

September 15, 1986

Gerald A. Doyle and Associates
4331 North 12th Street
Phoenix, Arizona 85014

Attention: Gerry Doyle

Re: Rehabilitation of the Carnegie Library
Our Job No. 85198 (FOURTH OBSERVATION)



Gentlemen:

This jobsite was visited on Friday, September 12, 1986 to observe the Mechanical, Electrical and Plumbing installations.

The following deficiencies were observed during this visit:

1. Provide proper hangers for flexible ducts where they are laying on structures in long lengths.
2. Several of the sheet metal ducts in the attic area have been damaged due to persons walking on them. Remake all damaged joints with arabol and canvas.
3. At all A.C. units- Remake all condensate drain lines in a workmanlike manner with proper supports and 1" air gap at floor drains.
4. It appears that the filters are dirty in all units. Remove and provide units with new filters.
5. Basement, A.C. units #1, provide hangers at 90° elbow of sheet metal supply duct.
6. At all mechanical rooms, tape joints of sheet metal ducts with arabol and canvas.
7. Basement mechanical rooms, remove duct tape from joints of return air ducts and tape with arabol and canvas.
8. Attic, provide cover for all thermostat sensor boxes.
9. Identify all A.C. units with plastic labels embossed with white lettering.
10. Attic, A.C. units #5 and #6, shorten flexible ducts that appear to be restricting proper air flow.
11. The flexible pipe connections have no visible manufacturers name. Remove or provide a certification as to name and working pressure.

2333 West Northern Avenue Phoenix, Arizona 85021 (602) 249-1320

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12. Provide unions at Pot Feeder with flow indicator at connections as per plans, Sheet M-6, detail 8.
13. Provide proper supports at line of Pot Feeder.
14. Provide 1" air gap for all lines at floor sink at mechanical equipment yard.
15. Provide drains from relief valve of expansion tank and from pressure relief as per plans, M-6.
16. Provide union in 1" by-pass of pressure reducing system at expansion tank.
17. Relocate pressure relief valve in by-pass as per plans, M-6.
18. Provide union at water supply to expansion tank.
19. Provide loose key valve in water supply to expansion tank.
20. Provide 3/4" hose connections at valves of strainers at pumps.
21. After final alignment of pumps with and indicator dial, grout bases of pumps.
22. Secure pumps to bases with proper fasteners.
23. Pump #2, repair water leak adjacent to pressure gauge.
24. Provide certification of air balance test by the proper agency.
25. Provide escutcheon for lines that penetrate wall of A.C. unit #6.
26. Provide heavy duty bronze cleanout plugs. Remove all plastic.
27. Adjust trap primer valves so water will flow to floor drains properly.
28. Provide dielectric unions at all shock absorbers.
29. Basement, women's restroom, faucet drips at lavatories, repair as necessary.
30. Sterilize entire water distribution system.
31. Provide 1" air gap for all lines at floor drains and floor sinks.

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32. Relocate shutoff valve at water heater supply line to be below sheet metal duct so as to be more accessible.
33. Provide escutcheon for domestic water line that penetrate wall in mechanical room B08.
- ~~SAO 34. Auditorium lobby B-24, light fixtures L-16 appear not to be located as per plans, E-2.~~
- ~~SAO 35. Auditorium B-28, light fixtures L-10 appear not to be same as plans E-2.~~
- ~~SAO 36. Basement, exit light appears not to be installed in locations as per plans, E-2.~~
37. Auditorium lobby B-24, replace 15 amp wall receptacles with 20 amp receptacles.
- ~~SAO 38. Auditorium B-28, Plans, E-4 show that ten floor receptacles are to be installed. Only five have been installed.~~
39. The FACP shows trouble for the duct detector in the attic.
40. Room B03, packing and shipping, the receptacles are not working.
41. The emergency lights X-4 appear not to be working.
42. Remove bugs from lens of fixtures.
43. Provide unistrut for conduit and secure with proper fasteners where running along floor in mechanical room B08.
44. Weatherproof J-Boxes have not been secured for post mounted fixtures at entry on north side of building.
45. Provide cast steel FS type of boxes for all wet locations.
- ~~SAO 46. Plastic flexible conduit has been installed in walls. EMT conduit is to be used as per specifications 16000-6, Electric Metallic Tubing.~~
47. Adjust escutcheons for fire sprinkler heads as deemed necessary.
48. Plumb fire sprinkler riser.

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49. Provide escutcheons where pipes at fire sprinkler riser penetrate walls.
50. Provide wrench and owners manual for spare sprinkler heads cabinet.
51. Provide chain for securing proper signs to fire sprinkler riser; not electricians wire.
52. Provide 90° ells for turndown at 1" and 2" drains at exterior wall from fire sprinkler riser.
53. There appears to be no hot water in the kitchen.

Very truly yours,

LOWRY-SORENSEN-WILLCOXSON ENGINEERS, INC.

Jim Hixenbaugh/95
Jim Hixenbaugh

JH/gs