

## **APPENDIX 2B**

### **ATTACHMENT I - ASSET HIERARCHY SAMPLES**

Please see attached.

## Attachment I: Asset Hierarchy Samples

### Overall Asset Hierarchy Sample:

#### ARCHITECTURAL

- BUILDING ENVELOPE
- BUILDING INTERIOR
- DOORS
  - AUTOMATIC DOORS
  - OVERHEAD DOORS
- GROUNDS
  - DRAINS
  - IRRIGATION SPRINKLERS
- HELIPORT/HELIPAD
- ROOFS
- SECURITY
  - ALARM

#### ELECTRICAL

- ELECTRICAL DISTRIBUTION SYSTEM
  - MAIN DISTRIBUTION
  - VITAL DISTRIBUTION
  - DELAYED VITAL DISTRIBUTION
  - CONDITIONAL DISTRIBUTION
  - UNINTERRUPTED POWER SYSTEM
  - GENERATOR DISTRIBUTION
- STANDBY POWER

#### ELEVATORS & DUMBWAITERS

- DUMBWAITERS
- ELEVATORS

#### FIRE EQUIPMENT & LIFE SAFETY

- EMERGENCY LIGHTS
- FIRE ALARM SYSTEM
- FIRE DOORS
- FIRE SUPPRESSION
  - FIRE DAMPERS
  - FIRE SPRINKLER SYSTEM
- GAS DETECTORS

#### MECHANICAL

- BUILDING AUTOMATION SYSTEM
- CHILLED WATER
  - CHILLERS
  - COOLING TOWERS
- CONDENSATE RETURN
- CONTROLLED PRESSURE ENVIRONMENTS
  - ISOLATION ROOMS
- HEAT PUMP SYSTEMS
- HEAT RECOVERY SYSTEMS
- HEATING HOT WATER DISTRIBUTION
  - PUMPS
  - UNIT HEATERS
  - EXPANSION TANKS
- HEATING HOT WATER PRODUCTION
  - BOILER SYSTEMS
  - FUEL OIL
- HVAC
  - EXHAUST FANS (OUTSIDE OF AHUS)
  - SUPPLY FAN (OUTSIDE OF AHUS)
  - AIR CONDITIONING UNITS

MIXING/VARIABLE AIR VOLUME BOXES

AIR HANDLING SYSTEMS

OTHER FANS (OUTSIDE OF AHUS)

CONTROLS

FUME HOODS

STEAM DISTRIBUTION

STEAM TRAPS

STEAM PRODUCTION

BOILER SYSTEMS

FUEL OIL SYSTEMS

**PLUMBING**

DOMESTIC HOT WATER

DOMESTIC WATER

BACKFLOW PREVENTERS

EYE WASH STATIONS

SANITARY & STORM

DRAINS

**MEDICAL AIR, GAS & VACUUM**

INSTRUMENT AIR

LAB AIR

MEDICAL AIR

MEDICAL GAS

MEDICAL VACUUM

**CLINICAL COMMUNICATION**

NURSE CALL SYSTEM

CODE BLUE

NURSE CALL

PAGING SYSTEMS

PATIENT SAFETY

BED ALARMS

TUBE SYSTEM

STATIONS

**HOSPITAL EQUIPMENT**

BED PAN DISINFECTORS

MACERATOR

BEDS & STRETCHERS

BEDS

STRETCHERS

CRIBS

CLINICAL EQUIPMENT

COMMODOE/SHOWER CHAIRS

I.V. POLES

REFRIGERATORS

CARTS

BLOOD PRESSURE UNITS

PATIENT ROOM CHECKS

WARMING CABINETS

MEDICAL SUCTION PUMPS

OR/EXAM CHAIRS

ICE MACHINES

SCALES

OR/EXAM TABLES

OR/EXAM LIGHTS

FREEZERS

COOLERS

COMPUTER EQUIPMENT

HOUSEKEEPING EQUIPMENT

KITCHEN EQUIPMENT

CARTS  
MICROWAVES  
REFRIGERATORS  
COOLERS  
STOVE/OVENS  
DISHWASHERS  
ICE MACHINES  
FREEZERS  
LOWERATORS  
BLENDERS  
MIXERS  
COMPRESSORS  
GARBURATORS  
GREASE INTERCEPTORS  
STEAM KETTLES  
STEAM TABLES  
STEAMERS  
CONDENSER/CONDENSING UNITS  
CONVEYORS  
KITCHEN HOOD EXHAUST  
SOUP KETTLES  
WATER FILTERS

**LAB EQUIPMENT**

REFRIGERATORS  
CENTRIFUGES  
FREEZERS  
FUME HOODS  
COOLERS  
ICE MACHINES  
ULTRASONIC CLEANERS

**LAUNDRY EQUIPMENT**

CARTS

**MDRE**

CARTS  
STERILIZERS  
INCUBATORS  
DETERGENT PUMPS  
AUTOMATIC ENDOSCOPE REPROCESSORS  
STERILE DRYERS  
WASHER/DISINFECTORS  
ULTRASONIC CLEANERS  
CART WASHERS  
UTENSIL WASHERS  
CONVEYORS  
COOLERS  
WASHER/PASTEURIZERS  
AUTOCLAVES  
INSTRUMENT STERILIZERS

**NON-CLINICAL EQUIPMENT**

CLOCKS  
AV EQUIPMENT

**OPERATING ROOMS**

CARTS  
OR/EXAM TABLES  
OR/EXAM LIGHTS  
OR/EXAM CHAIRS

**PATIENT LIFTS**

OVERHEAD PATIENT LIFTS

OVERHEAD PATIENT LIFT GANTRIES

MOBILE PATIENT LIFTS

TUB LIFTS

SCALES

PHARMACY EQUIPMENT

REFRIGERATORS

COOLERS

CARTS

FREEZERS

FUME HOODS

CONDENSER/CONDENSING UNITS

ICE MACHINES

POOL EQUIPMENT

WASTE EQUIPMENT

WHEELCHAIRS & WALKERS

WHEELCHAIRS

WALKERS

FMO EQUIPMENT & TOOLS

TOOLS

HANDHELD RADIOS

GROUNDS EQUIPMENT

**Sample Electrical Hierarchy:**

**Electrical Distribution System**

**Main Distribution**

**Isolation Switch (12 kV)**

**Main Load Circuit Breaker (12 kV)**

**Load Break Switch (12kV) Transformer #1**

**Transformer (Dry) 12400 / 600V Conditional (TX-1)**

**Main Breaker (600 V) Delayed Vital (Transformer 1)**

**Main Tie Breaker (600 V)**

**Vital Distribution**

**Distribution Sub-Panel (600V) Vital (2V-1)**

**Distribution Panel, 250 A, 600 V, Fed from 2V1 (A08-6)**

**1D-3 Breaker Enclosure 200 A, 600V, Fed from Panel A08-6**

**Transformer (Dry) 112.5 kVA 600V ~ 208V/120V Vital**

**Distribution Panel, 408A, 120V/208V, Vital (A-09)**

**Panelboard, 208V, Vital, Fed from A-09 (A40)**

**Panelboard, 208V, Vital, Fed from A-09 (A40A)**

**Panelboard, 208V, Vital, Fed from A-09 (A41)**

**Delayed Vital Distribution**

**Conditional Distribution**

## **Sample Boiler Plant Hierarchy:**

### **Steam Generation**

**Blr. #1 - High Pressure Boiler (750) - HP58228**

**Blr.#1 - Boiler Control Instruments**

**Blr.#1 - O2 Analyzer**

**Blr.#1 - Boiler Header Line**

**Blr.#1 - Superheater Safety Valve, 1 1/2", 700 psi**

**Blr.#1 - Burner Management Control Panel**

**Blr.#1 - Forced Draft Fan System**

**Blr.#1 - Damper - Forced Draft Fan**

**Blr.#1 - Drive - Forced Draft Fan**

**Blr.#1 - Fan - Forced Draft**

**Blr.#1 - Motor - Forced Draft Fan**

**Blr.#1 - Fuel System**

**Blr.#1 - Gas Fuel Train**

**Blr.#1 - Gas Control Valve**

**Blr.#1 - Gas Control Valve Actuator**

**Blr.#1 - Gas Control Valve Positioner**

**Blr.#1 - Oil Fuel Train**

**Blr.#1 - Oil Control Valve**

**Blr.#1 - Oil Control Valve Actuator**

**Blr.#1 - Oil Control Valve Positioner**

**Blr.#1 - Feedwater Train**

**Blr.#1 - Control Valve - Feedwater**

**Blr.#1 - Bypass Isolating Valve - Feedwater Control**

**Blr.#1 - Inlet Isolating Valve - Feedwater Control Station**

**Blr.#1 - Outlet Isolating Valve - Feedwater Control Station**

**Blr.#1 - Economizer Feedwater Heater**

**Economizer- Safety Valve, 3/4" : 600PSI**

**Blr.#1 - Steam Drum**

**Blr.#1 - Safety Valve #2, 1 1/2 " : 745 PSI**

**Blr.#1 - Water Column**

**Blr #1- Safety Valve #1, 1 1/2": 750 PSI**

**Sample HVAC Hierarchy:**

**Air Handling Systems**

**Air Handling System AHU#1**

**General Exhaust Fan, EF-1A**

**Variable Speed Drive, VSD - EF1A**

**Washroom Exhaust Fan, EF-1B**

**Variable Speed Drive, VSD - EF1B**

**Return Air Fan, RF-1**

**Variable Speed Drive, VSD - RF1**

**Smoke Exhaust Fan, EF-1C**

**Supply Fan, SF-1A**

**Variable Speed Drive, VSD - SF1A**

**Supply Fan, SF-1B**

**Variable Speed Drive, VSD - SF1B**

**Booster Fan, BF-G536**

**Humidifier, HU-1A**

**Humidifier, HU-1B**