

Fremont City Schools
FMS Construction Project
Electrical Design Meeting
June 11, 2009

Attending:

Andrew Poignon	Dave Saller	Michael Sexton	Dr. Kim Theller
Dave Reinbolt	Rhonda Schmidt	Curt South	

1. Michael Sexton, Fanning Howey Electrical Designer presented an Electrical Design overview (see attached).

a. Prior to the meeting, Fanning Howey personnel met with an AEP representative on the construction site. **A decision will be needed on the primary service into the building** (AEP is to work up cost figures):

(1) Overhead: cost is worked in to electric billings over 48 months.

(2) Underground: must be paid up front

(3) AEP is to work up cost figures; money is included in the budget to bring the electric from the street to the building.

b. Manufacturers: district personnel should identify any likes/dislikes with manufacturers prior to the end of August.

c. The design allows for expansion; 10% spare capacity in panel boards and switchboards.

d. Incandescent lighting: they try not to use much except at the nurse's station.

e. **Decision to be made by the district:** copper or aluminum wire

(1) Aluminum has greatly improved

(2) Aluminum is cheaper than copper

(3) Some projects have seen significant cost savings with aluminum

f. District personnel requested 2 dedicated circuits for janitor closets

g. Corridor outlets every 30-50' on center; restrooms are on circuit with corridor

h. Three dedicated circuits designed per classroom; district technology personnel request total of 4 per classroom (future use of portable carts require 2 circuits). Fanning Howey personnel to look at cost; may consider an alternate bid. Consider whether this additional circuit can be left as conduit in the wall or power supplied into the classrooms.

i. Corridors are tied into the Energy Management System (system is programmable); motion sensors every third light

j. Emergency system (stand-by generator) designed for Life Safety items (emergency lighting, fire alarms); district personnel questioned adding pumps, refrigerators/freezers. Adding additional items drives up the cost and size of the generator (could consider alternate bid or if not much would be added, keep at designed size). **Decision to be made by district: diesel (specified 8 hour tank) or natural gas powered generator**

k. Dr. Theller wanted to insure the lighting is being designed in adherence to Jarod's Law.

l. Exterior building lights tied into the Energy Management System (parking lot off at certain hour) (high pressure sodium for parking/street lighting)

m. Two existing poles west of the high school; consider removing and tying to this project; 30' poles away from building, 15' closer to building

n. Lighting was requested to display cases (either tied to corridor or by itself)

o. **Decision to be made on fire alarm system manufacturers** – one concern expressed was insuring the system worked with the chilled beam HVAC system.

1 Attachment

file