

# U.S. ARMY CORPS OF ENGINEERS UPDATE ON COVID- 19 RESPONSE

27 March 2020



US Army Corps  
of Engineers®



# AGENDA

Introductions- Mr. Jordan Howard (Director, Federal & Heavy Construction, Associated General Contractors)

Overview - Dr. Christine Altendorf, SES (Chief, Engineering & Construction Division, HQUSACE)

Concept of Operations - Mr. Mike Schultz, SES (Chief, Interagency and International Division, HQUSACE)

Overview of Conversion Concepts- Mr. Chip Marin (Programs Director, Huntsville Center)

Contracting Considerations- Ms. Jill Stiglich, SES (Director, Contracting, HQUSACE)

Questions and Answers



# OVERVIEW



## Key Points

- We are looking to marshal the support and capability of the industry to help with this crisis
- Powering Down- Districts are empowered reach out to local leaders and help them to frame options

## Alternate Care Site Documents

- Developed by USACE and HHS medical and construction experts to help States and municipalities address potential shortages in medical facilities during the 2020 COVID-19 pandemic
- Intended to assist in assessing and developing potential facilities for suitability as alternate care sites and to rapidly engage contractors to convert and prepare them for medical use.
- May not fit all circumstances
- Local & state governments must determine appropriate use of facilities

## Execution

- Magnitude and required speed of effort requires Federal, State, and local agencies issue be able to contract work
- The decision is by the State and FEMA!
- Primarily via emergency contracting authorities to local/regional firms (large or small business) with capability to begin immediately and execute the work rapidly
  - Contracted either by USACE or to State and local authorities
  - Governor must request FEMA provide the mission assignment (MA) to USACE
  - FEMA must provide USACE the MA under our Emergency Support Functions (ESFs) to be the executing agent
    - Example: NY was a directive from FEMS



# PHASES- CONCEPT OF OPERATION

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## Plan

Lead: State / Municipality

- ☐ Identify existing available facilities
- ☐ Assess for suitability
- ☐ USACE provides technical advice/assistance under FEMA Mission Assignment (MA) – Critical Public Facilities PRT
- ☐ Existing utilities and infrastructure (electric, power, water, HVAC, IT,...)
- ☐ Obtain rights / ownership (i.e. Lease facility)
- ☐ Determine construction agent

## Build

Lead: USACE (w/ MA) / State / Municipalities

- ☐ Convert/Retro-fit existing structure
  - ✓ Hotel, dorm, or apartment building
  - ✓ Arena or convention center
- ☐ Enable conversion of facility to support identified facility type
- ☐ Main Functions - supply & auxiliary power, washable floors & walls, negative pressure HVAC, nurse's station, IT infrastructure
- ☐ Stafford Act – emergency contracting authorities, utilizing local, capable business(es); Construction contracts.

## Supply

Lead: FEMA / HHS / State / Municipality / Other

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

## Staff

Lead: State / Municipality

- ☐ Expect to be critical path

\*Contracts will be executed primarily via emergency contracting authorities to local/regional firms (large or small business) which have the capability to begin immediately and execute the work rapidly- under contract either to USACE or to State and local authorities as determined by the States and FEMA.





# RECOMMENDED FACILITY CONSIDERATIONS



## All Facilities

- Within 10 miles/30 min of permanent medical hospital, HazWaste disposal, linen/laundry, pharmacy
- ADA compliant only to current ADA compliance of existing facility
- Facility templates and standards are adapted from DoD UFC criteria.
- Municipality and Construction Agent must discuss and agreed upon use of local municipality/county/state standards
- State or City Owned Property Preferred.
- Cost estimates
  - Do not include real estate, lease acquisition, restoration costs post-medical use
  - Are minimum costs for renovation/construction and IO&T. Actual costs developed when site adapting each facility.

## Hotel to Healthcare (H2HC) Specific

- Built/Renovated after 1990 (mitigate lead paint/asbestos)
- Single Room with attached Bathroom
- Install exhaust on Exterior walls if needed
- Sprinklered and meets Fire Code
- Modern Power 3-Phase, 3-Wire

## Arena to Healthcare (A2HC) Specific

- Existing redundant power or emergency power
- Can be modified or supplemented to meet Fire Code.
- Stage temporary facilities on perimeter (including med waste, sanitary, soiled linen, hand washing, med supply/pharmacy)
- Modern Power 3-Phase, 3-Wire w/ temp power supplemented to patient care areas on floor



# USACE TERMINOLOGY FOR COVID-19 PERFORMANCE WORK STATEMENTS (PWS)

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Patient Diagnosis	Acuity **	Clinical Differentiation Impacting the Facility Design	NFPA 99 Space Category & NFPA 101 Classification	Recommended Facility Solution per PWS's	
				Hotel/Barracks	Arena
<b>COVID Positive</b>	Acute*	Airborne Infectious On Ventilator	Cat 2 Plus* (General/Critical Care) Non-Ambulatory	Single Patient Space Negative Pressure Room Line of Sight to Patient (vision panel / camera)	Single Patient Space Negative Pressure Pod Line of Sight to Patient (Vision panel)
<b>COVID Positive or Presumed Positive (pending test)</b>	Non-Acute	Airborne Infectious Not On Ventilator. May require supplemental oxygen	Cat 3 (Basic Care) Ambulatory	Single Patient Space No negative pressure Isolation by floor/room Line of sight not required (cameras to reduce contact)	Single Patient Space Negative Pressure Pod Line of sight not required
<b>NON-COVID</b>	Non-Acute	Not airborne infectious	Cat 3 (Basic Care) Ambulatory	No Special Requirements – No negative pressure. Multi-patient room permissible Line of sight not required	No Special Requirements – No negative pressure. Multi-patient bays permissible. Line of sight not require
<b>NON-COVID</b>	Acute	Not airborne infectious May require medical support spaces not in ACF.	Cat 2 (General Care) Non-Ambulatory	<i>Typical Med/Surg</i> <i>May not be appropriate for ACF*</i>	<i>Typical Med/Surg</i> <i>May not be appropriate for ACF*</i>
<b>NON-COVID</b>	Critical	Intense medical needs beyond Cat 2 Plus. Multiple Comorbidity	Cat 1 (Critical Care) Non-Ambulatory	<i>Hospital ICU/All/PE</i> <i>ACF not intended for full Category 1 Provisions.</i>	<i>Hospital ICU/All/PE</i> <i>ACF not intended for full Category 1 Provisions</i>

Applicable Performance Work Statement for Alternate Care Facility (ACF)

- H2HC Acute or B2HC Acute
- H2HC Non-Acute or B2HC Non-Acute
- A2HC Acute
- A2HC Non-Acute (NON-COVID)

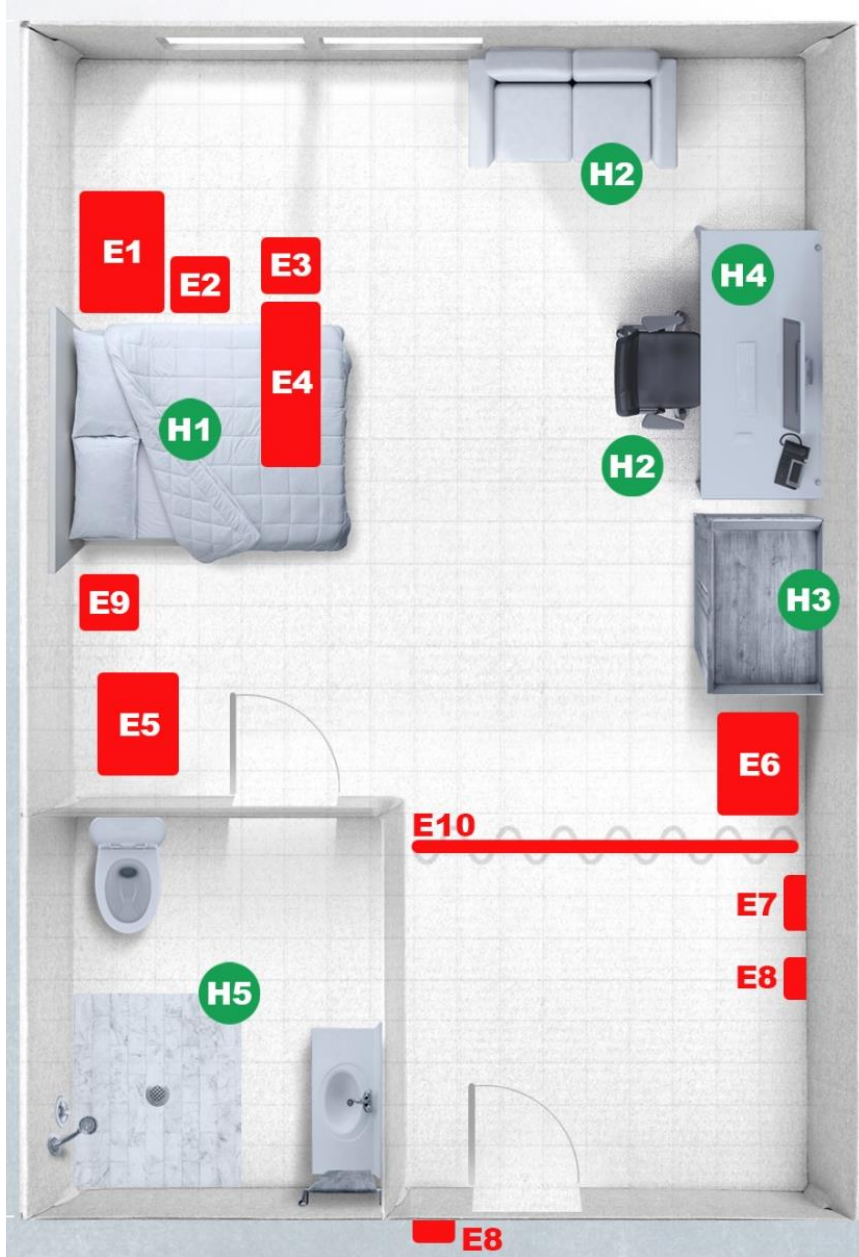
## NOTES

\* Category 2 Plus applies NFPA 99 Category 2 considerations (General Care – risk of minor injury) plus additional Category 1 provisions (Critical Care – risk of major injury or death) as relates to the specific needs of a COVID-positive patient on a ventilator.

\*\*This column is not intended to represent true clinically defined patient acuity but represents a general categorization (and terminology) used across the PWS's



# 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

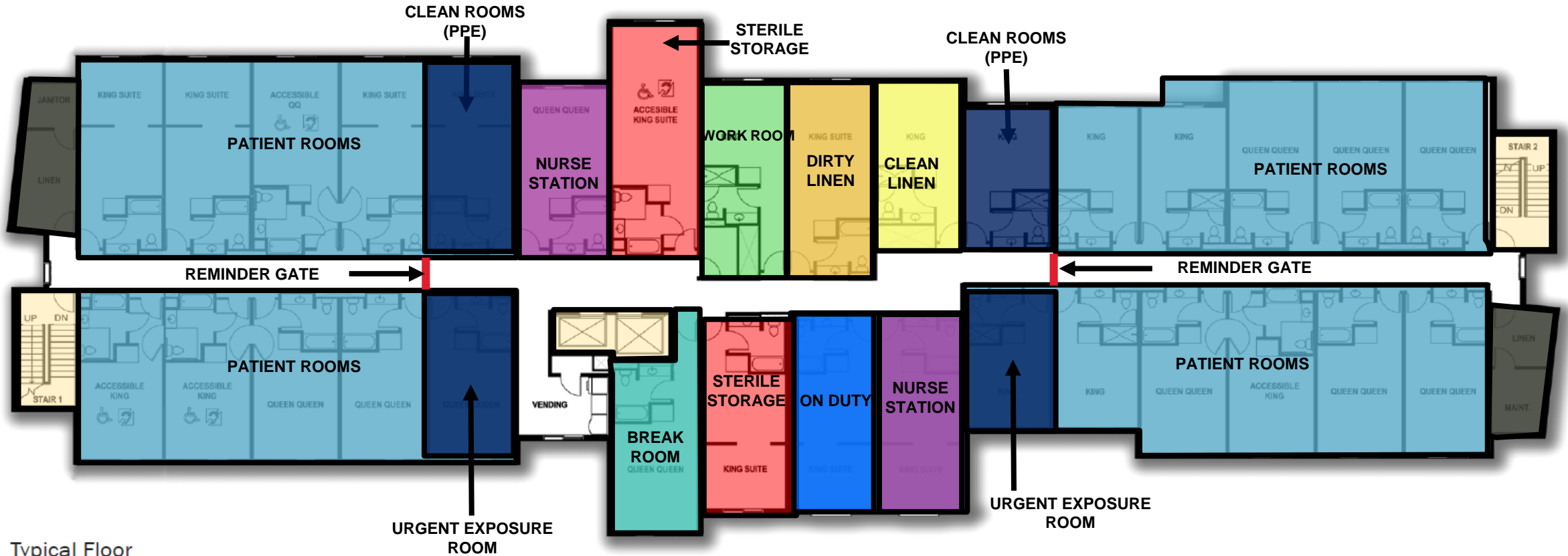
## PHASES

- 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

\*COVID  
Non-COVID  
Scalable, Tailorable,  
Site Adaptable

## SPECIAL MEDICAL EQUIPMENT

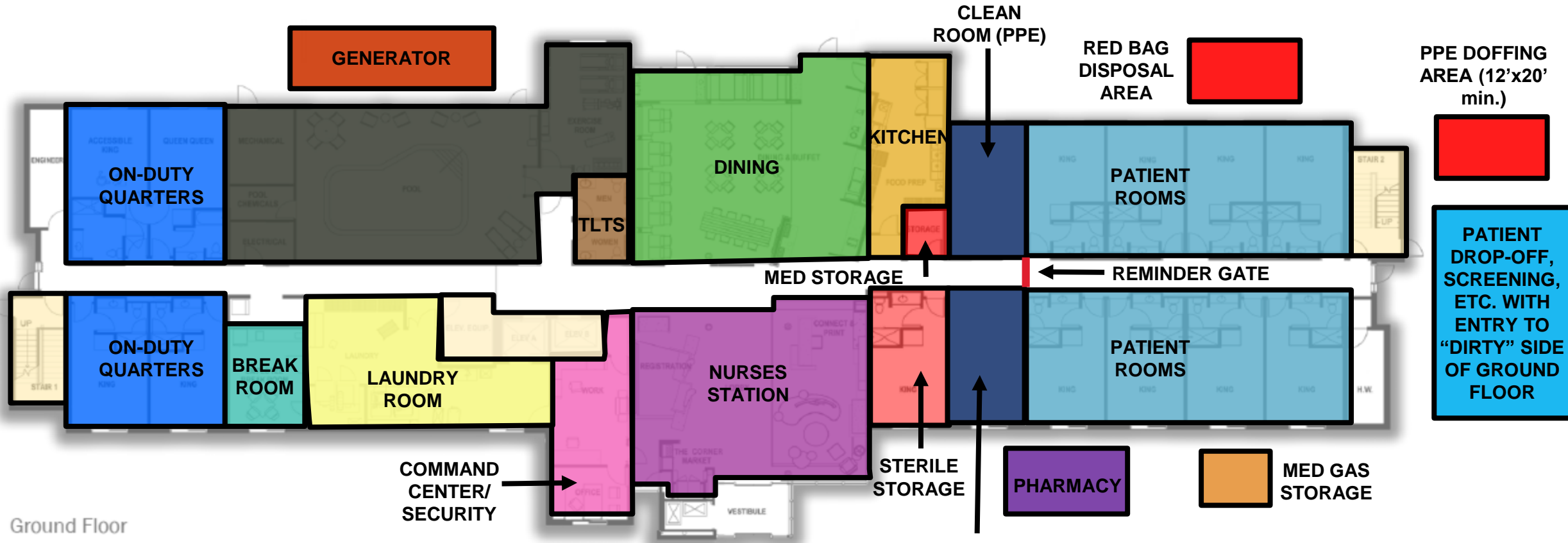
1. NURSE CALL
2. STORAGE SHELVING
3. WORKSTATIONS
4. MED DISPENSING UNITS
5. # VENTILATORS / FLOOR
6. "CRASH" CART / FLOOR
7. REMINDER GATES
8. EYE/HAND WASH STATIONS





# H2HC - GROUND FLOOR PLAN

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Ground Floor

## HOTEL PROVIDED

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

### STANDARD DESIGN

\*COVID  
Non-COVID  
Scalable, Tailorable,  
Site Adaptable

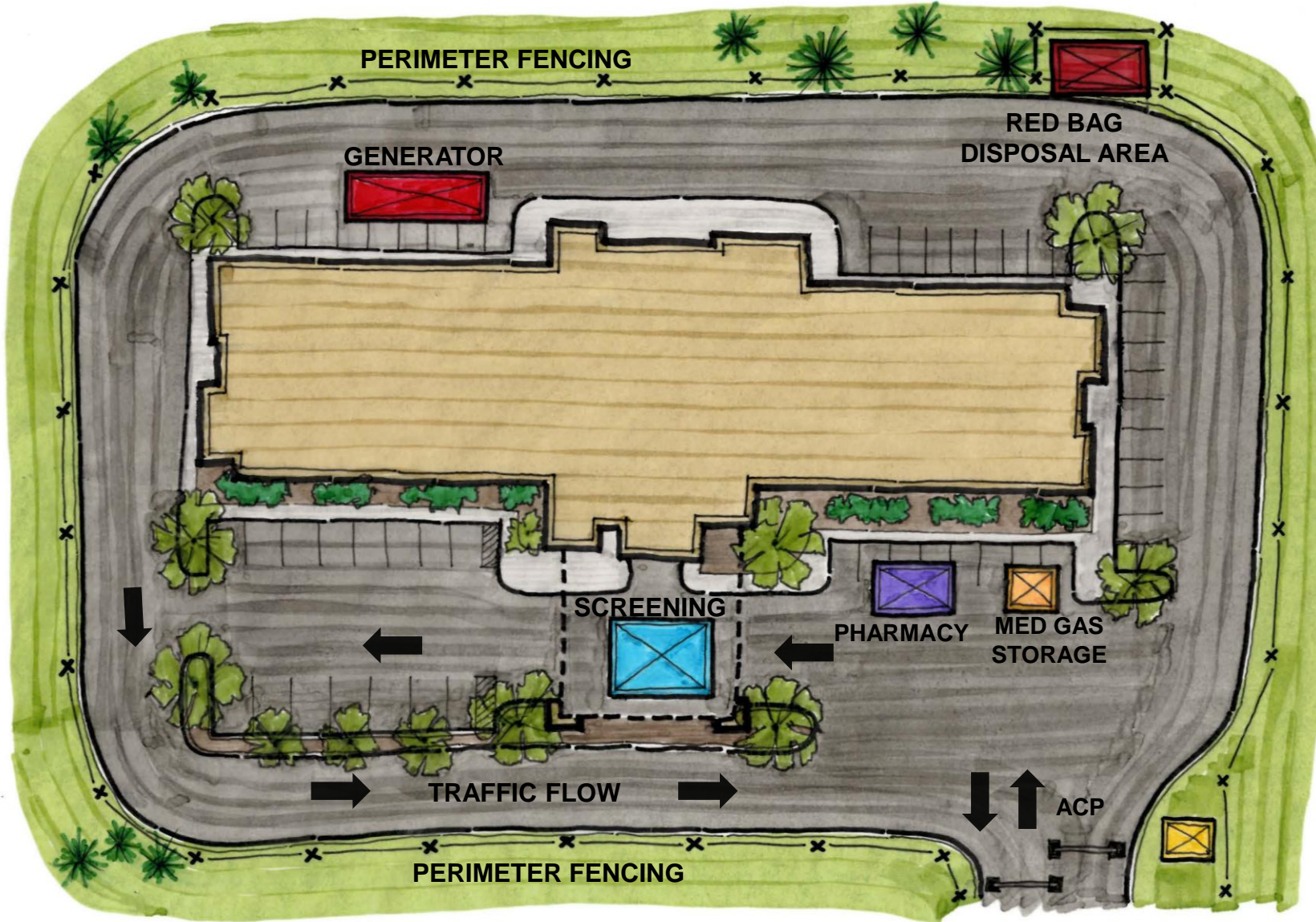
## ENGINEERING CHANGES

- ALL TYPICAL FLOOR PLAN ADDITIONS
- PLUS GENERATOR

## NEW EQUIPMENT

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

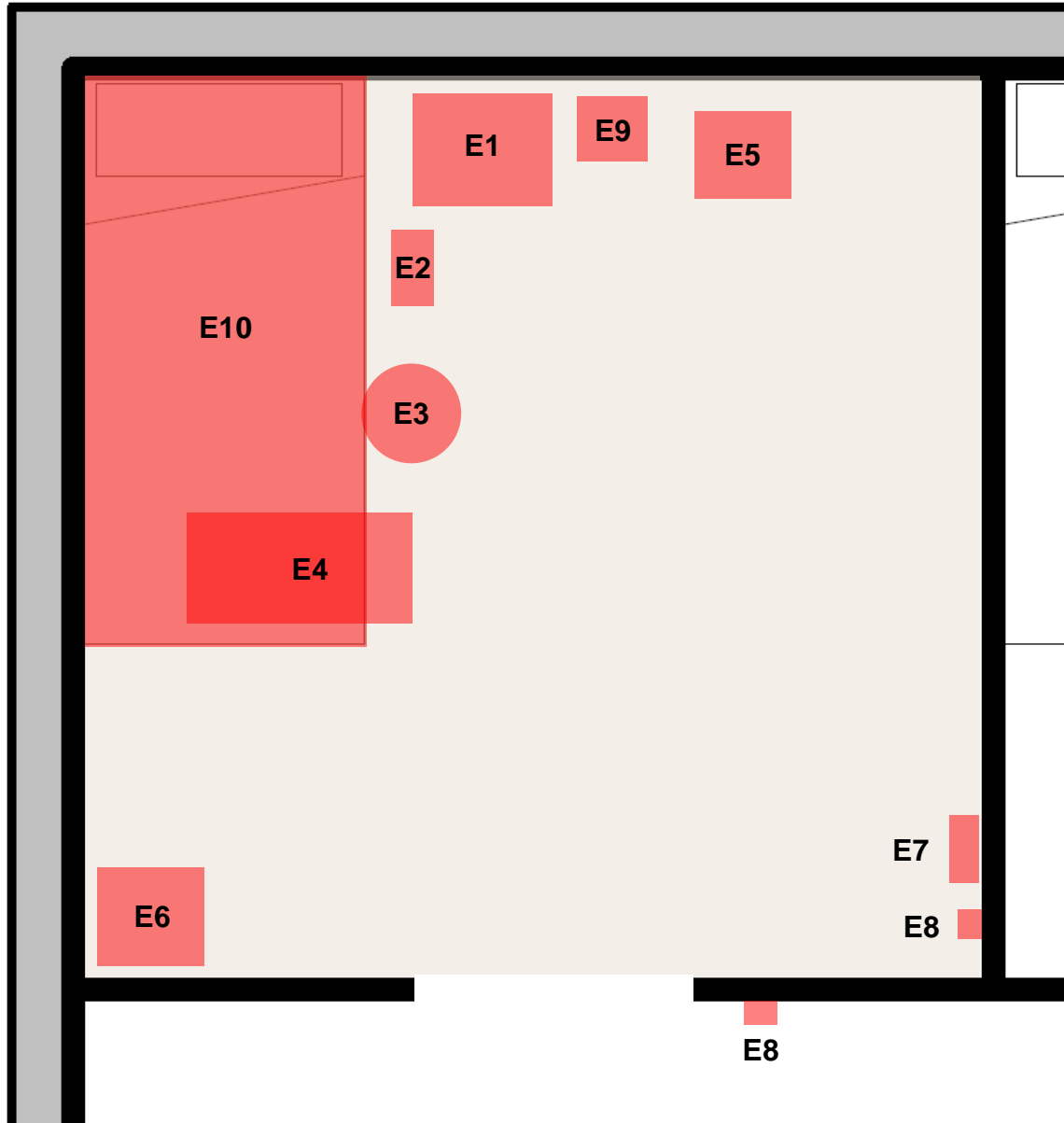
# H2HC – SITE IMPROVEMENT PLAN



## 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

# A2HC TYPICAL POP-UP CARE SPACES



## ENGINEERING CHANGES

1. ADD HVAC DUCTING AND HEPA FILTERING
2. ADD EMERGENCY BACK-UP POWER
3. ADD ELECTRICAL OUTLETS
4. ADD DATA OUTLETS
5. ADD PLUMBING

## NEW EQUIPMENT - TO BE PROVIDED BY OTHERS (NON-USACE)

- E1. VENTILATOR CAPABLE; STORAGE CABINET
- E2. TELEMTRY/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. PATIENT BED

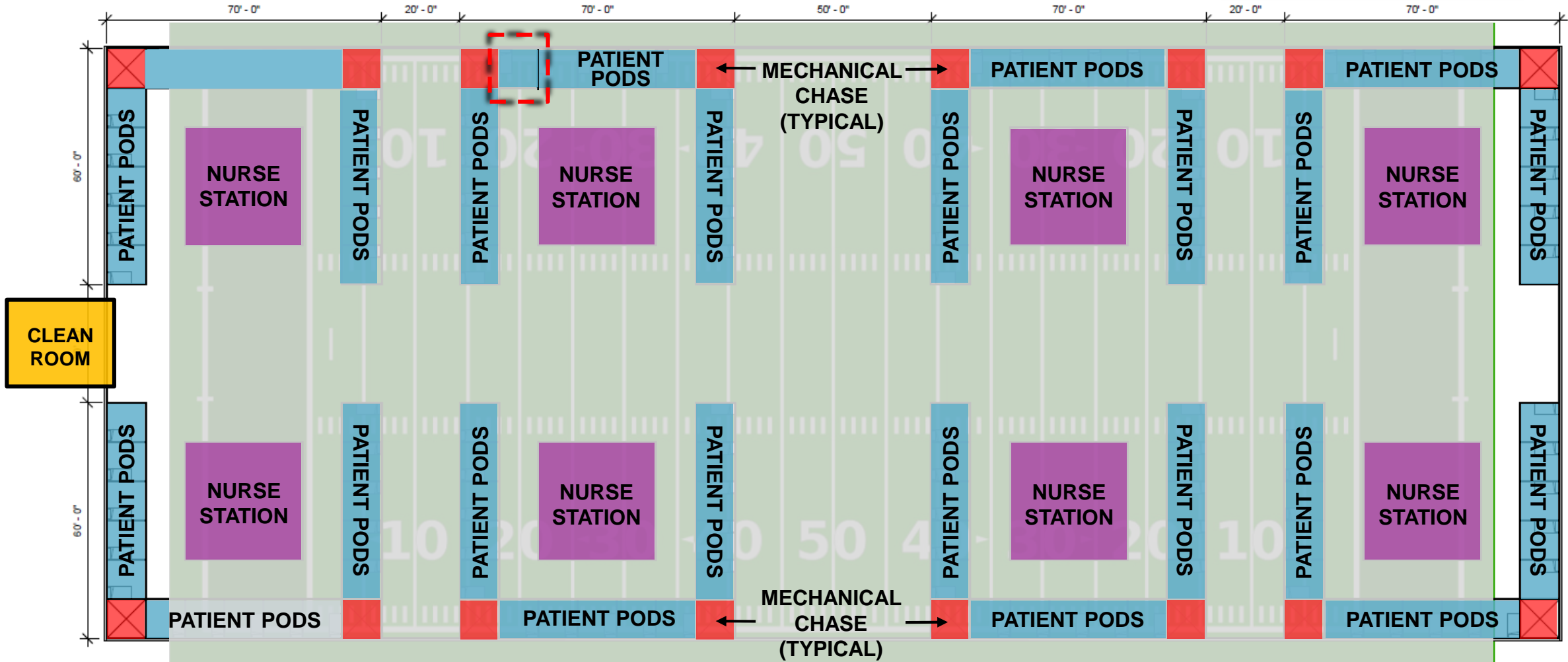


Bedside Toilet



# A2HC TYPICAL LAYOUT

- 1 NURSE STATION FOR EACH 15 PATIENTS
- TOTAL OF 120 PODS

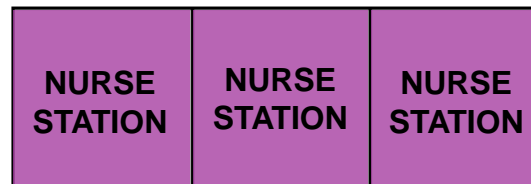


## FACILITY PROVIDED

- FIELD HOUSE ICE MACHINE

## ENGINEERING CHANGES

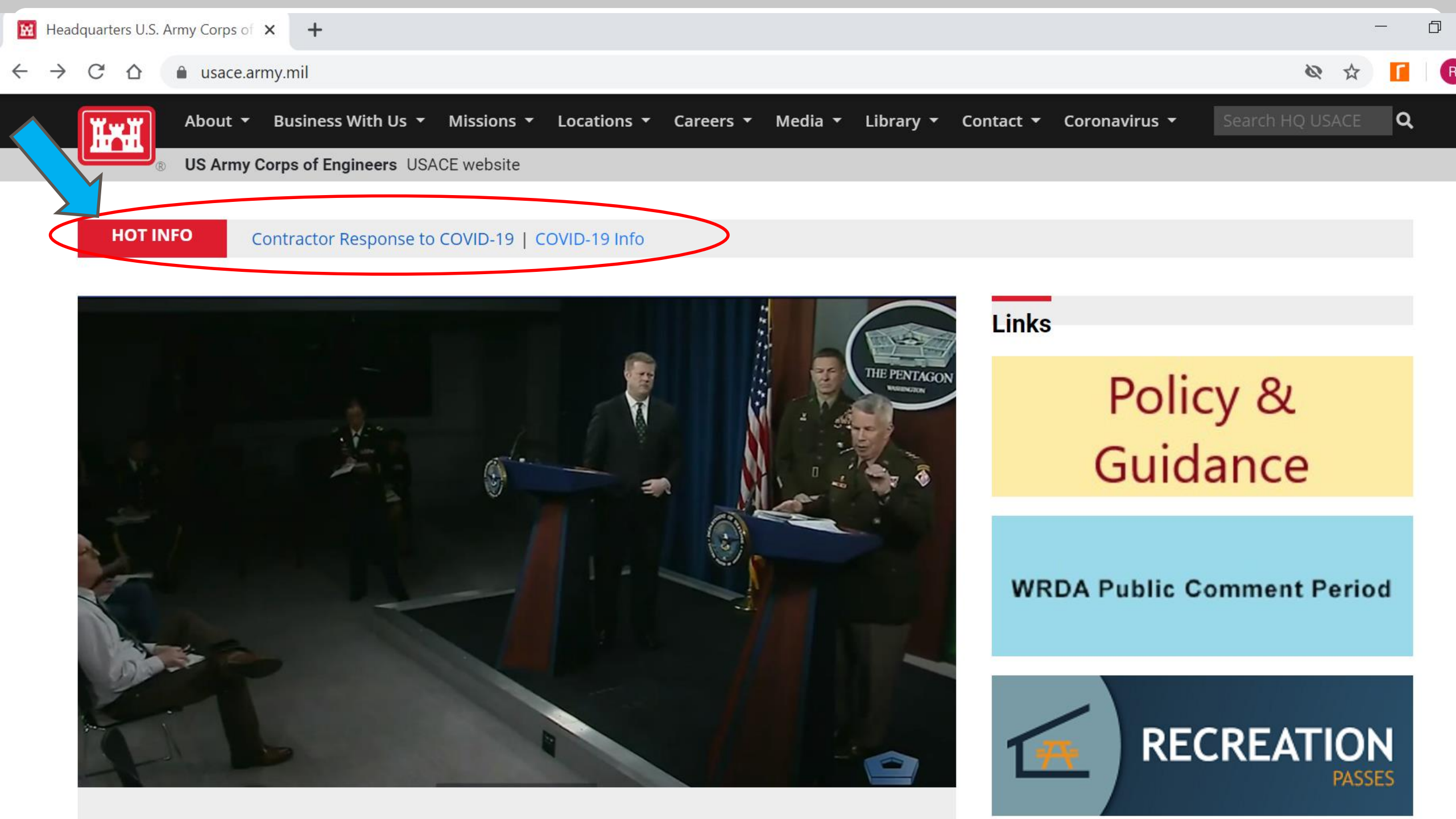
- ALL TYPICAL FLOOR PLAN ADDITIONS
- ADD GENERATOR



## MEDICAL EQUIPMENT

- ALL TYPICAL FLOOR PLAN ADDITIONS
- NURSE CALL
- STORAGE
- WORKSTATIONS
- MED DISPENSING UNITS





HOT INFO

Contractor Response to COVID-19 | COVID-19 Info



## Links

Policy & Guidance

WRDA Public Comment Period





**Businesses can help during COVID-19: register on the SAM.gov System for Award Management (SAM) and see below for more information!**

- Contracting +
- MILCON Forecast
- Small Business

### From the Director of Contracting:

#### USACE COVID-19 Market Research Request:

Vendors with the ability to perform or supply items 1, 2 and 3 below are requested to send capabilities statements to our dedicated COVID-19 Contracting mailbox: [COVIDContracting@usace.army.mil](mailto:COVIDContracting@usace.army.mil).

1. "Build-out" or retrofit of existing space (arenas, convention centers, dormitories, hotels, or other facilities) into alternate care facilities
2. Field Medical Units
3. Temporary Medical Enclosures

***Please Note: Vendors of other supplies and services are welcome to submit capability or interest statements regarding support of the USACE COVID-19 Response. All interested parties are requested to register at the [SAM.gov](https://beta.sam.gov) website under the "Disaster Registry" tab.***

### Interested in contracting with USACE?

Register in the [System for Award Management \(SAM\) database](#). See description below. It is mandatory that all vendors be registered under the SAM program.

Find information on available opportunities through Contract Opportunities at <https://beta.sam.gov>.

### Useful Links

- [USACE Coronavirus Alternate Care Site Documents](#)
- [USACE Opportunities on beta.SAM.gov](#)
- [System for Award Management](#)

### Contact Us

**Email Us:**  
[Contracting Inbox](#)

**Call Us:**  
202-761-0567



# CONTRACTING – COMMON QUESTIONS



1. Can USACE post solicitation links on their COVID web pages? District, or HQ site would be helpful, but blanket reference to [beta.SAM.gov](https://beta.sam.gov) does not alleviate concerns.
2. Can USACE share local POCs that can be contacted with questions about the COVID response as a whole?
3. Are USACE regions considering soliciting contracts from a single district for an MSC as a whole, similar to the BRAC approach?
4. How will USACE address impacts from COVID outbreak? We are aware of the traditional “Defaults Clause” that possibly grants non-compensable time to our work. However, we expect significant impacts to our supply chain that may not be quantifiable when “shelter in place” orders or other guidance is lifted.



## QUESTIONS