

HOTEL TO HEALTHCARE CONCEPT (H2HC)

22 March 2020



US Army Corps
of Engineers®



H2HC – CONCEPT OF THE OPERATION



PHASES

1. SITE – **STATE Responsibility**

- Identify existing, available facility and obtain rights/ownership (via lease, other)
- Assess for suitability
- Technical advice/assistance from USACE under FEMA MA – Critical Public Facilities PRT
- Existing utilities and infrastructure (electric, power, water, HVAC, IT,...)
- Lease facility
- Transfer authority to USACE to convert and retrofit facility

2. BUILD – **USACE Mission (MA from FEMA)**

- Convert/Retro-fit existing code-compliant structure
- Hotel, dorm, or apartment building
- Enable conversion of facility to support an ICU-like capability
- Main Functions - supply power (+ auxiliary), remove carpet, modify HVAC for negative pressure, install nurse's station, enable/configure IT infrastructure, etc...
- Stafford Act – emergency contracting authorities, utilizing local, capable business(es); Construction contracts. Cost per Patient = ~\$145K or ~\$35M total for 250 beds hotel. **\$15M is the USACE portion for construction and \$20M for medical equipment** (to be provided by others. Costs are ROM estimates and do not include lease costs).

3. SUPPLY – **FEMA/HHS/OTHER Mission**

- Procure, Install, and Configure medically unique equipment
- Meets end-state requirements
- FEMA would task to either HHS or DLA to procure and install

4. STAFF – **STATE Responsibility**

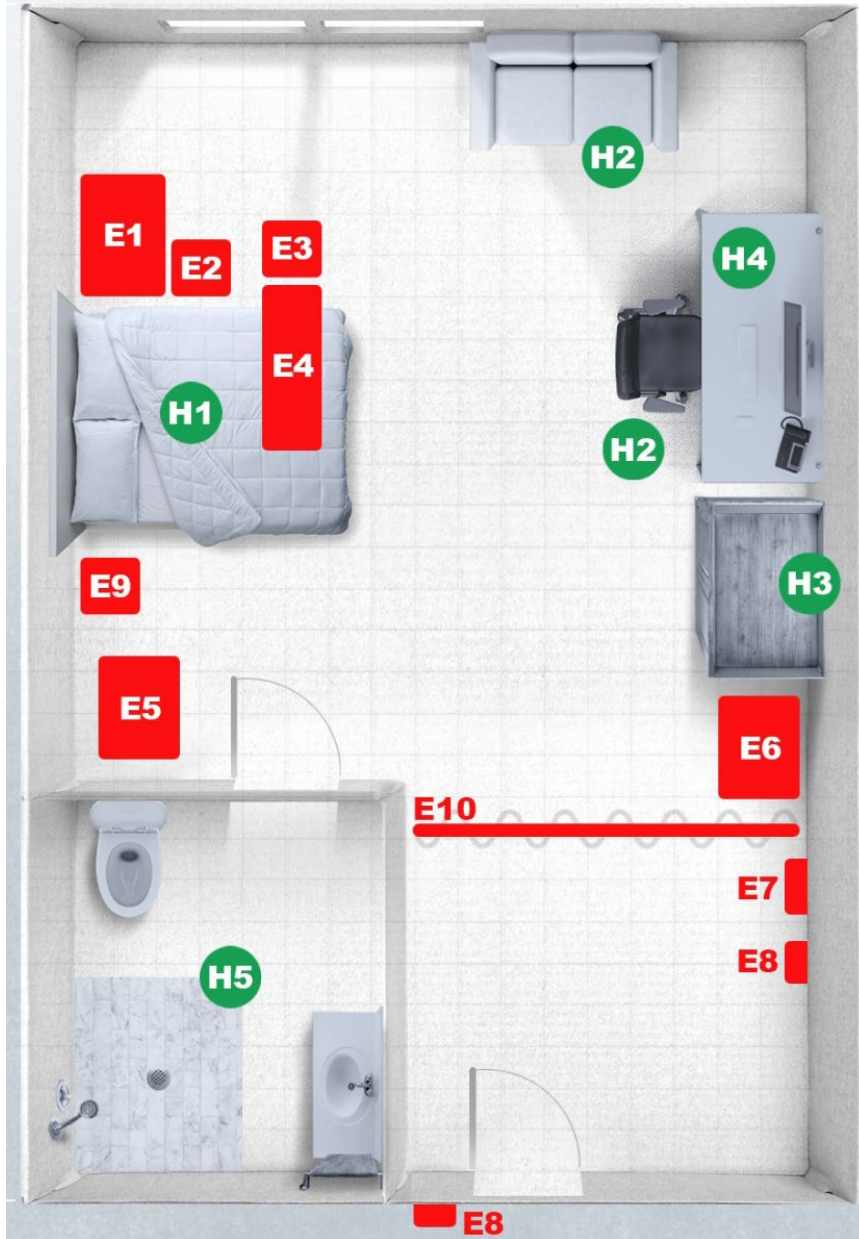
- Clearly a state function with available staff
- Expect to be critical path

BUSINESS RULES

- Proximity to existing, permanent medical hospital (10 mile/30 min)
- Readily available (10 mile/30 min) HazWaste disposal, linen/laundry, pharmacy
- Will not be fully ADA compliant; only to extent of existing facility
- USACE Cost estimates do not include real estate or lease acquisition, nor restoration costs post-medical use.
- USACE costs for renovation/construction work and IO&T are minimum costs. Actual cost must be developed when site adapting actual facility
- Facility templates and standards are adapted from DoD UFC criteria.
- Local municipality/county/state standards should be discussed and agreed upon by municipality and the Construction Agent.
- State or City Owned Property Preferred...eases leasing and permitting.
- Built/Renovated after 1990 to mitigate lead paint/asbestos.
- Already has redundant power or emergency power
- Building already Sprinklered and meets Fire Code
- Should be Single Room with attached Bathroom
- Meet Modern Power 3-Phase, 3-Wire
- Utilize exterior wall to install exhaust if needed



H2HC - HOTEL ROOM to HEALTHCARE ROOM



HOTEL PROVIDED

- H1. HOTEL BED
*WITH MEDICAL LINENS
- H2. HOTEL/RECLINING CHAIR
- H3. HOTEL DESK
- H4. HOTEL WARDROBE
- H5. HOTEL PLUMBING FIXTURES

ENGINEERING CHANGES

- 1. REMOVE CARPET
- 2. INSTALL VINYL FLOORING OR EPOXY
- 3. *REVISE HVAC DUCTING AND HEPA FILTERING*
- 4. ADD EMERGENCY BACK-UP POWER & UPS
- 5. ADD ELECTRICAL OUTLETS
- 6. ADD PRIVACY CURTAIN

SPECIAL MEDICAL EQUIPMENT – TO BE PROVIDED BY OTHERS (NON-USACE)

- E1. VENTILATOR CAPABLE; STORAGE CABINET
- E2. TELEMETRY/PUMP ON IV STAND
- E3. STOOL
- E4. OVER BED TABLE
- E5. MOBILE WORK STATION
- E6. LINEN HAMPER
- E7. SHARPS/GLOVES
- E8. HAND SANITIZER STATION
- E9. INFECTIOUS WASTE
- E10. CUBICLE CURTAIN

PHASES

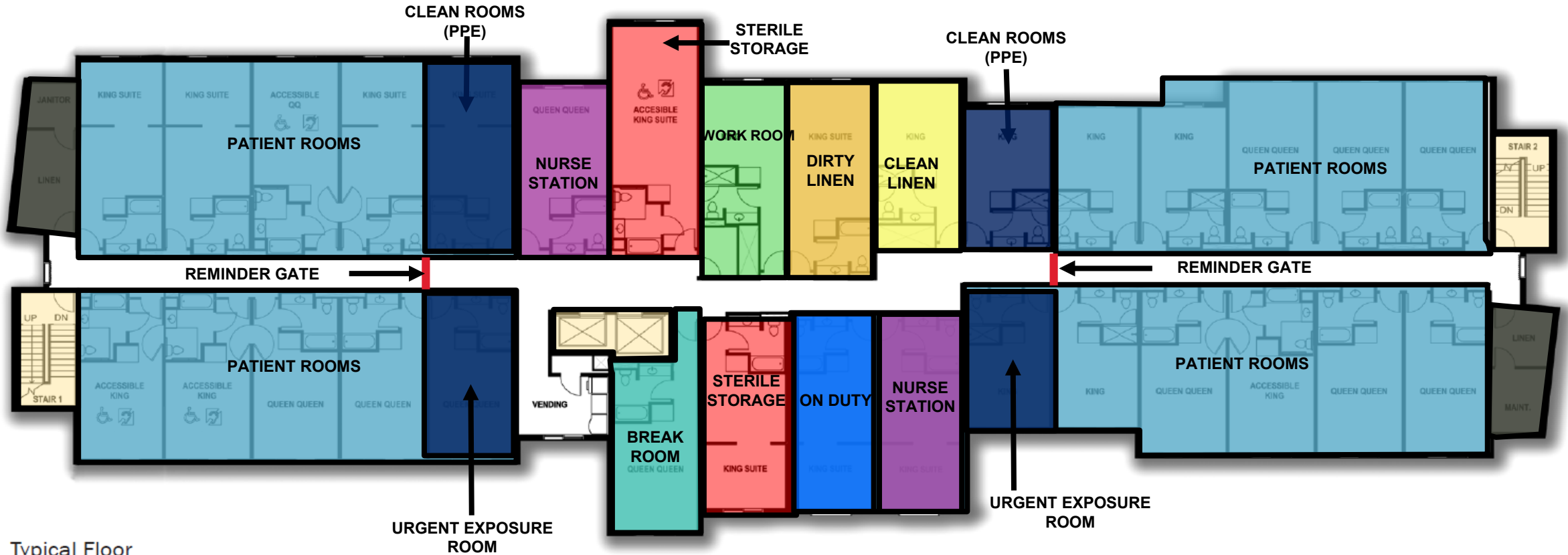
- 1. SITE (State)
- 2. BUILD (USACE)
- 3. SUPPLY (FEMA)
- 4. STAFF (State)

STANDARD DESIGN

*COVID
Non-COVID
Scalable, Tailorable,
Site Adaptable



H2HC - TYPICAL FLOOR PLAN



Typical Floor

HOTEL PROVIDED

1. HOTEL WI-FI
2. HOTEL PHONE SYSTEM
3. HOTEL IN-HOUSE NETWORK/TVs
4. HOTEL ICE MACHINE/VENDING
5. HOTEL PACKAGED HVAC

ENGINEERING CHANGES

1. MODIFIED ELEVATOR CONTROLS

STANDARD DESIGN

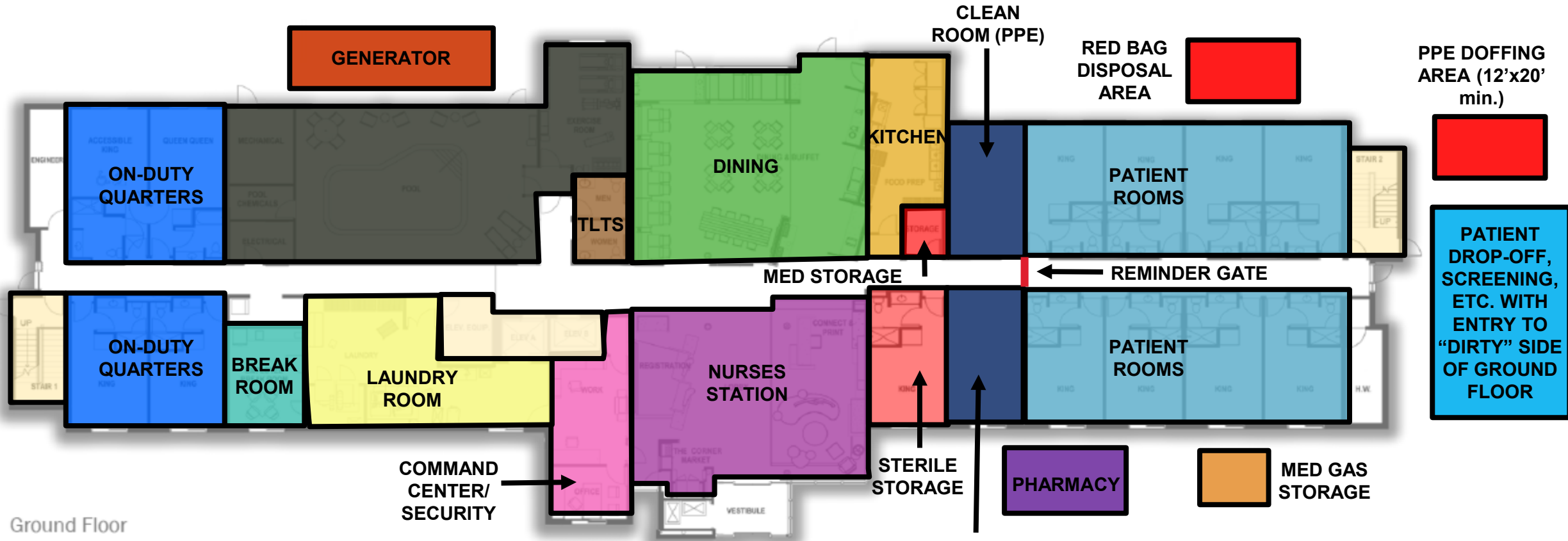
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SPECIAL MEDICAL EQUIPMENT

1. NURSE CALL
2. STORAGE SHELVING
3. WORKSTATIONS
4. MED DISPENSING UNITS
5. # VENTILATORS / FLOOR
6. "CRASH" CART / FLOOR
7. REMINDER GATES
8. EYE/HAND WASH STATIONS



H2HC - GROUND FLOOR PLAN



Ground Floor

HOTEL PROVIDED

- HOTEL FURNITURE FOR STAFF QUARTERS
- HOTEL KITCHEN
- HOTEL DINING
- HOTEL VESTIBULE
- HOTEL CCTV FOR SECURITY
- HOTEL CARD READERS

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ENGINEERING CHANGES

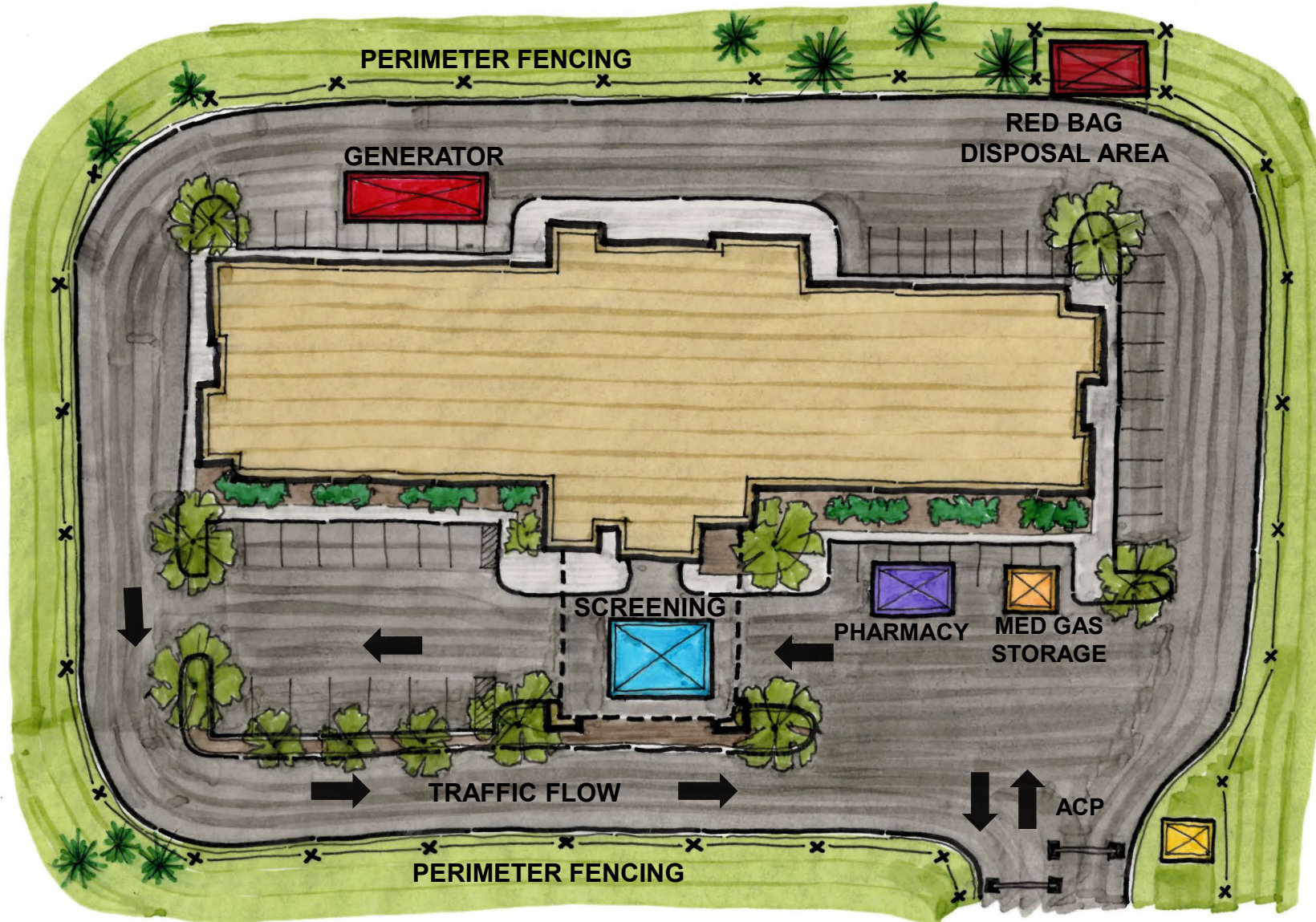
- ALL TYPICAL FLOOR PLAN ADDITIONS
- PLUS GENERATOR

NEW EQUIPMENT

- METAL DETECTOR
- VTC FOR COMMAND CENTER
- CONTROLLED ACCESS
- INFECTIOUS/CLEAN
- REMINDER GATES
- EYE HANDWASH STATIONS



H2HC – SITE IMPROVEMENT PLAN



ENGINEERING CHANGES

- ADD PERIMETER FENCING
- ADD GENERATOR
- ADD PATIENT SCREENING TENT
- ADD EXTERIOR PHARMACY
- ADD MED GAS STORAGE
- ADD ACCESS CONTROL POINT (ACP)
- ADD RED BAG DISPOSAL AREA