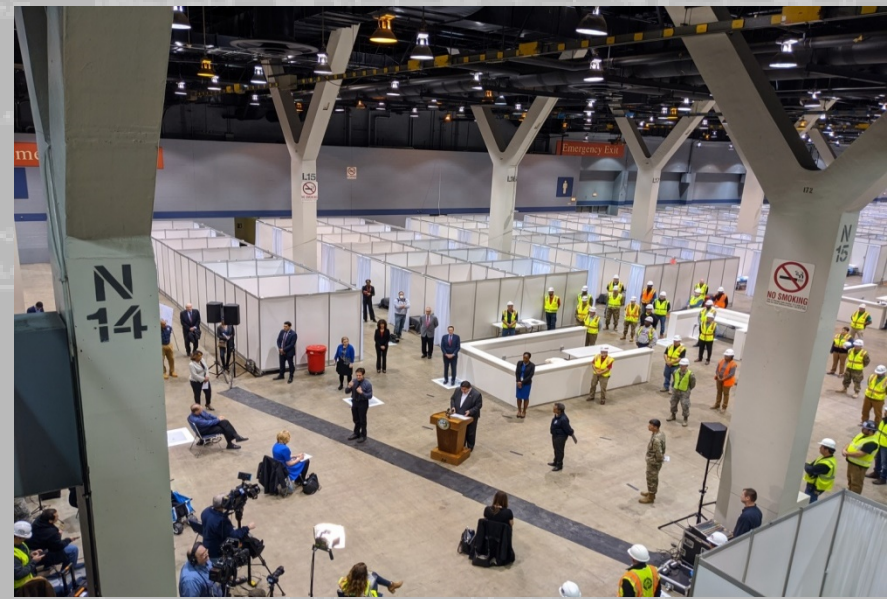
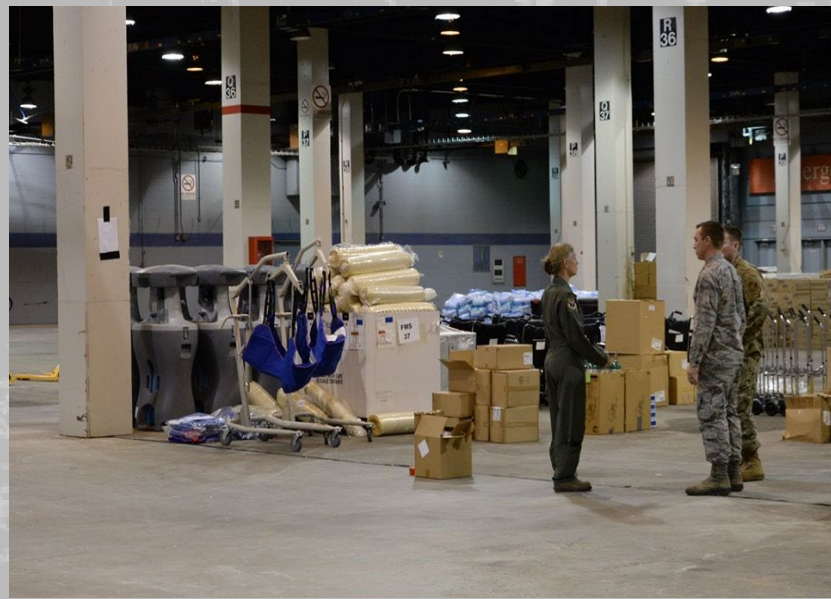


U.S. ARMY CORPS OF ENGINEERS UPDATE ON COVID-19 RESPONSE

9 April 2020



US Army Corps of Engineers®



AGENDA



- Introduction
- 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. Wade Doss (Director of Engineering, Huntsville Center)
- Contracting Considerations
Ms. Jill Stiglich, SES (Director, Contracting, HQUSACE)
- Q&A



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



U.S. ARMY CORPS OF ENGINEERS (AS OF: 09-APR 1100)

COVID-19 CORONAVIRUS

COVID-19
RESPONSE DAY



USACE
ENGAGEMENT 50/5
States / Territories

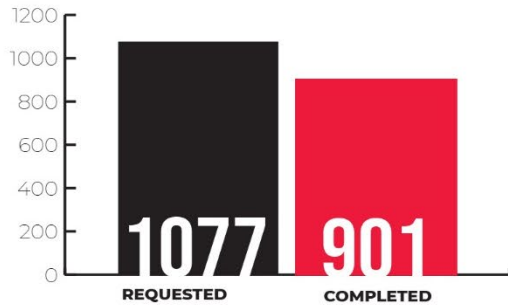
ADMINISTRATIVE

MISSION ASSIGNMENTS **40** OPEN: 40
CLOSED: 0

CUMULATIVE FUNDING **\$1.7B** MA: \$1.7B
NEPP FUNDING: \$2.1M

ENGAGED PERSONNEL / DEPLOYED: 2,078
SUPPORTING: 15,000

ASSESSMENTS



ALTERNATE CARE FACILITY TOTAL BED COUNT

15,706

ALTERNATE CARE FACILITY CONSTRUCTION



ARENA TO HEALTHCARE (A2HC)

500 Assessments Complete 23 Sites Selected 13,902 Beds 10 Pending Contracts **13 Contracts Awarded**



HOTEL/DORMS TO HEALTHCARE (H2HC)

401 Assessments Complete 14 Sites Selected 1,804 Beds 7 Pending Contracts **7 Contracts Awarded**

ARENA TO HEALTHCARE (A2HC)

500/609
Assessments Complete



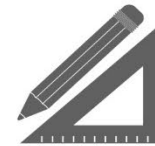
13,902 Potential Beds

HOTELS/DORMS TO HEALTHCARE (H2HC)

401/468
Assessments Complete



1,804 Potential Beds



ENGINEERED SOLUTION PLANS

Approved site adaptations must be accomplished in as little as 5 days and at most 2 weeks to align with state projected virus infection peaks.

4 STANDARD DESIGNS



College Dorm



Hotel



Sports Arena



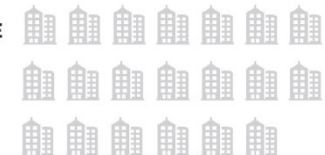
Convention Center

All 4 designs can be adapted to serve COVID and NON-COVID patients.

PROJECT TRANSFERS TO STATE STATUS



0 OF 20 COMPLETE





PHASES- CONCEPT OF OPERATION



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.



ALTERNATE CARE FACILITY (ACF) ROLL UP

Status	MSC	Facility Name	Location	COVID or NON-COVID	Type	# Beds	Award Date	Start Date	Complete Date	Comp. %
A	NAD	Javits Center	NYC, NY	COVID	A2HC	2,100	25-Mar-20	30-Mar-20	8-Apr-20	99%
A	NAD	Westchester County Center	White Plains, NY	COVID	A2HC	110	27-Mar-20	27-Mar-20	17-Apr-20	42%
A	LRD	McCormick Place	Chicago, IL	COVID	A2HC	3,000	28-Mar-20	30-Mar-20	24-Apr-20	80%
A	NAD	SUNY Stony Brook	Stony Brook, NY	NON-COVID	A2HC	1,038	29-Mar-20	29-Mar-20	19-Apr-20	82%
A	LRD	Sherman Hospital	Elgin, IL	COVID	H2HC	283	29-Mar-20	30-Mar-20	24-Apr-20	40%
A	LRD	Metro South Medical Center	Blue Island, IL	COVID	H2HC	550	29-Mar-20	30-Mar-20	24-Apr-20	40%
A	NAD	SUNY Old Westbury	Westbury, NY	NON-COVID	A2HC	1,024	29-Mar-20	31-Mar-20	19-Apr-20	51%
A	LRD	TCF Center	Detroit, MI	COVID	A2HC	970	31-Mar-20	1-Apr-20	9-Apr-20	98%
A	SPD	Gibson Medical Center	Albuquerque, NM	COVID	H2HC	200	3-Apr-20	4-Apr-20	18-Apr-20	33%
A	LRD	Westlake Hospital	Chicago, IL	COVID	H2HC	361	4-Apr-20	5-Apr-20	24-Apr-20	15%
A	LRD	Suburban Collection Showplace	Novi, MI	COVID	A2HC	1,100	5-Apr-20	6-Apr-20	20-Apr-20	5%
A	LRD	Music City Center	Nashville, TN	COVID	A2HC	1,004	5-Apr-20	6-Apr-20	30-Apr-20	4%
A	SPD	Colorado Convention Center	Denver, CO	COVID	A2HC	2,000	5-Apr-20	6-Apr-20	27-Apr-20	7%
A	SPD	Miyamura High School	Gallup, NM	COVID	A2HC	50	5-Apr-20	6-Apr-20	20-Apr-20	12%
A	SPD	Porterville Dev. Center	Porterville, CA	COVID	A2HC	246	5-Apr-20	6-Apr-20	22-Apr-20	2%
A	SAD	Miami Beach Convention Ctr	Miami, FL	COVID	A2HC	450	6-Apr-20	7-Apr-20	20-Apr-20	10%
A	LRD	Gateway Shopping Convention Ctr	Memphis, TN	COVID	A2HC	243	6-Apr-20	7-Apr-20	29-Apr-20	0%
A	MVD	Wisconsin State Fair (Milwaukee)	West Allis, WI	COVID	A2HC	754	7-Apr-20	8-Apr-20	18-Apr-20	0%
A	NAD	East Orange General Hospital	East Orange, NJ	COVID	H2HC	250	7-Apr-20	8-Apr-20	18-Apr-20	0%
A	NWD	Quality Inn, St Louis	Florissant, MO	COVID	H2HC	120	8-Apr-20	8-Apr-20	12-Apr-20	1%
A	SPD	The Ranch Events Complex	Loveland, CO	COVID	A2HC	1,060	8-Apr-20	9-Apr-20	16-Apr-20	0%

ASSESSMENTS
1,077 REQUESTED 901 COMPLETED

TENTATIVE
26 FACILITIES 13,957 BEDS

PENDING
16 FACILITIES 5,562 BEDS

USACE DESIGN/STATE EXECUTED
20 FACILITIES 6,869 BEDS

USACE EXECUTED
21 FACILITIES 16,913 BEDS



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)



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
COVID Positive	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)
COVID Positive or Presumed Positive (pending test)	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
NON-COVID	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
NON-COVID	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>
NON-COVID	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)

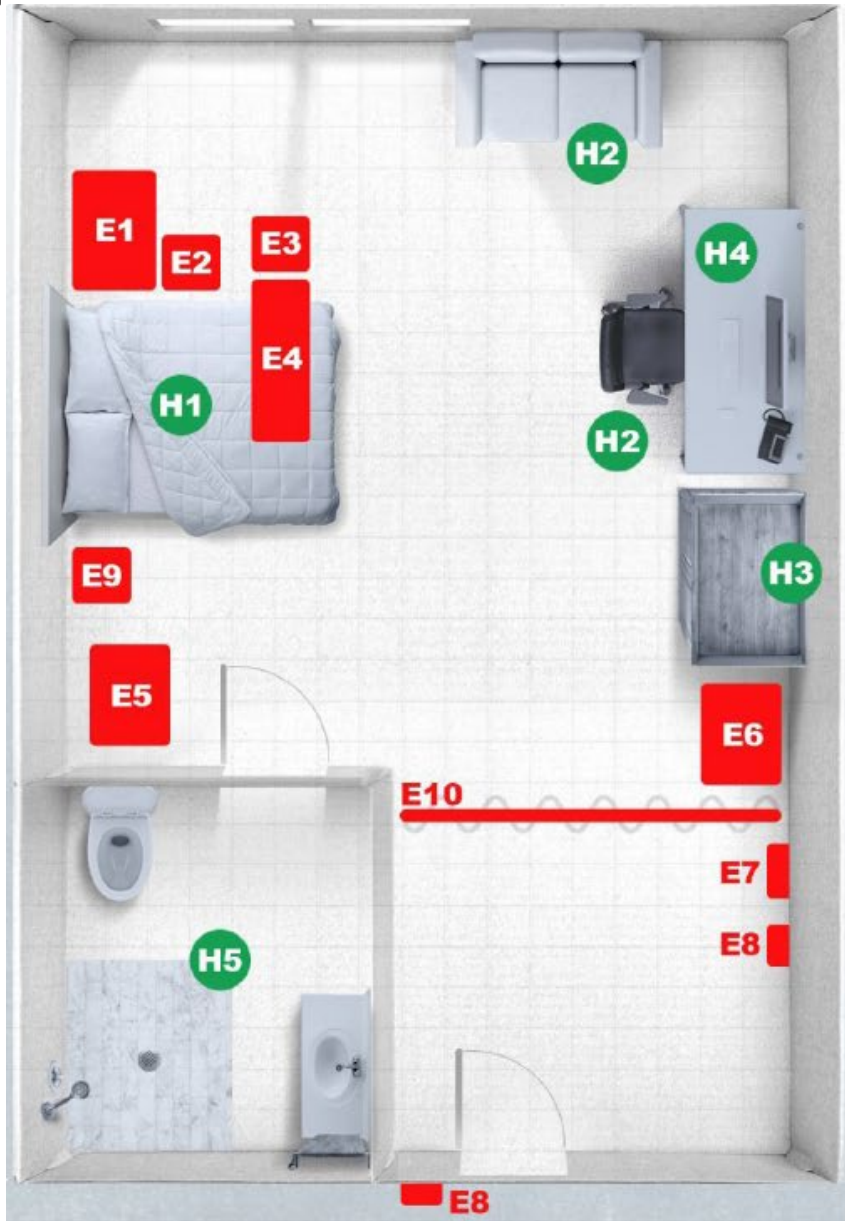
- H2HC Acute or B2HC Acute
- H2HC Non-Acute or B2HC Non-Acute
- A2HC Acute
- A2HC Non-Acute (NON-COVID)

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/DESK CHAIR
- H3. HOTEL WARDROBE
- H4. HOTEL DESK
- H5. HOTEL PLUMBING FIXTURES

ENGINEERING CHANGES

- REMOVE CARPET
- INSTALL VINYL FLOORING OR EPOXY
- *REVISE HVAC DUCTING AND HEPA FILTERING
- ADD EMERGENCY BACK-UP POWER & UPS
- ADD ELECTRICAL OUTLETS
- ADD PRIVACY CURTAIN

SPECIAL MEDICAL 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. 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

STANDARD DESIGN
 *COVID
 Non-COVID
 Scalable, Tailorable,
 Site Adaptable

ENGINEERING CHANGES

- INSTALL PRESSURE MONITORING
- MODIFY HVAC TO ACHIEVE NEGATIVE PRESSURE (BY FLOOR)
- MODIFIED ELEVATOR CONTROLS

REUSE

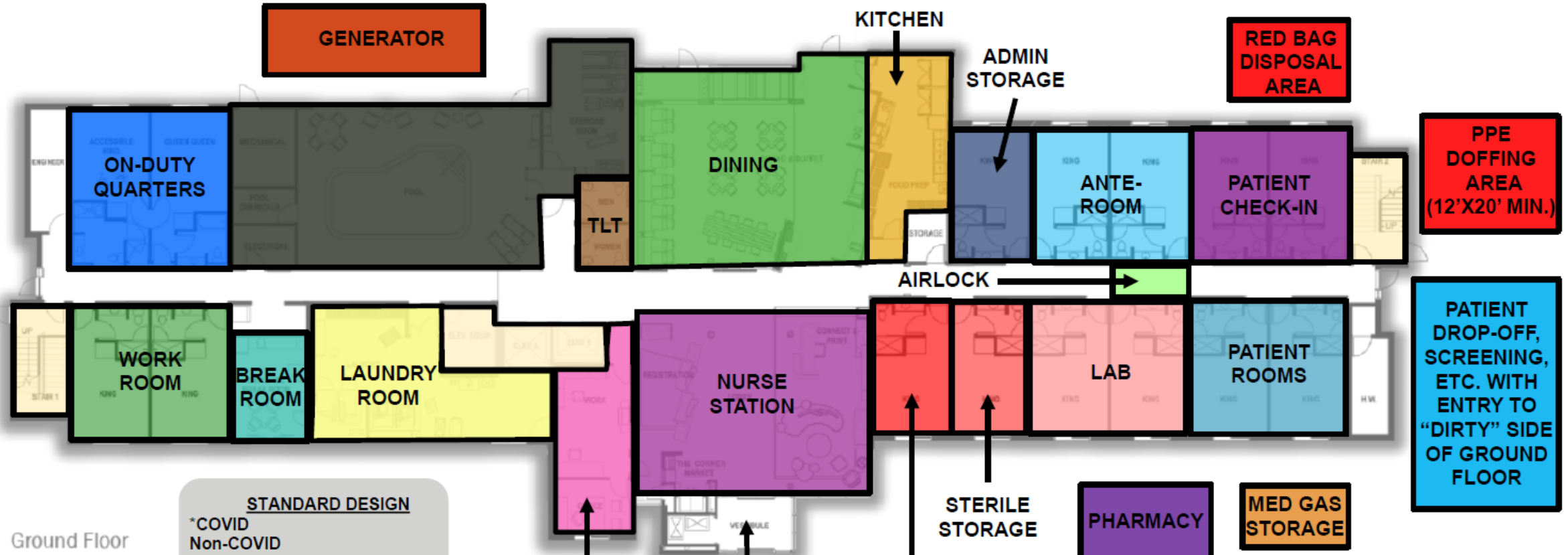
- HOTEL WIFI
- HOTEL PHONE SYSTEM
- HOTEL INHOUSE NETWORK/TVS
- HOTEL ICE MACHINE/VENDING
- HOTEL PACKAGED HVAC

NEW EQUIPMENT

- NURSE CALL
- STORAGE SHELVING
- WORKSTATIONS
- MED DISPENSING UNITS
- #TBD VENTILATORS / FLOOR
- "CRASH" CART / FLOOR
- REMINDER GATES
- EYE HANDWASH STATIONS



H2HC - GROUND FLOOR PLAN – OPTION 2



Ground Floor

STANDARD DESIGN
 *COVID
 Non-COVID
 Scalable, Tailorable,
 Site Adaptable

ENGINEERING CHANGES

- ALL TYPICAL FLOOR PLAN ADDITIONS
- PLUS GENERATOR

REUSE

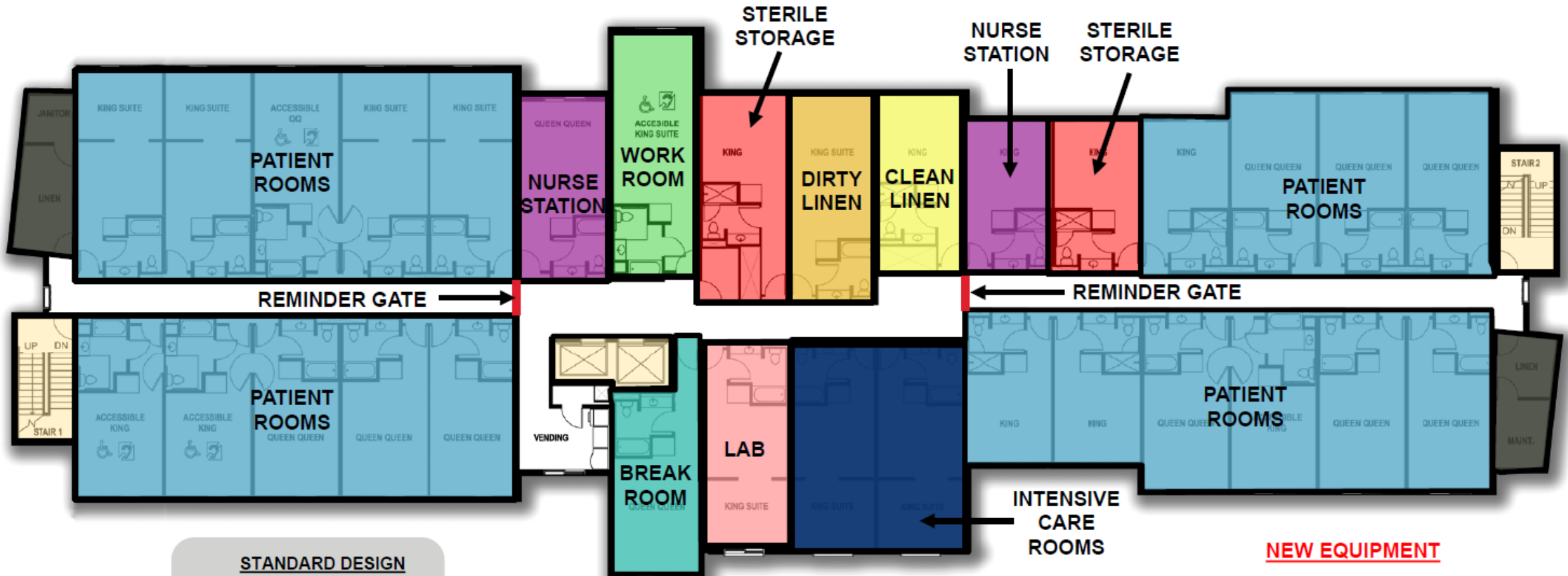
- HOTEL FURNITURE FOR STAFF QUARTERS
- HOTEL KITCHEN
- HOTEL DINING

NEW EQUIPMENT

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



H2HC - TYPICAL FLOOR PLAN – OPTION 2



Typical Floor

STANDARD DESIGN
 *COVID
 Non-COVID
 Scalable, Tailorable,
 Site Adaptable

ENGINEERING CHANGES

- INSTALL PRESSURE MONITORING
- MODIFY HVAC TO ISOLATE BY FLOOR
- MODIFIED ELEVATOR CONTROLS

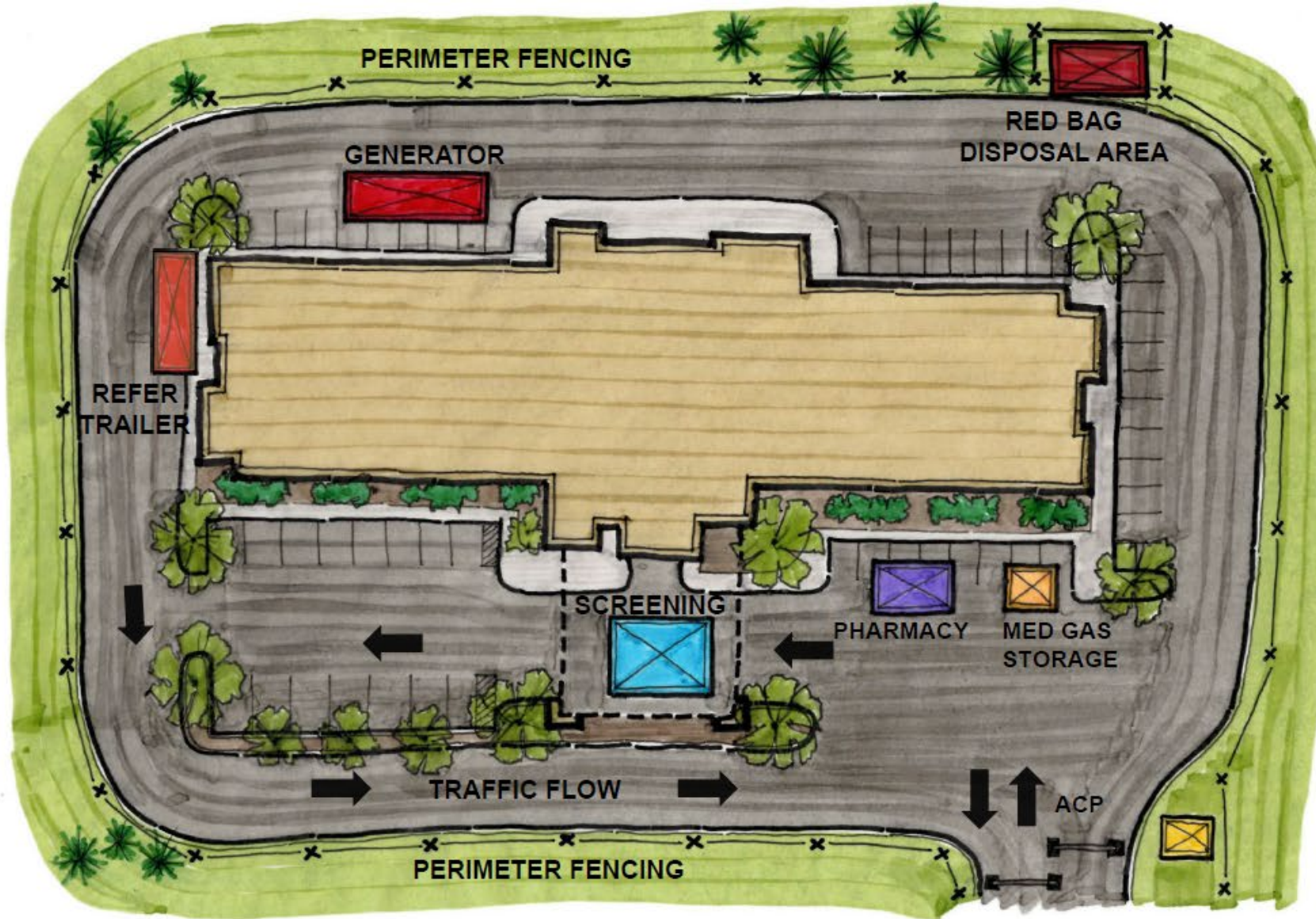
REUSE

- HOTEL WIFI
- HOTEL PHONE SYSTEM
- HOTEL INHOUSE NETWORK/TVS
- HOTEL ICE MACHINE/VENDING
- HOTEL PACKAGED HVAC

NEW EQUIPMENT

- NURSE CALL
- STORAGE SHELVING
- WORKSTATIONS
- MED DISPENSING UNITS
- #TBD VENTILATORS / FLOOR
- "CRASH" CART / FLOOR
- REMINDER GATES
- EYE HANDWASH STATIONS

H2HC – SITE IMPROVEMENT PLAN

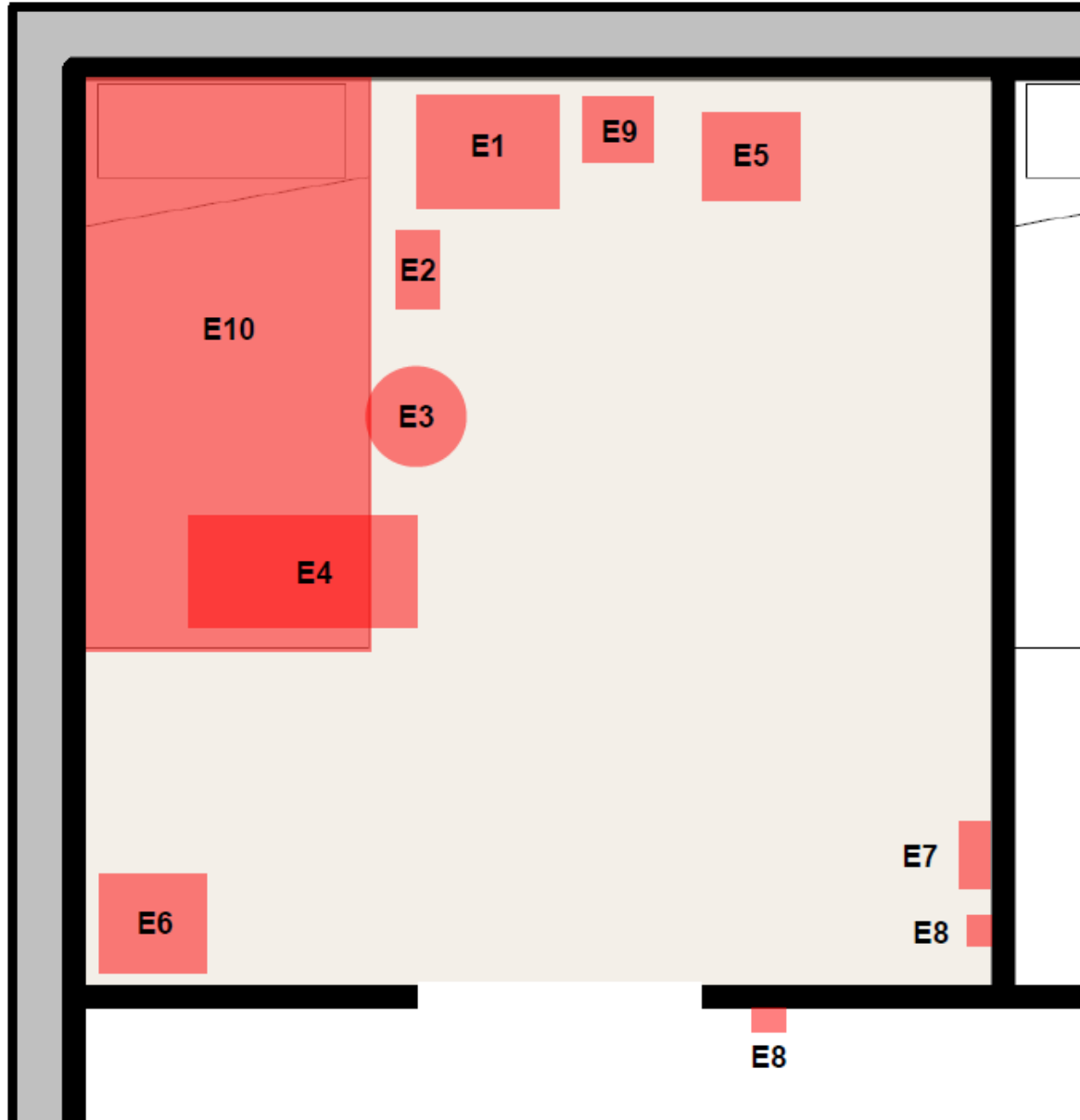


ENGINEERING CHANGES

- 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

- 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



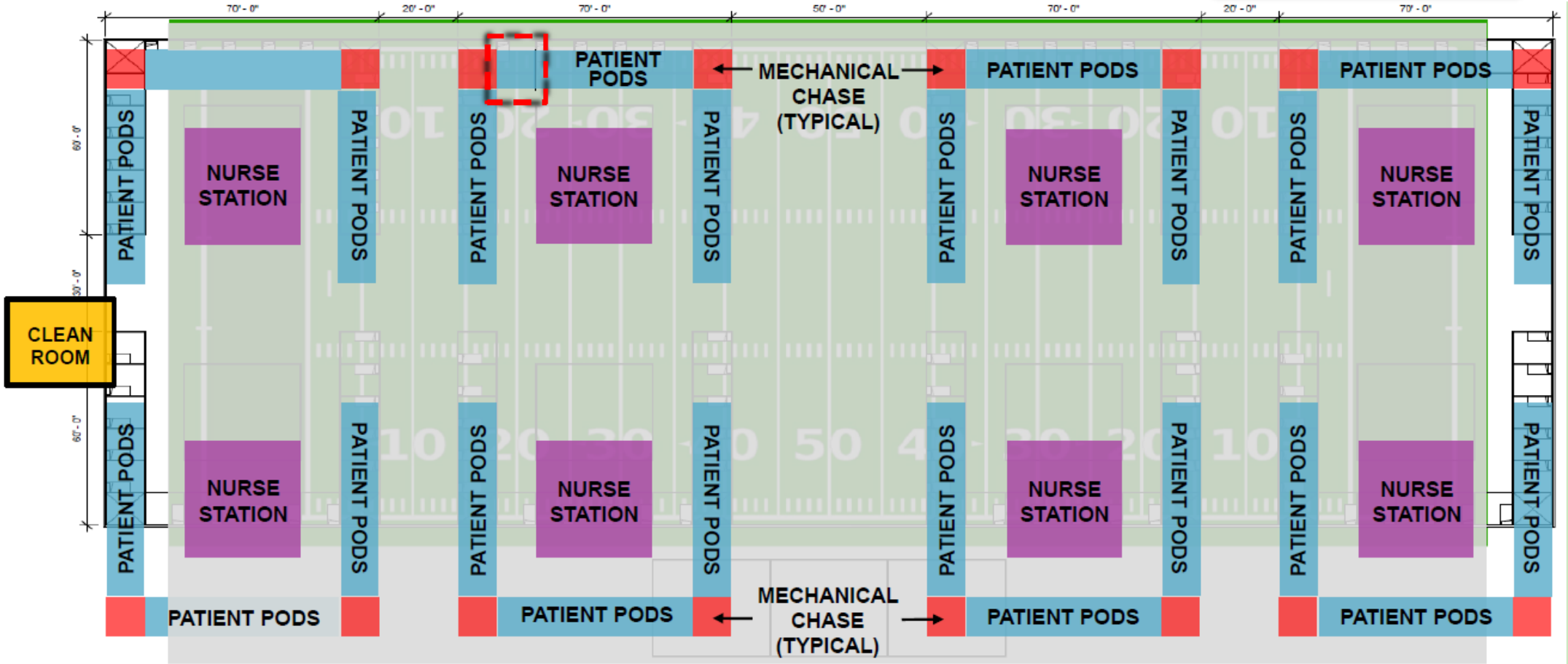
Bedside Toilet



A2HC TYPICAL LAYOUT



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



FACILITY PROVIDED

- FIELD HOUSE ICE MACHINE

ENGINEERING CHANGES

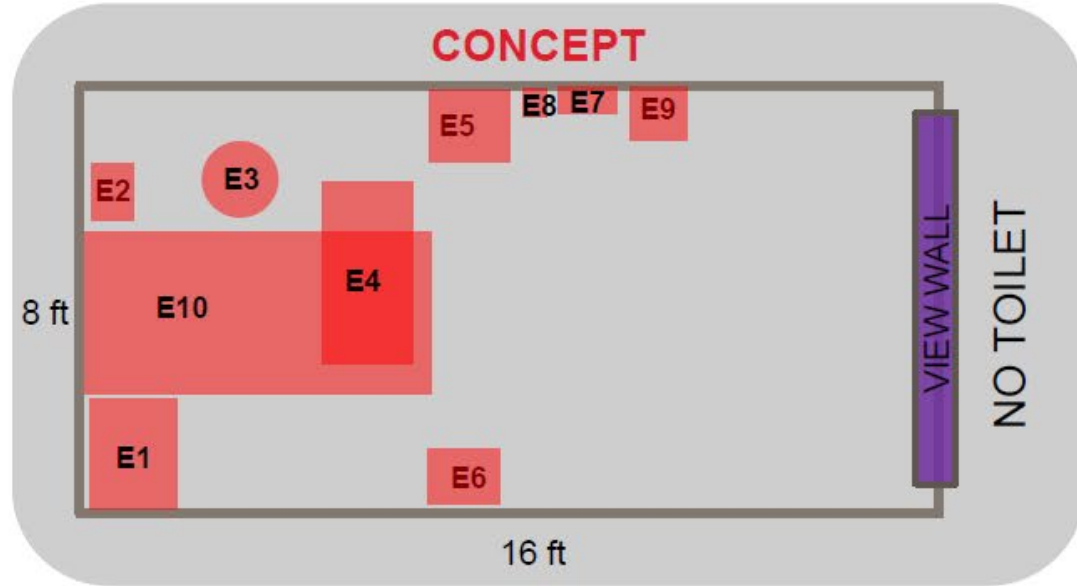
- ALL TYPICAL FLOOR PLAN ADDITIONS
- ADD GENERATOR

MEDICAL EQUIPMENT

- ALL TYPICAL FLOOR PLAN ADDITIONS
- NURSE CALL

- STORAGE
- WORKSTATIONS
- MED DISPENSING UNITS

A2HC CONTAINERIZED OPTION

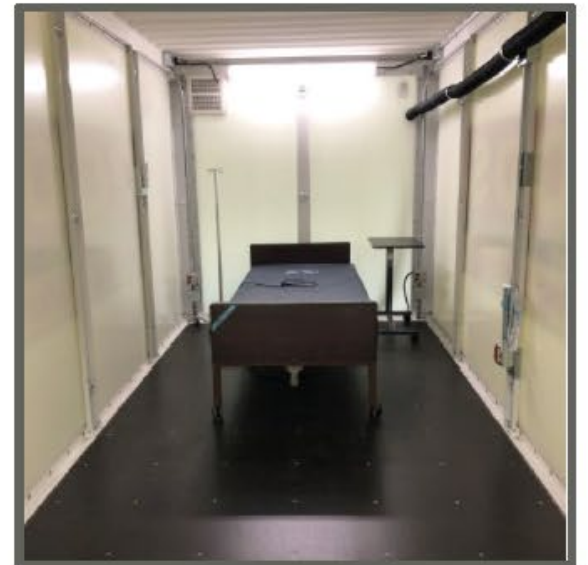


ENGINEERING CHANGES

- Field modified isolation room entry door
- Add louver with gravity damper and balancing damper
- Add exhaust fan with HEPA filtering
- Add mounted lighting
- Add emergency back-up power
- Add electrical and data outlets
- Add washable wall and floor covering

MEDICAL EQUIPMENT

- 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. Patient bed





HOT INFO

[Contractor Response to COVID-19](#) | [COVID-19 Info](#)



Links

Policy & Guidance

WRDA Public Comment Period



RECREATION
PASSES



Business With Us / Contracting

Hot Info

Businesses can help during COVID-19: click here for information regarding the Disaster Response Registry and see below for more information! E-mail questions or concerns regarding COVID-19 Contracting Issues to: COVIDContractingQuestions@usace.army.mil.

Contact Us

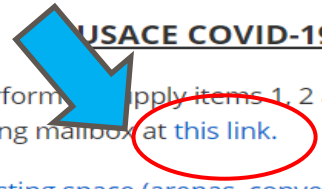
[Click here to e-mail questions or concerns regarding COVID-19 Contracting Issues.](#)

Useful Links

- [USACE Coronavirus Alternate Care Site Documents](#)
- [COVID-19 DoD Business Resources Website](#)
- [State Emergency Management Agency Points of Contact](#)
- [USACE Opportunities on beta.SAM.gov](#)
- [USACE Vendor Guide for Contract Opportunities on Beta.SAM.Gov](#)
- [System for Award Management](#)
- [Procurement Technical Assistance Centers for Businesses](#)

From the Director of Contracting:

USACE COVID-19 Market Research Request:



Vendors with the ability to perform apply items 1, 2 and 3 below are requested to send capabilities statements to our dedicated COVID-19 Contracting mailbox [at this link.](#)

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: Decisions regarding use of hotels, arenas and similar facilities are made at the State level. If you are offering these types of facilities, please contact the applicable State. [Click here for a FEMA website that provides points of contact for each State.](#)

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](#) website under the "Disaster Registry" tab. [Click here to learn more about the Disaster Registry.](#)

Due to the volume of submissions, individual responses are not possible.



COVID-19 Mailbox Data



What happens when I hit send?

Email is sent.

You've put together your response and attached your capabilities statement. You've hit send and now you're waiting.



Human Read and Entered

A Procurement Analyst team reads each email individually. They find the key information points, and enter it in a database along with your capabilities statement.



Available for Review

- As soon as the record is entered, it is available to everyone in USACE.
- Each day, the entire database is downloaded to an excel file for easy filtering and searching.
- Updated information is available instantly as well.



COVIDContracting Inbox

An automatic response is generated, thanking you for your input. The email enters a queue to be assigned to an analyst, read, and entered.



One of two emails goes out

#1 Thank You Email

If all the critical information was found, you get an automated thank you email.

#2 More Information Email

If the analyst didn't see your

- DUNS number
 - State willing to perform OR
 - Immediate execution/inventory
- an automatic email will ask you for MORE INFORMATION.



You Receive and Respond

When the automatic email for more information comes, you reply all with the response. The analyst that sent it gets a copy.





CONTRACTING – COMMON QUESTIONS



1. How is USACE approaching the Stafford Act provisions to utilize local businesses at time of emergency?
2. What is the process of determining which agencies (e.g., State, City, Federal agencies (GSA, FEMA, DHS, USACE) work which procurement (e.g., Supply/Services/Construction)? We are noticing that every state is doing things differently to meet COVID19 requirements.
3. I am a firm with the capabilities to help support the Alternate Care Facility mission with enclosures, modules, containerized medical spaces, etc. I sent a message to the COVIDContracting@usace.army.mil email inbox. Why haven't I been contacted yet?
4. How do I find out about the contracts that USACE has awarded for Alternate Care Facilities?



QUESTIONS