

**Minutes of Meeting
Low Voltage Energy Management System (EMS) Meeting
Peralta Community College District**

Project: Laney College Athletic Fields and Field House

Date: May 28, 2009 Revised

Attendees: Sherry Katz, Peralta CCD Tony Graciolett, Peralta CCD
Tizoc Herrera & David Stone, EMCOR
Antonio Esposito, Gilbane Construction Lauren Maass, Gould Evans B & T
Dan Martin, SYSKA Angel A. Alvarez, Cordoba Corporation

The purpose of the meeting was to discuss and review in detail the Low Voltage System related to the Energy Management System for the Field House. EMCOR system controls HVAC and exterior lighting only.

All parties in the meeting were introduced and individual roles were discussed. Lauren Maass gave an overview of the Project and went over the layout and peculiarities associated with the Field House. She described the functionality of the Building as it relates to A/V and Energy Management needs for such areas as the Lobby, Team Rooms, Locker Rooms, and Offices. She particularly described areas where Thermostats would be required and the various HVAC Zones that could be created. Dan Martin discussed his proposed scheme to control the various interior spaces, he suggested a VAV system.

During the meeting, Lauren and Dan carefully marked her floor plan with specific thermostat locations that would be required to service the Field House. Dan and Lauren will incorporate that information on the DD plans. Dan described the type of systems that he plans to propose and David Stone described the Delta EMS Control system that they operate at the Campus. He indicated that it was a Web access system.

The District expressed their desire to have thermostats in every major room and in every office. Antonio Esposito expressed his concern over the cost of all those Stats. Adjustable Thermostats may be provided at private offices.

Consideration will be given to ceiling mounted stats and/or returning air sensors in conference rooms.

T Stats were marked in the desired locations on the drawings, including all sensors. Wall mounted T stats will be installed in the Weight Room unless the HVAC Mech. Engineer proposes a better solution. The Training Room will need special considerations and will probably end up with two control zones. There will be provisions for at least two registers in the corridors.

Sensors will be provided on doors at Weight Room and Team Rooms to interlock the system when doors are open. Gilbane will review the SD Estimate and compare the cost with the number of thermostat PCCD would like to have.

Lauren said that there is a LEED credit for CO monitoring. CO Monitoring was not a part of the SD estimate. We need to know whether CO detectors are required at the Football Locker Room and Team Room. Wall sensors are planned. Gilbane & GE|BT will verify the necessity to meet LEED point requirements.

The MDF will have its own AC system. The EMS runs on the network using 18-22 gauge conductors.

Restrooms will have exhaust fans. Heating and cooling if the budget allows.

There will be ladder AC roof access. Access for troubleshooting and maintenance will be made available.

Photocell controlled dual lighting will be provided for the parking lot. The EMS panel will be in the MDF room. Separate panel will be on 1st floor. Need to be able to monitor Utility bills and usage through sub-metering. Engineer requested one year of energy usage for the site and the stadium.

A question was raised. Does the Field House need a sub-meter???

Antonio raised a question about the possibility of getting gas to the Field House, is there a meter and is the existing abandoned gas line running under the football field available to provide gas to the Field House? There is a possibility of getting gas from the Child Care Center. Gilbane will look into that possibility.

There is no EMS in the Block House.

Tony Graciolett said that the Field Lighting needs to be controlled remotely.

EMCOR will review the DD and all construction drawings. Conduit will be stubbed out for future site lighting and monitoring.

Lauren and Dan took with them the marked up drawings and sketches. Copies of the Mark ups will be made available at a later time.

Notes by:

Angel A. Alvarez
Cordoba Construction Manager