1 O&M Considerations for MERs

1.1 To the extent possible, all mechanical equipment should be located within the Mechanical Equipment Room (MER).

1.2 Equipment must be located so as to allow room for servicing and maintenance, including room to pull HVAC coils and heat exchanger tube bundles with pull spaces indicated on the floor plans.

1.2.1 Adjoining pieces of equipment need to be separated by a minimum of 36”.

1.3 Water Softener brine tank(s) must be located to allow salt to be delivered to the tank by pallet jack with an unobstructed path from MER entrance to brine tank.

1.3.1 Salt placed in the brine must be lifted no higher than 46” from the standing surface

2 MER Design Considerations

2.1 MER must be accessible by a standard stair or elevator. Ship’s ladders are NOT acceptable.

2.2 MER is to be well lit with lamps located in such a manner that equipment may be serviced without requiring additional portable lighting.

2.3 MER should not be adjacent to classrooms or offices if possible.

2.4 MER shall be thermally, vibrationally, and acoustically isolated from occupied areas.

2.4.1 MER walls designed to meet STC 60.

2.4.2 MER doors should meet STC 45.

2.5 Provide space to store two changes of air filters, lubricants, etc.

2.6 Provide locally controlled thermostatic ventilation.

2.7 Provide separate concrete housekeeping pads under each mechanical equipment item.

2.8 Floor drains are required for each piece of equipment requiring drainage. If multiple pieces of equipment are to be drained to a common drain, this drain must be a floor basin. Floor drains shall be laid out to prevent drain pipe floor obstructions.

Note: Do not let cooling coils drain condensate across MER floor. When there is condensate drain piping that is not buried or running along the floor it must be insulated.

2.9 Oil or petroleum storage containers with a capacity of 55 gallons or greater, will have secondary containment.

2.9.1 Containment will have a capacity of 110% of the largest single container

2.9.2 Containment will have a means for manual drainage of secondary containment areas.

2.10 MER above the lowest floor shall be curbed and sealed or have condensation/drip pans under all equipment.

2.11 All floor penetrations must be sleeved. MER floor sleeves to be a minimum of 6” diameter extend 4” above the floor and have a water tight material (that may have to be fire stopping as well) to create a water tight compartment system.