

BASIS OF DESIGN – BUILDING PROGRAM TO BASIS OF DESIGN FOR A HIGH-PERFORMANCE HOSPITAL PATIENT ROOM RETROFIT

Date: November 2015 Project Name: Building Program To Basis Of Design For A High-Performance Hospital Patient Room Retrofit Project #: 2015-11
 Prepared By: Reader Revision date: _____

BUILDING

New Construction Renovation Addition Sq. Ft.: _____ No. of floors below grade: _____ No. of floors at and above grade: _____

UTILITIES

Electrical: New Upgrade Existing **Gas:** New Upgrade Existing **Steam:** New Upgrade Existing **Chilled Water:** New Upgrade Existing

Hot Water: New Upgrade Existing

Services from Utility of: Electric Gas District Energy Existing **Campus Power Plant:** Electric Gas Steam CHWS CWS Hot Water None

UTILITY DESIGN PARAMETERS

Electrical: 120/1/60 208/3/60 277/3/60 480/3/60 ___/3/60

Emergency Power: New Diesel oil Gas Existing None

Steam Pressure: Low @ 5 psig Medium @ ___psig High @ ___psig High @ ___psig

Chilled Water Temperature: CHWS @ 44°F & CHWR @ 95°F None

Condenser Water Temperature: CWS @ 85°F & CWR @ 95°F None

Hot Water Temperature: HWS @ 160°F & HWR @ 120°F when 17°F OAT and 90°F HWR 70°F when OAT is 60°F Off above 60°F Fixed HWS @ 180°F & HWR @ 150°F None

ASHRAE APPLICATION HANDBOOK

ASHRAE 2015 Handbook: Chapter [8] [18] [] **ASHRAE 2012 Handbook:** Chapter [1] [] Other Chapters

OWNER MECHANICAL DESIGN PARAMETERS

Equipment Location: On floor being served In central equipment room(s) _____ In penthouse On roof Away from building Above ceilings

Maintenance Outside Occupied Space: Yes serving primary HVAC equipment Yes serving room terminals No

Redundancy: For primary & secondary equipment N+1 N+N No

Equipment/System Expansion: Increase equipment size by 15% No

Indoor Air Quality at: MERV rating of [8] for pre-filters MERV rating of [11] for final filter, MERV rating of [16] for final filter and MERV [20] for fan-powered unit filters

Acoustic & Vibration Criteria: Design parameters by acoustic consultant None

Specialty Room(s): Corridor, Vestibules, & Patient Rooms (Reader to list room) None

Occupancy Schedule: 24-7-365 Occupied/Unoccupied with manual over-ride

DESIGN CRITERIA

Outdoor Dry Bulb & Wet Bulb: ___°F Heating season ___84°F/75°F Cooling season

Patient Rooms: Occupied 24-7 period Occupied-unoccupied period Warm-up & cool down _____

Set Point: 70°F and 30% RH Heating Season & 76°F < 60%RH Cooling Season

Mechanical & Electrical Space and Back of the House Area: Occupied 24-7 period Occupied-unoccupied period Warm-up & cool down NA

Set Point: ___°F Heating season & ___°F < 65% RH Cooling season Not applicable

ENERGY & ENVIRONMENT CRITERIA

LEED Certification: Yes No Other certification (List the program)

Infection Control: In-House IC manager 3rd party IC commissioning consultant Not applicable

Annual Operating Budget: With energy budget With organization structure Outsource operation & maintenance Building only NA

Refer To "The Facility Files" For Additional Operation & Maintenance Design Criteria

SPECIAL CONDITIONS & REQUIREMENTS

1. Standard 170 -Ventilation of Health Care Facilities _____

2. ISPE Design Guidelines _____