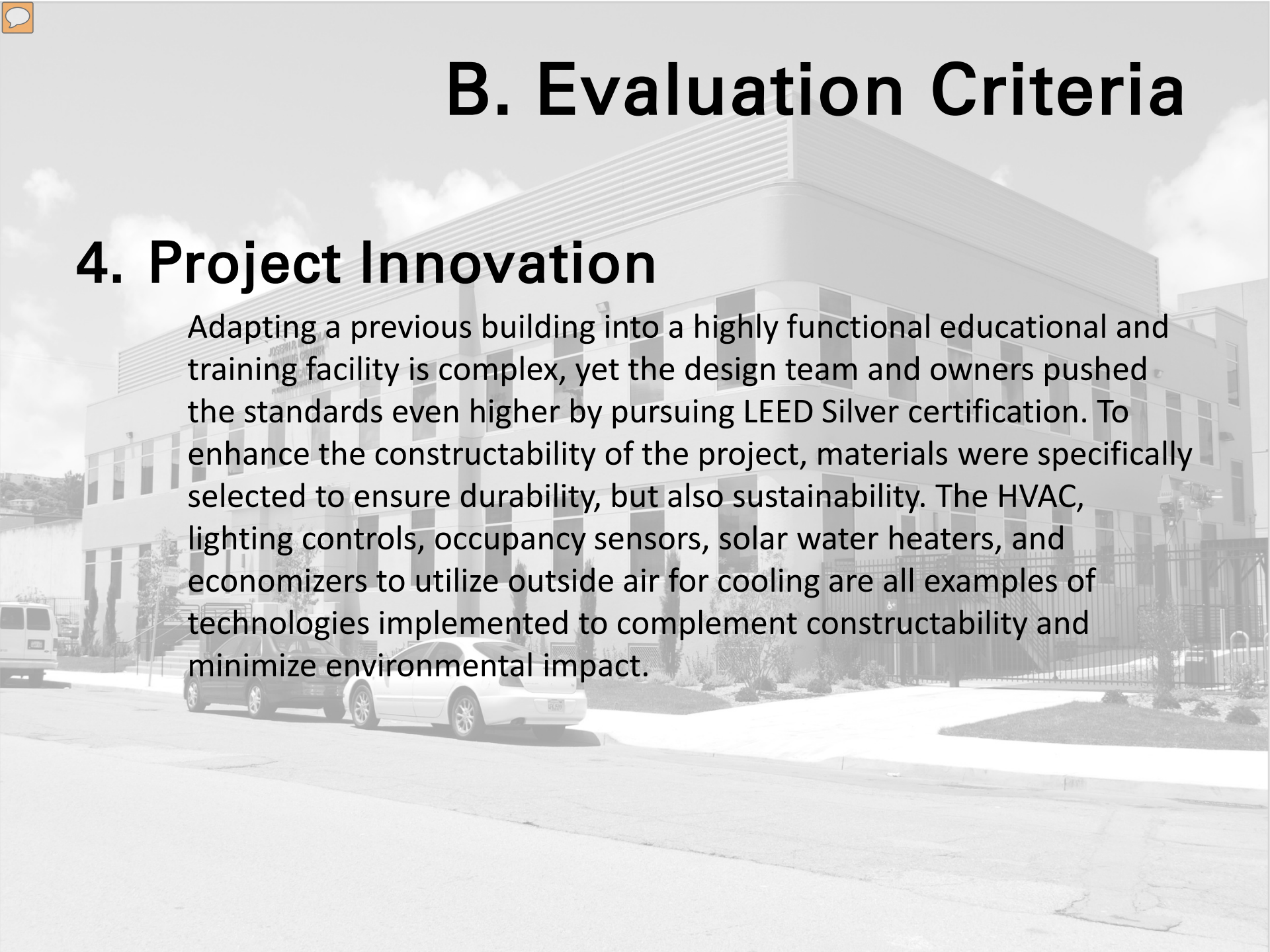




B. Evaluation Criteria

4. Project Innovation

Adapting a previous building into a highly functional educational and training facility is complex, yet the design team and owners pushed the standards even higher by pursuing LEED Silver certification. To enhance the constructability of the project, materials were specifically selected to ensure durability, but also sustainability. The HVAC, lighting controls, occupancy sensors, solar water heaters, and economizers to utilize outside air for cooling are all examples of technologies implemented to complement constructability and minimize environmental impact.

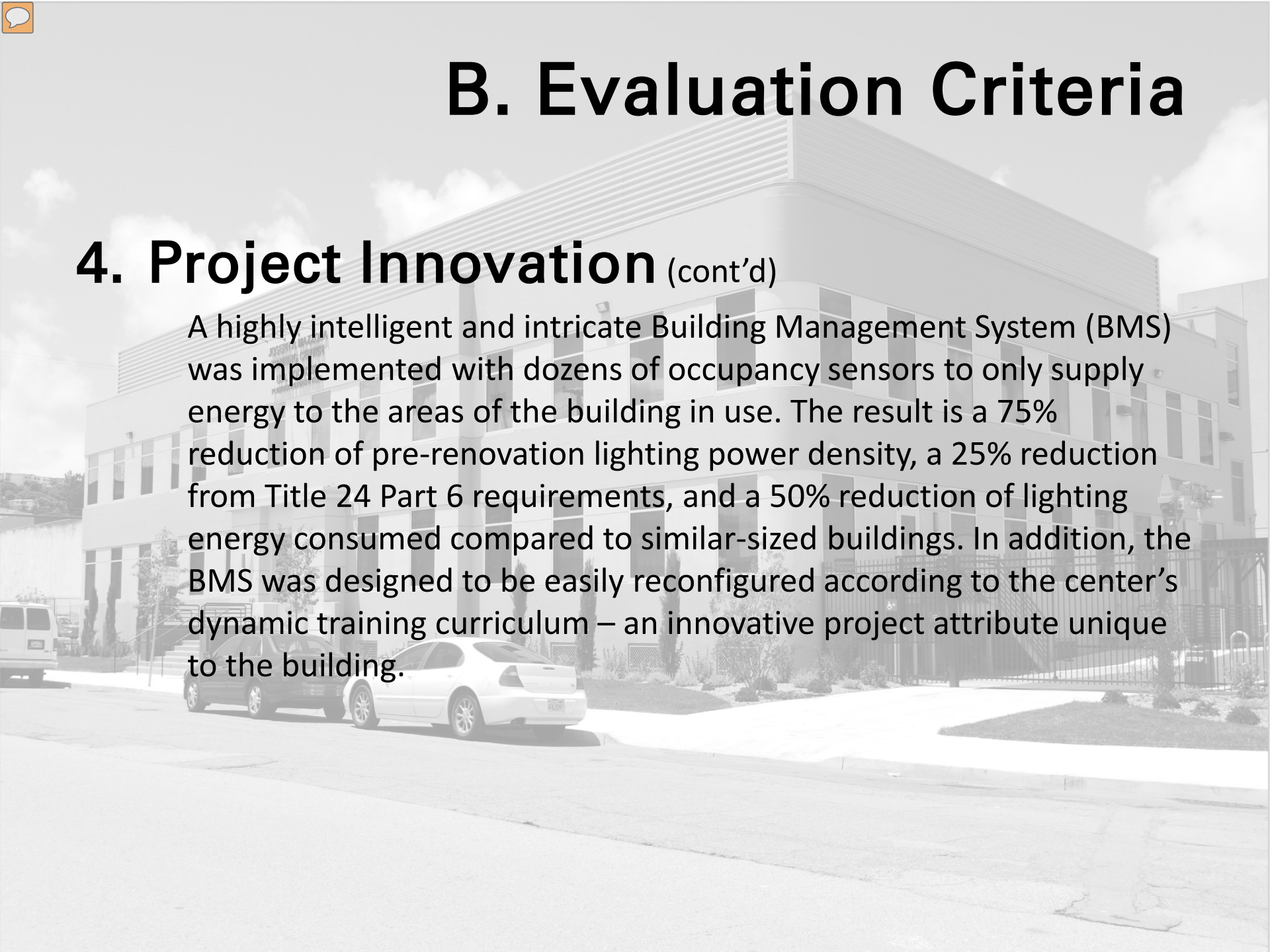




B. Evaluation Criteria

4. Project Innovation (cont'd)

A highly intelligent and intricate Building Management System (BMS) was implemented with dozens of occupancy sensors to only supply energy to the areas of the building in use. The result is a 75% reduction of pre-renovation lighting power density, a 25% reduction from Title 24 Part 6 requirements, and a 50% reduction of lighting energy consumed compared to similar-sized buildings. In addition, the BMS was designed to be easily reconfigured according to the center's dynamic training curriculum – an innovative project attribute unique to the building.

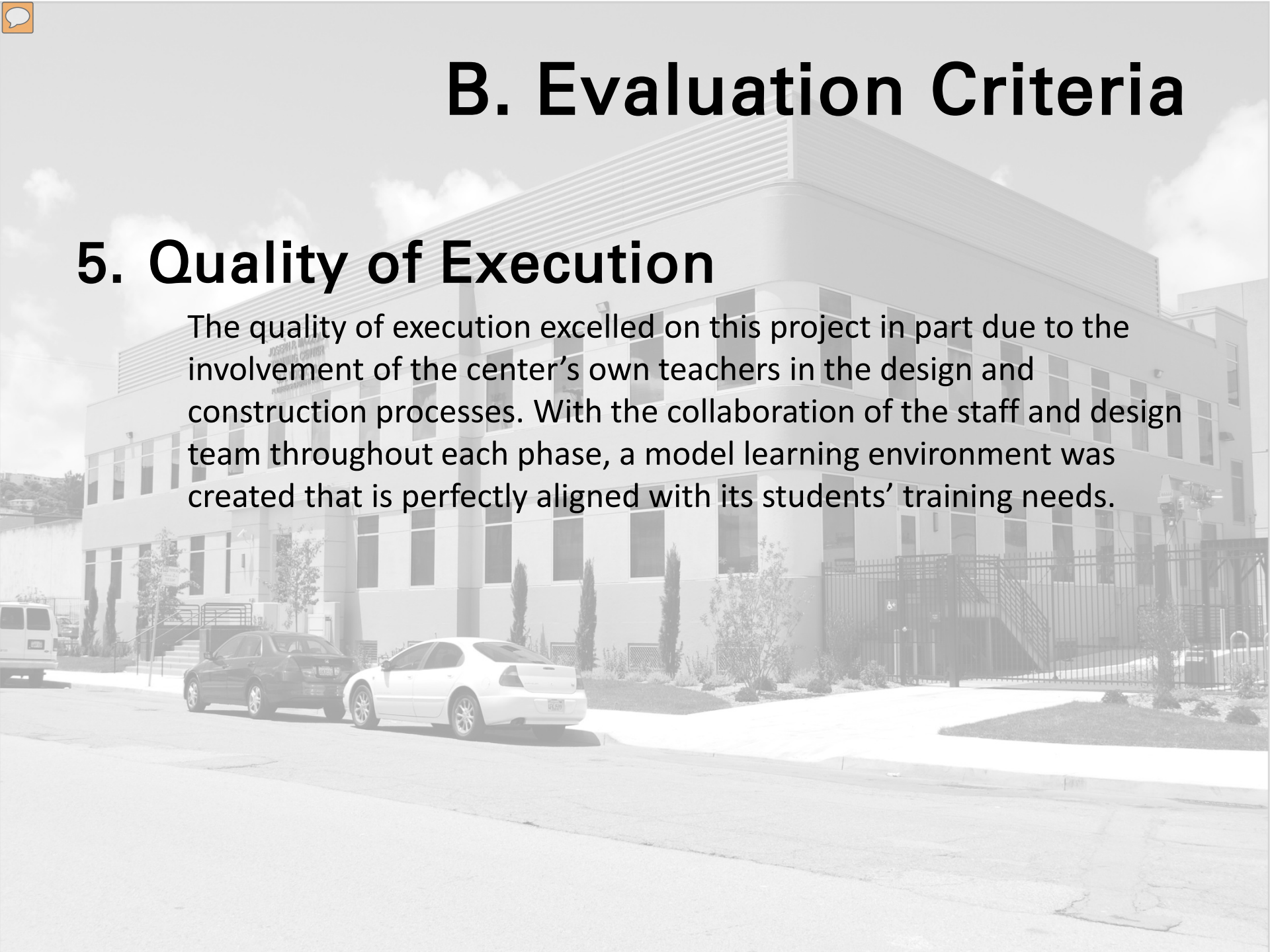




B. Evaluation Criteria

5. Quality of Execution

The quality of execution excelled on this project in part due to the involvement of the center's own teachers in the design and construction processes. With the collaboration of the staff and design team throughout each phase, a model learning environment was created that is perfectly aligned with its students' training needs.





We were pleased to have selected [this firm] to build our new Joseph P. Mazzola Training Center for Local Union No. 38 Plumbing and Pipe Fitting Industry. The firm's ability to get the job done right helped us keep this important project moving forward and completed on-time and within budget."

Steve Mazzola,
Director of Apprenticeship
United Association of
Journeymen & Apprentices-
Plumbing

