SECTION 15300 - FIRE PROTECTION CODES

1.1 FIRE PROTECTION CODES

All work shall conform to the NFPA 10, 13, 14, 20 and 415. The Locale Building Code, Current Edition and the requirements of the Authority Having Jurisdiction.

A. Fire Protection General - All permits, license, approvals and other arrangements for work shall be obtained by the Trade Contractor at his own expense.

B. Fire Protection Scope of Work:
   1. Provide fire suppression system in accordance with requirements of the Locale Building Code, Current Edition, NFPA 10, 13, 14, 20 and 415 latest edition and as described below:
      a. A supervised sprinkler system shall be installed throughout the entire premises except in transformer apparatus, switchboard rooms, generating apparatus rooms, electrical rooms, elevator machine rooms as allowed by code.
      b. Wet type sprinkler system shall be installed throughout the areas except in the loading dock, tug tunnel baggage handling and parking areas. The parking areas, baggage handling and loading dock shall be provided with a dry sprinkler system. Sprinkler installation shall conform to the requirements of NFPA-13.
      c. The supervised sprinkler system shall conform to the requirements of NFPA-13. The passenger areas shall be designed as ordinary group 1 hazard, the baggage handling and mechanical areas shall be designed as ordinary group 2 hazard, office areas shall be designed as light hazard. A 250 gpm allowance for inside and outside hoses shall be included in the sprinkler system demand.
      d. Inside standpipe system class 1 shall be provided in accordance with requirements of NFPA 14. The standpipe risers shall be located so that the entire floor in each story can be protected by fire hose not more than 100 feet long if the hose valves are located in a properly enclosed stairwell and 75 feet if not.
      e. The standpipe risers shall be calculated hydraulically to provide 500 gpm at 100 psi residual pressure at the top most outlet of the most remote standpipe riser and 250 gpm at 100 psi at the topmost outlet of each additional standpipe riser.
f. Double detector check valve assembly with meter on by-pass shall be installed on the water main serving water extinguishing systems.

g. Water service from the public water main shall be boosted by electrically driven fire pumps. Fire pumps shall be provided with wye delta closed and transition type controllers and jockey pumps to serve the lower zone. Capacity of the fire pumps shall be as indicated on the drawings.

h. Outside pump test connections shall be installed for testing the fire pump.

i. Fire department connections shall be installed on each face of the building (air and land sides) and not more than 250 feet apart.

j. Portable fire extinguishers shall be installed in accordance with requirements of NFPA-10. Maximum travel distance to any fire extinguishers shall not exceed 75 feet. Fire extinguishers shall be placed in fully recessed type cabinets.

k. Valve supervisory units on the control valves, water flow indicating devices and fire pump running, power failure and phase reversal status shall be tied to the building fire alarm panel for remote annunciation.

C. Water Supply:

1. The building will be supplied with a water supply by the Plumbing Trade Contractor. The Fire Protection Trade Contractor shall start from the flanged connection provided by the Plumbing Trade Contractor.

2. The fire pumps shall be installed to boost the city main water supply to meet sprinkler and standpipe demand combined.

END OF FIRE PROTECTION