



CONT+AID

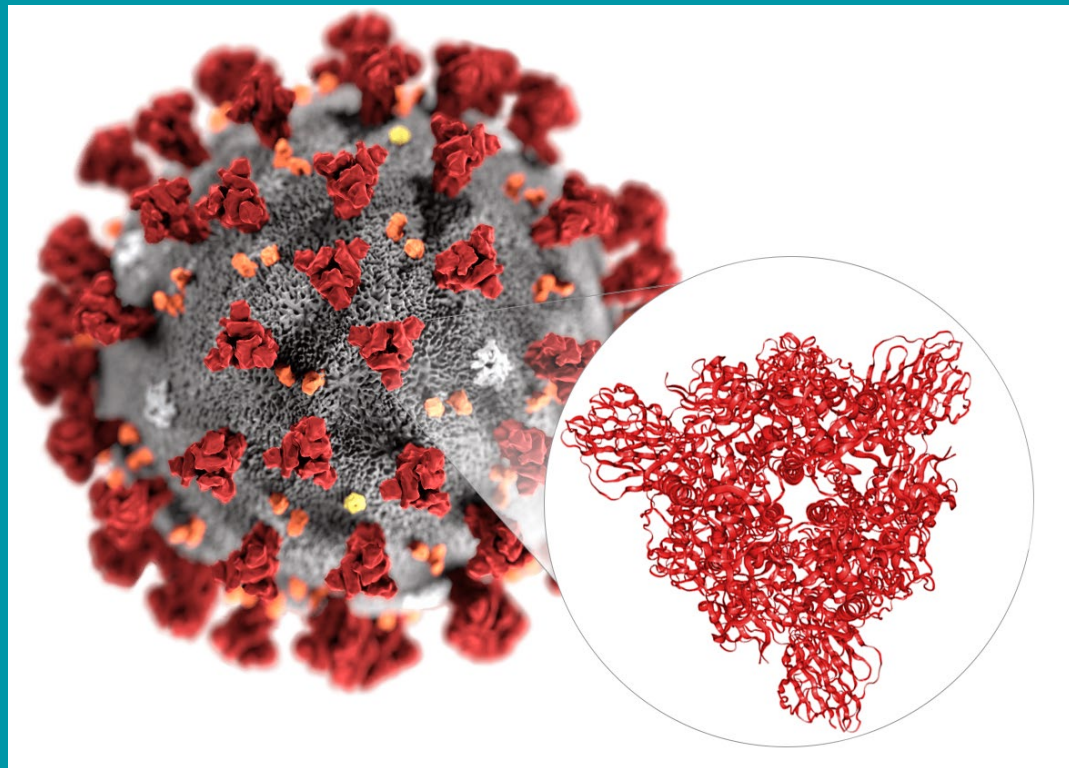
A COVID-19 TESTING STATION



Understanding What is COVID-19 Coronavirus

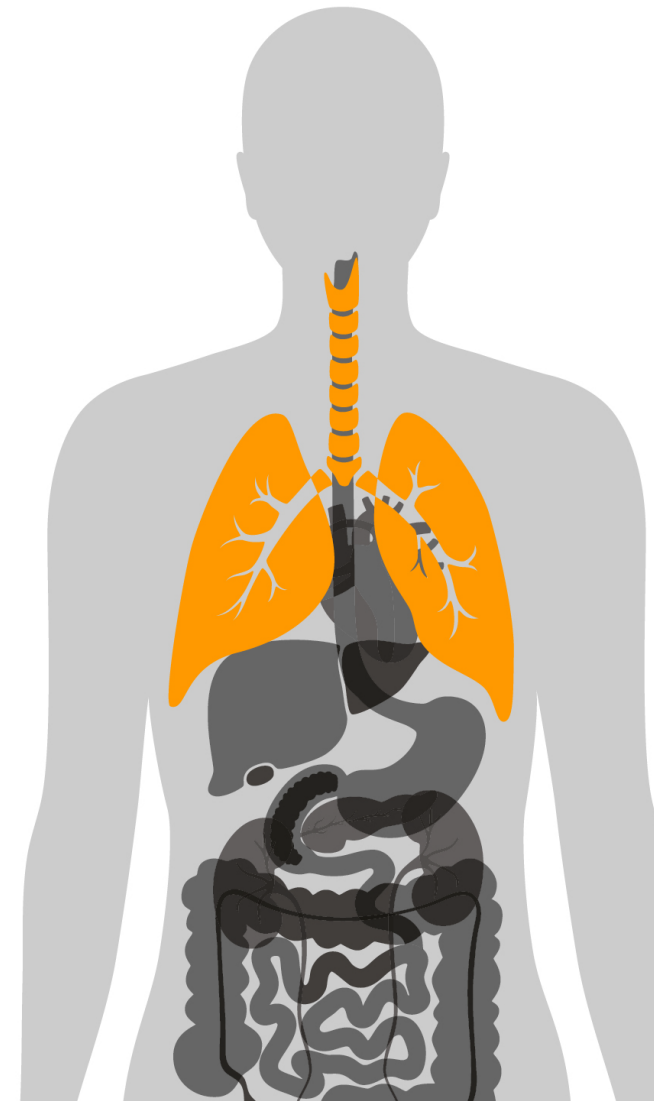
Novel Coronavirus

Coronaviruses are viruses that circulates among animals, but some of them are also known to affect humans. The Coronavirus was identified in China at the end of 2019 and is a new strain that has not previously been seen in humans.



The spiky proteins on the surface of Covid-19 cell

More Info.



Data shows the disease is mild in 80 percent of patients, severe in 13 percent, and critical in 6 percent.

Most common symptoms:



Fever



Fatigue



Dry cough

Some patients may also have:



Aches and pains



Runny nose



Sore throat



Shortness of breath



Diarrhoea

In critical cases, COVID-19 can cause severe pneumonia or a multiple-organ failure and can lead to death.

CONT+AID Testing Station & COVID-19 Lab Facility

While **CONT+AID** was created in response to the COVID-19 crisis, the hybrid structure facility can be used for a number of medical purposes due to their design flexibility. This includes ICU, exam/treatment, quarantine/isolation, or just surge space for non-critical patients.

The design is based on used 10-foot shipping containers combined with prefabricated expandable units. It includes placing 8-6 testing units surrounding a central staff corridor. The entire structure can be built in 2-5 days, providing a quick solution for overwhelmed hospitals.

The Mission

To provide equal and easy access to testing opportunity for all, relief to hospitals from being overcrowded, and extending the reach to outside the clinical setting. Additionally, reducing possible infection and provide early treatments..



CONT+AID

Top Safety Considerations

- Implementation of quick deployment structure for easy installation and mobility.
- Implementation of high safety measures to reduce staff to patient exposure.
- Minimize possible frequent touch surfaces such as door handles and countertops in order to reduce the spread of infection and contamination by patients and staff.
- Improve telehealth and virtual health options.
- Enhance HVAC systems.
- Allow for staff visualization and communication with patients.
- Integration of technological advanced equipment.
- Ensure compliance with regulations and policies to adapt to new situations (Flexibility).

Strategies

- The use of modular shipping containers in addition to prefabricated expandable units for rapid deployment and flexibility.
- The use of automatic sliding doors and sensors in high traffic zones.
- The help of Robotics in high exposure area to eliminate staff to patient exposure.
- Integration of a Mobile App. to improve communication and wayfinding for the safety of all.
- ADA accessibility in all areas.
- Negative pressure exhaust in all patient zones.
- Application of medical grade finishes on floors, walls and ceiling such as (HDPE plastic, vinyl, aluminum, steel, plexiglass, rubber floor and washable paint).
- Proper disposals of hygienic waste materials (PPE).
- The use of UV light to disinfect patient entry/exit point.

Patient Journey Visualization

Walk Up Testing



Ms. R

Who prefers to do the test the traditional way inside the facility.

Book an appointment online using the App.



Arrives at the location 15 minutes early, parks and waits inside the car.



Using the App to say I AM HERE and wait for further instructions.



Once you receive a notification head toward the info. booth and follow the instructions to your designated testing booth.



You are done! Go back home and wait for the results via text or call within the next 4 business days.

1



2

3

4

5

Drive Thru Testing



Mr. X

Book an appointment online using the App.

Who prefers to do the test using the drive-thru service.



Arrives at the location 10 minutes early, and waits in line inside his car.



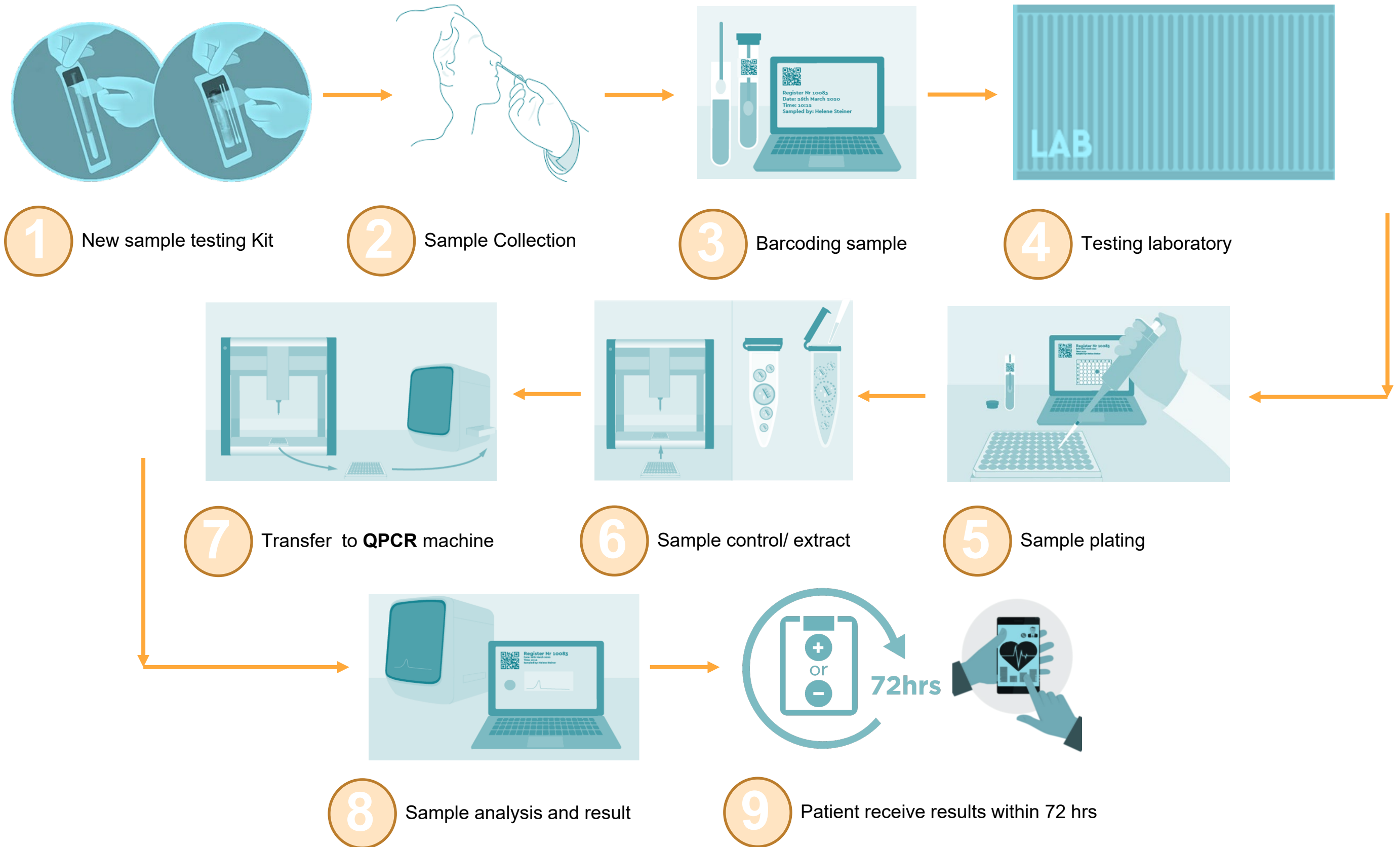
Once you are next in line, follow the instructions given by the healthcare provider at the window.



You are done! Go back home and wait for the results via text or call within the next 4 business days.



Sample to Result Journey Visualization



CONT+AID Hybrid Structure Facility

Mobile App:

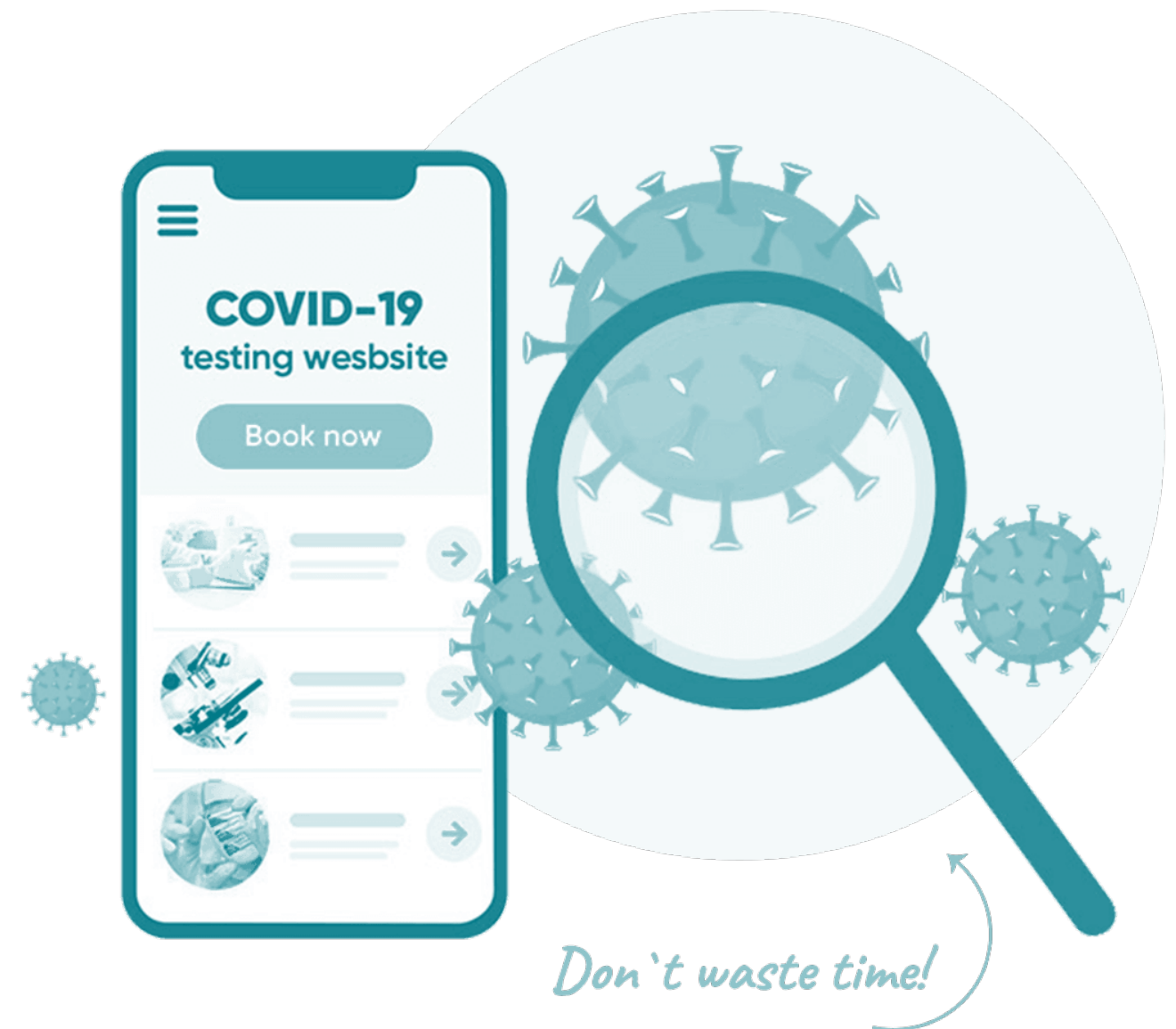
The use of a Mobile App. will help bridge the gap between health providers and patients. Improving access to appointments, locations, additional services and emphasis on social distancing.

STRENGTH

- Avoid waiting lines and emphasize social distancing.
- Efficient data collection from patient to staff using the individual unique bar code.
- Safety.
- Reduce stress.

WEAKNESSES

- It can be a challenge for old people who are not familiar with using technology the proper way.
- Some people might not have the advantage of having an advanced phone that allows them to download the App.
- People with visual impairment/ vision loss may not have the access to this type of service.



CONT+AID Mobile App. Configuration



- ✓ Scheduling
- ✓ Cancellation
- ✓ Confirmation

APPOINTMENTS



- ✓ Lab Results
- ✓ Resources

RESULTS



- ✓ Testing Centers
- ✓ Nearest Hospitals

LOCATIONS



- ✓ Call us
- ✓ Email us
- ✓ Visit our Website

CONTACT US



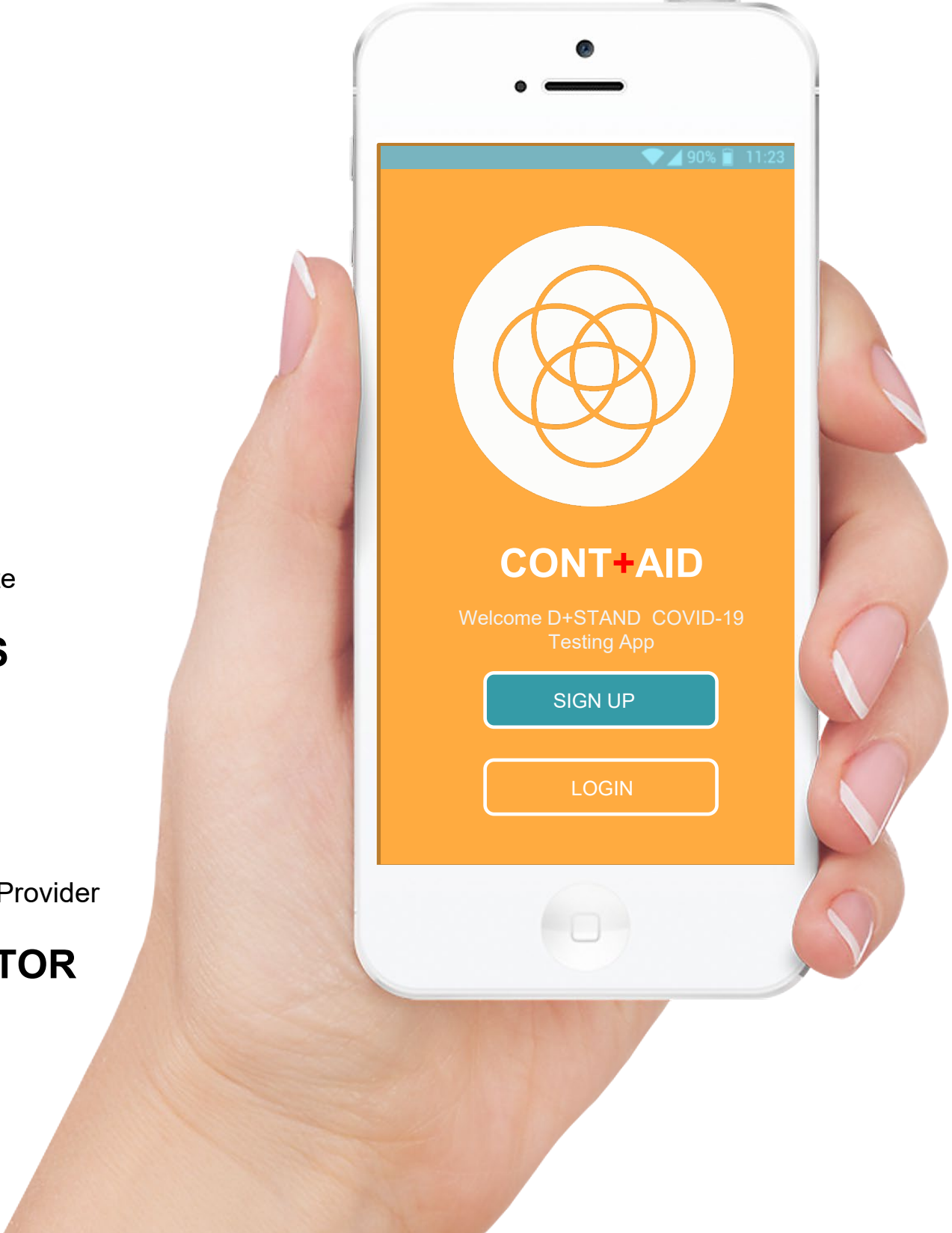
- ✓ Prevention
- ✓ Statics
- ✓ Symptoms
- ✓ Treatments

COVID-19 UPDATES



- ✓ Specialist
- ✓ Consultation
- ✓ Tal to a Health Provider

FIND A DOCTOR



CONT+AID Hybrid Structure Facility

Shipping Containers (STAFF ZONE):

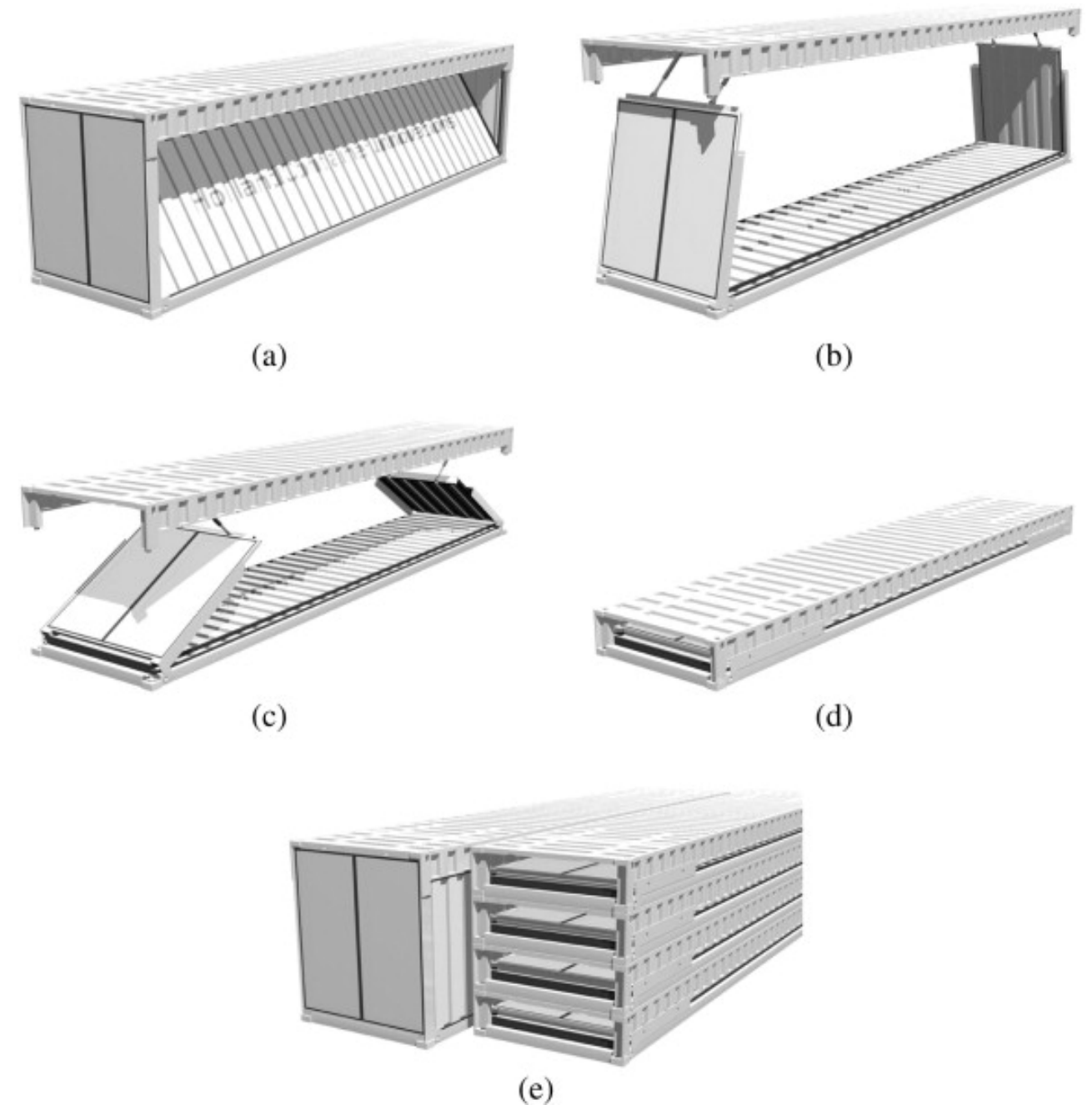
Each container unit can be folded and rapidly deployed with minimal site preparation. The sides openings are intended to be done in advance using a special steel cutter to reduce installation time and effort.

STRENGTH

- Flexibility.
- Rapid deployment.
- Modularity.
- Mobility.
- Scalability.
- Weather resistance.
- Sustainability.
- Easy to clean and disinfect.

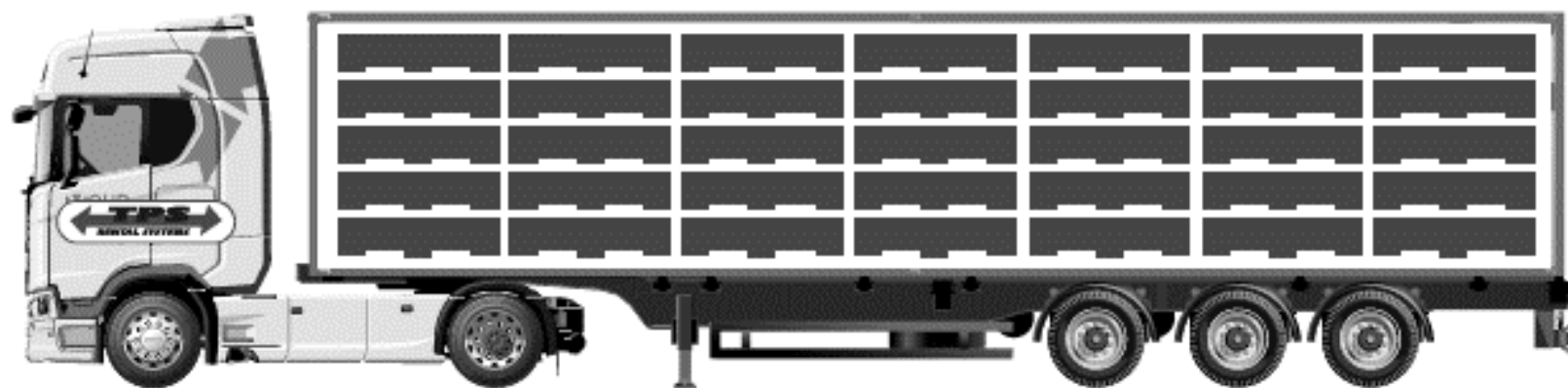
WEAKNESSES

- Space limitation (Height & Width)
- Needs renovation with some floor, ceiling and walls materials to meet medical standards.
- Power generator.
- Low ceiling height.
- Special transportation.

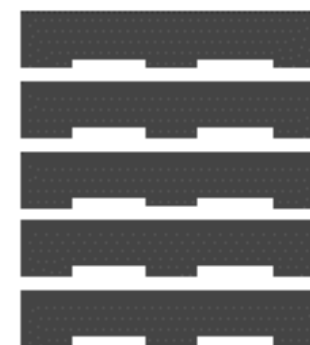


Folding and Stacking Strategy

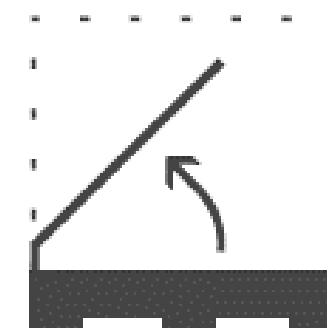
CONT+AID Shipping Containers sizes & Transportation



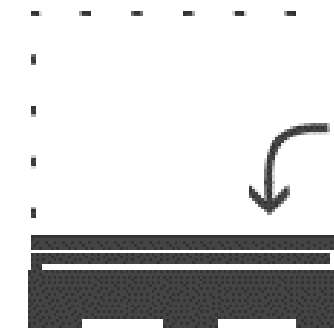
53' Maximum Overall Length Limit



Receive



Unfold

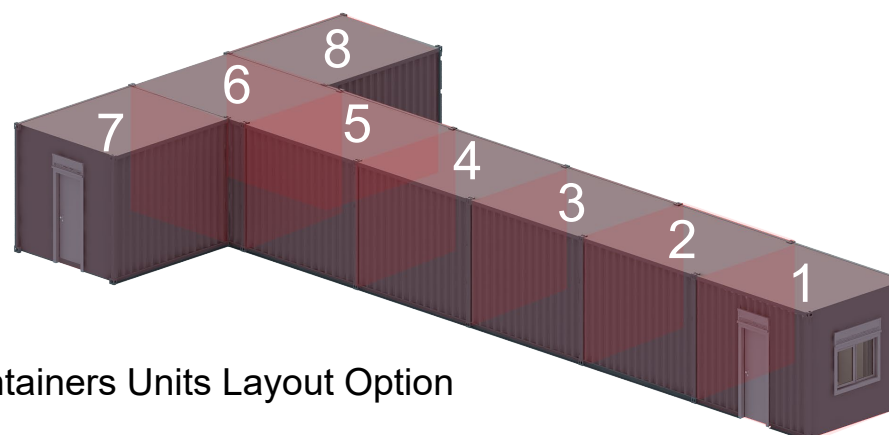


Return

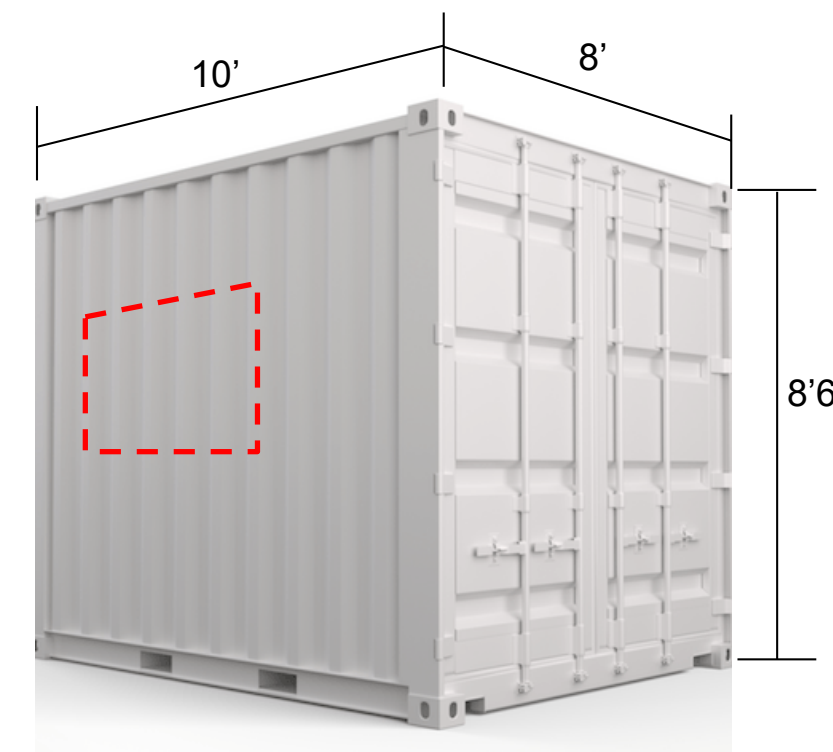
- **Height :** 14' (measured from Level ground to top of load.
- **Maximum Load :** 80,000 lbs.
- **Width :** 8'6"



The Federal size regulations for commercial motor vehicles



Containers Units Layout Option



Fully opened 10' X 8' Modular shipping container

CONT+AID Hybrid Structure Facility

Prefabricated Expandable Testing Units

(PATIENT ZONE):

Inspired by the Accordion, these units can be rapidly deployed with minimal site preparation. They are intended to 'plug in' to existing utility services, and can be deployed by a team of four workers in roughly an hour.

STRENGTH

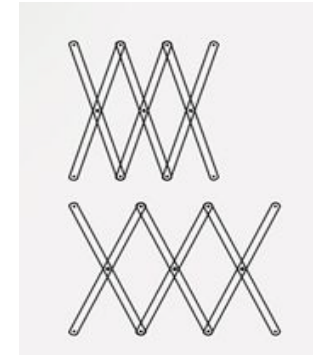
WEAKNESSES

- Fully enclosed/sealed structure.
- Digital and technology integration.
- High standard medical grade materials.
- Rapid expansion and contraction.
- Quality control.
- Modularity.
- Hygiene and safety.
- Adaptability.

- Expensive.
- Manufacturing time.
- Special transportation.



Inspiration



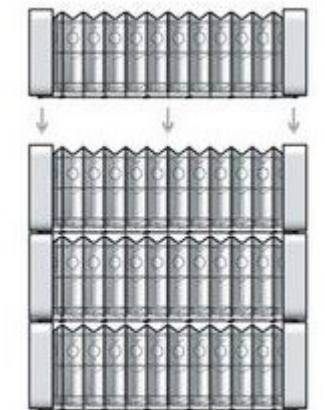
X Support Hinge to ensure Stability



Automatic door



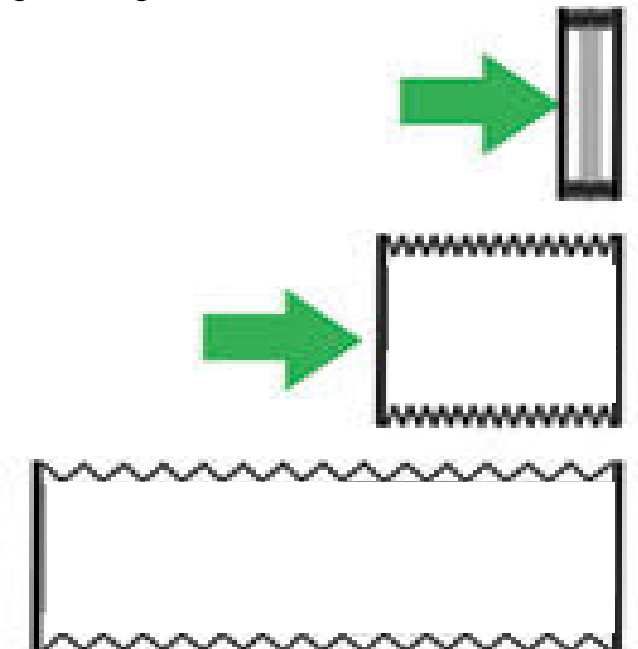
Disinfecting UV Light



Stackable

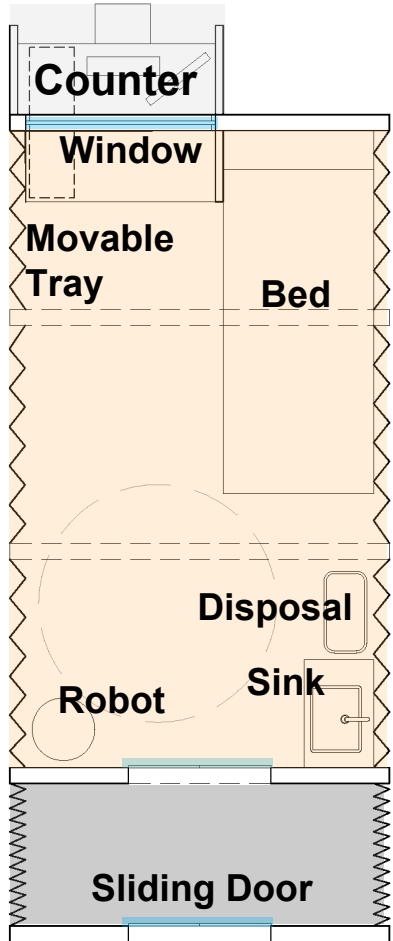


Robotics to eliminate staff exposure

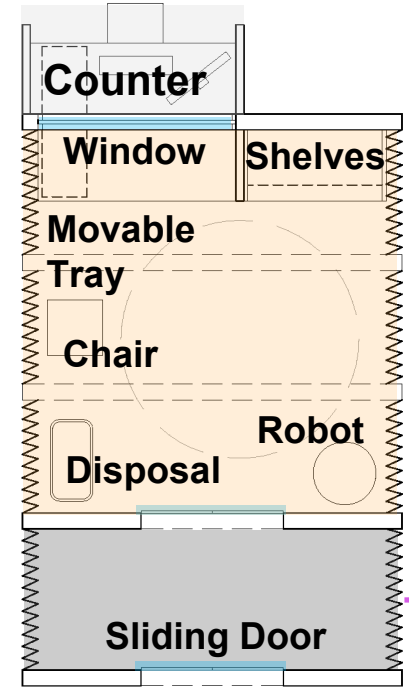


Expanding To Different Sizes

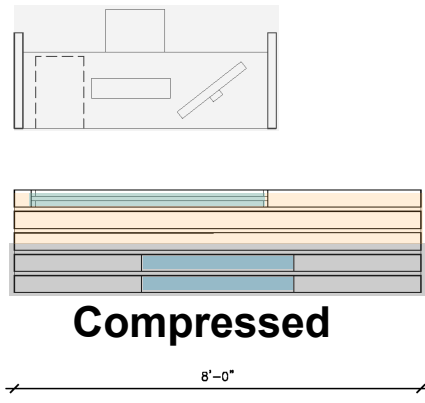
CONT+AID Prefabricated Expandable vs Containers Testing Units



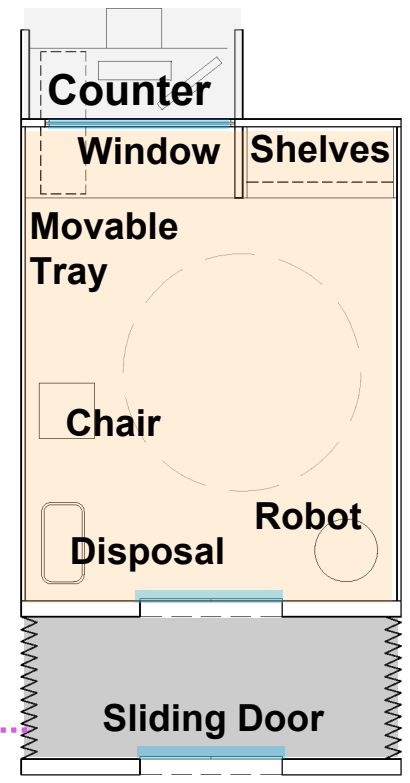
Maximum Expansion (ICU)



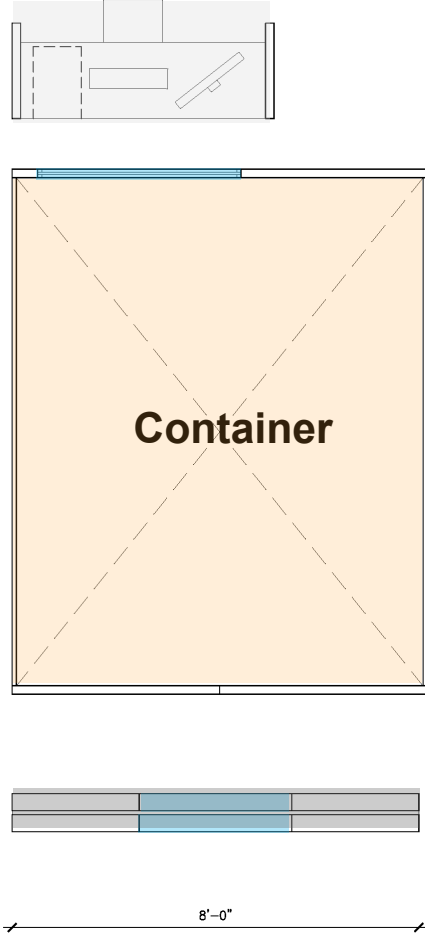
Standard Expansion (Testing)



UV Light zone



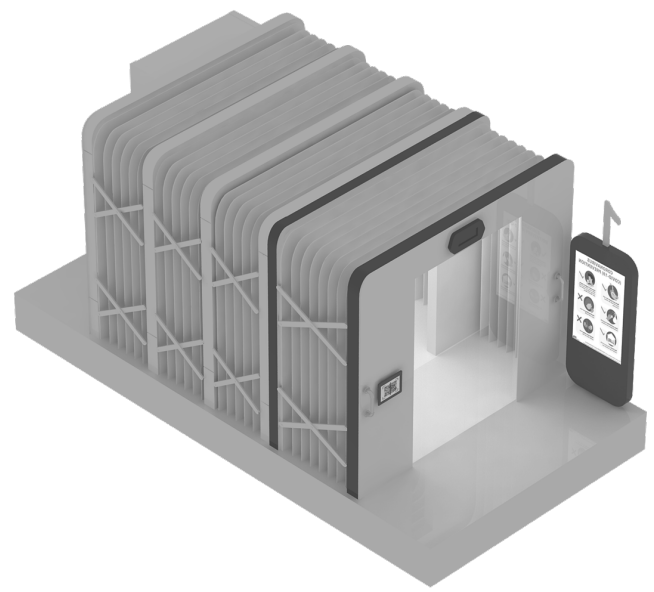
Standard Container (Testing)



10' X 8' Container Testing Unit

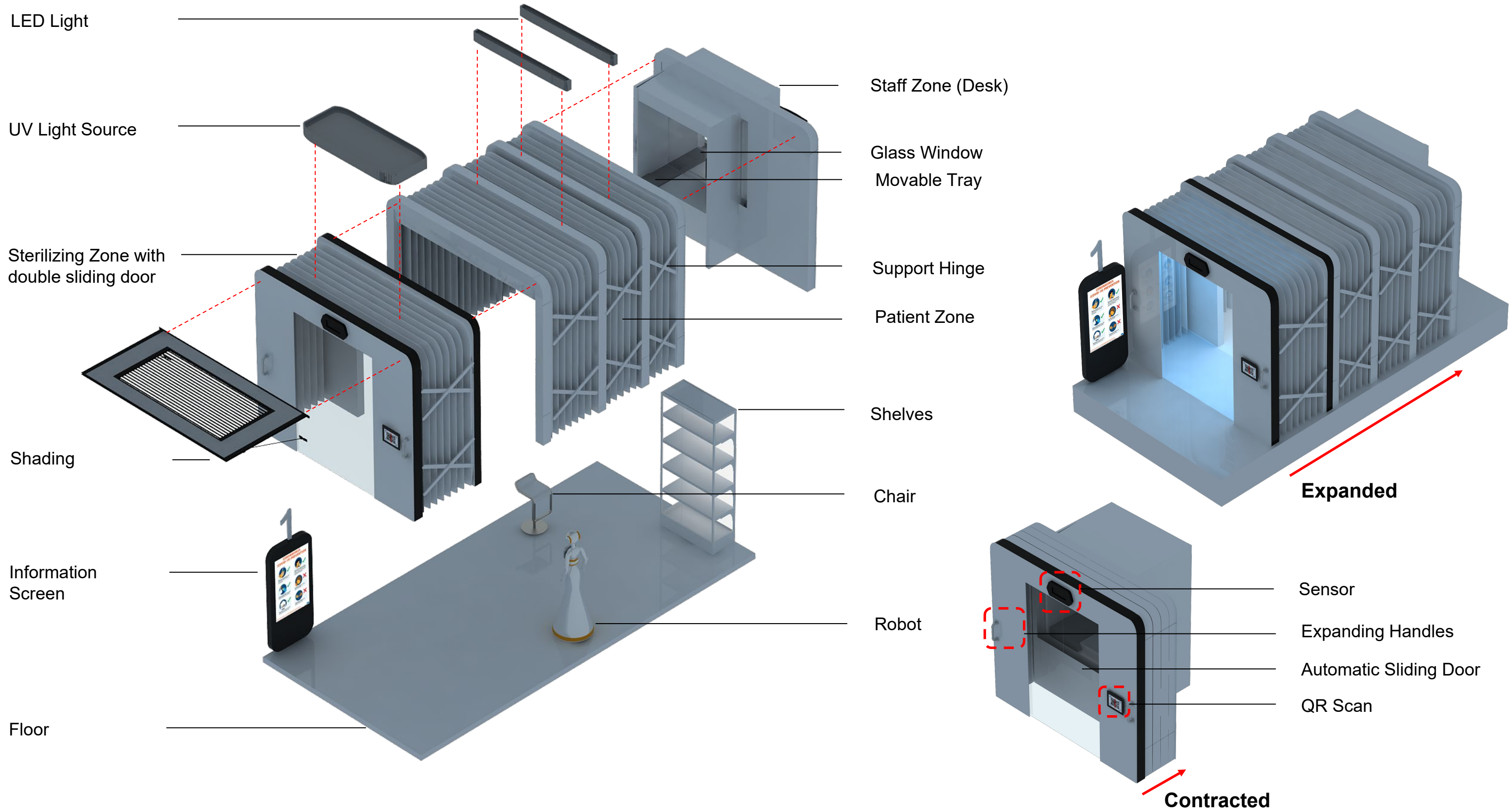
The modular shipping container units used for the staff zone can also be converted into a testing unit. It gives an inexpensive alternative to the prefabricated ones if needed. An expandable sterilizing zone can be attached as an entry point just like in the prefabricated units.

- Ultraviolet Sterilizing Zone**
- Patient Zone**
- Staff Zone**
- Glass**

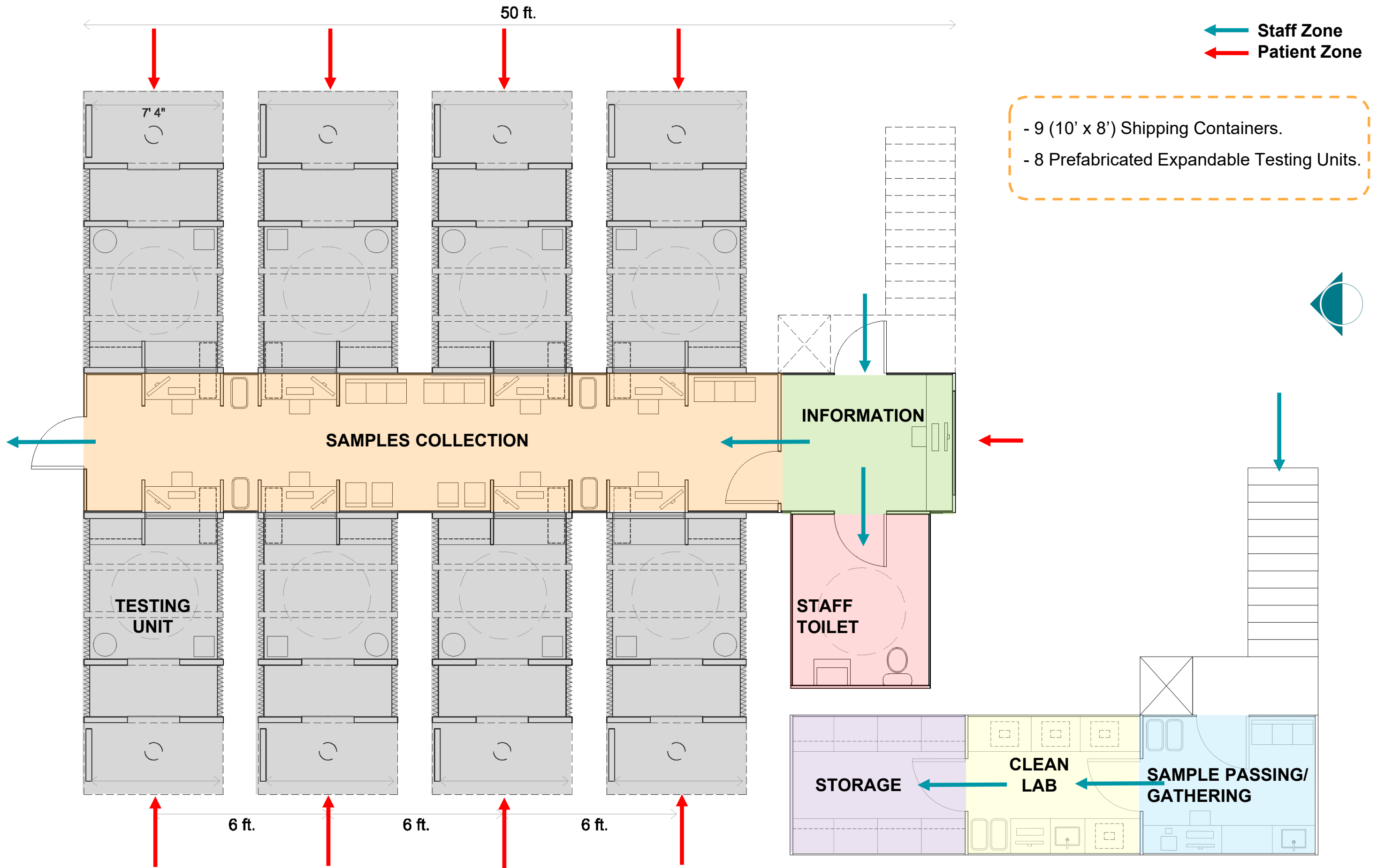


Prefabricated Expandable Testing Unit

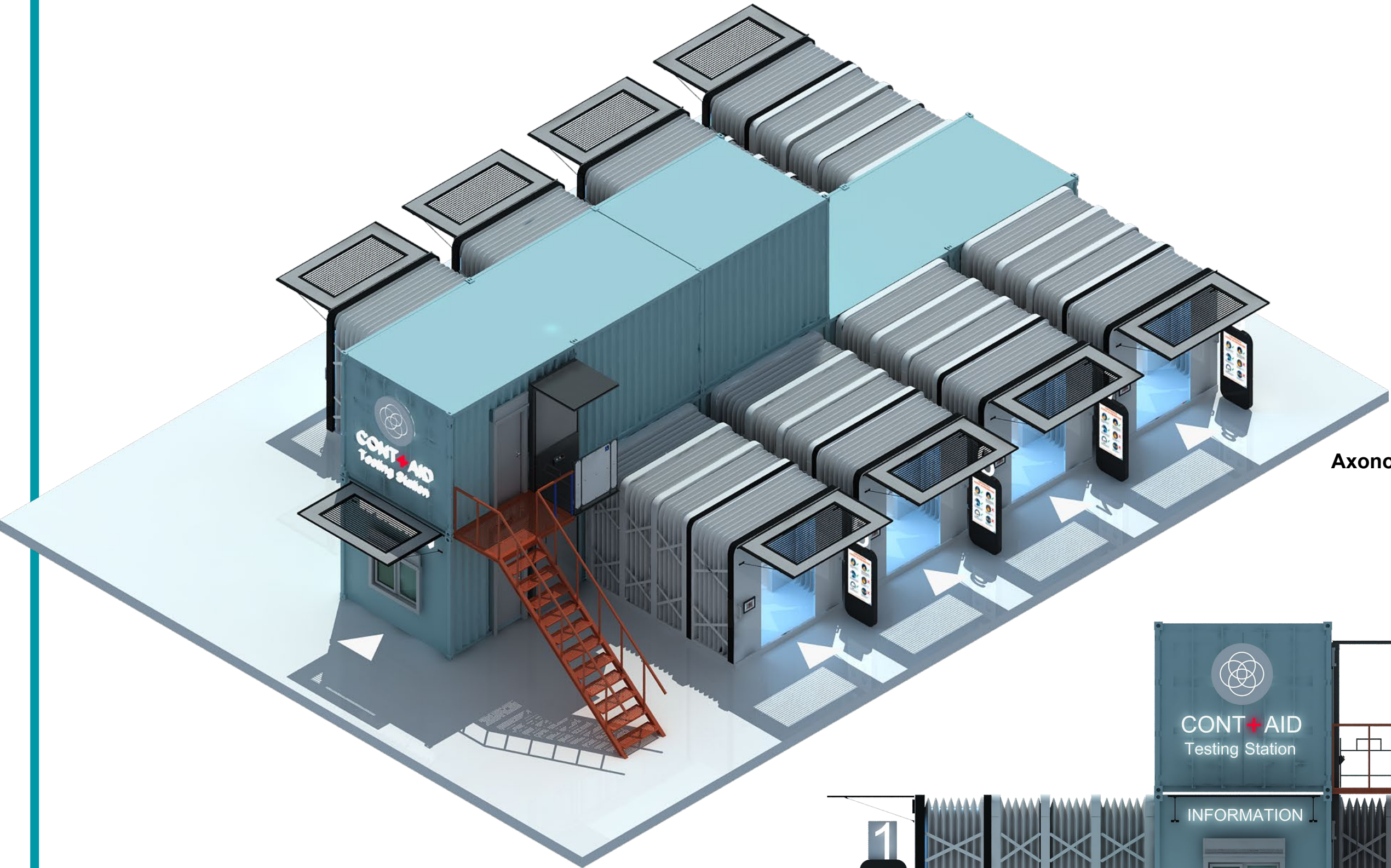
Prefabricated Expandable Testing Booth



Unit Detail



Layout Option 1 (Parking Lot / Interior)

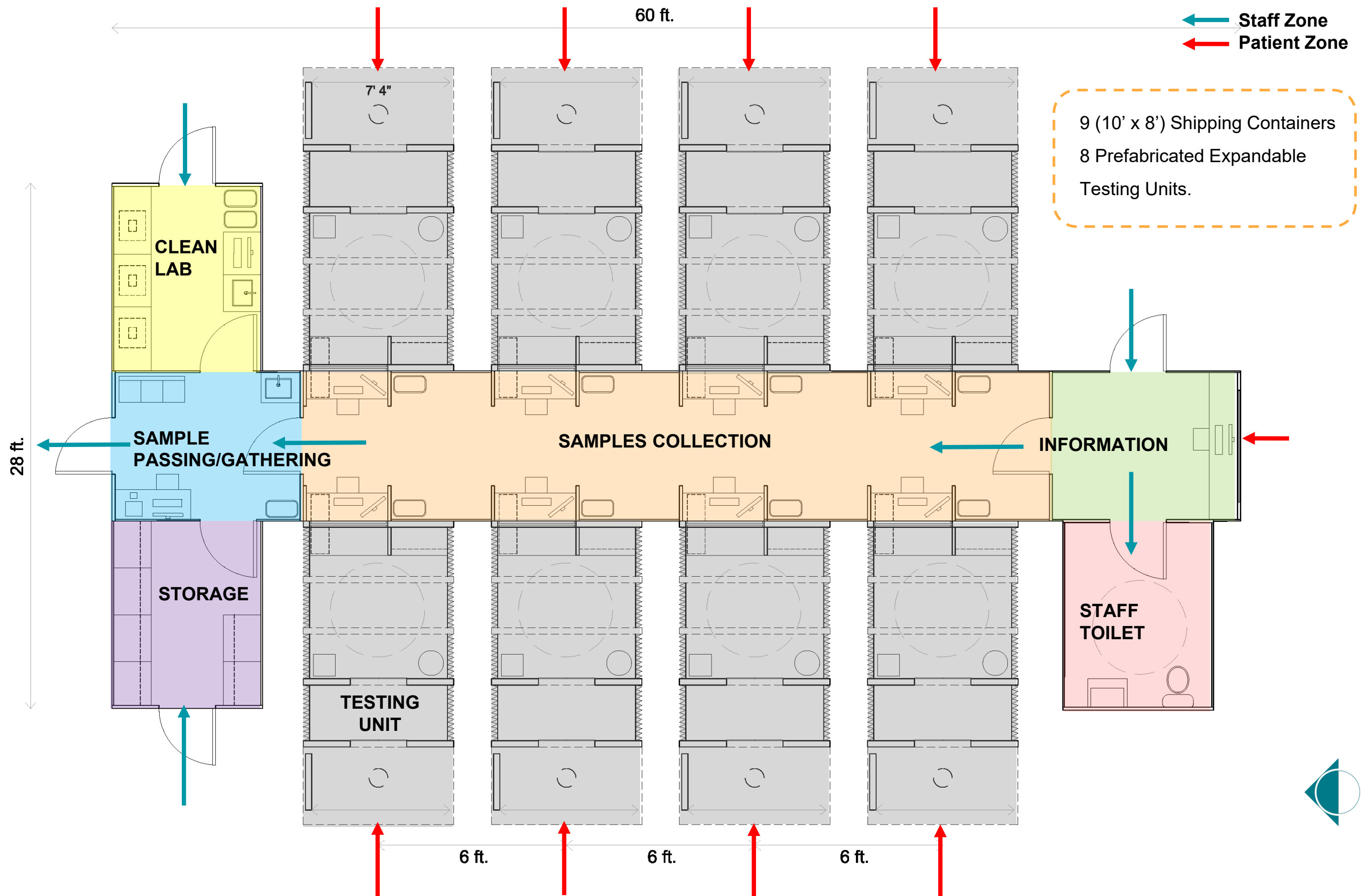


Axonometric View

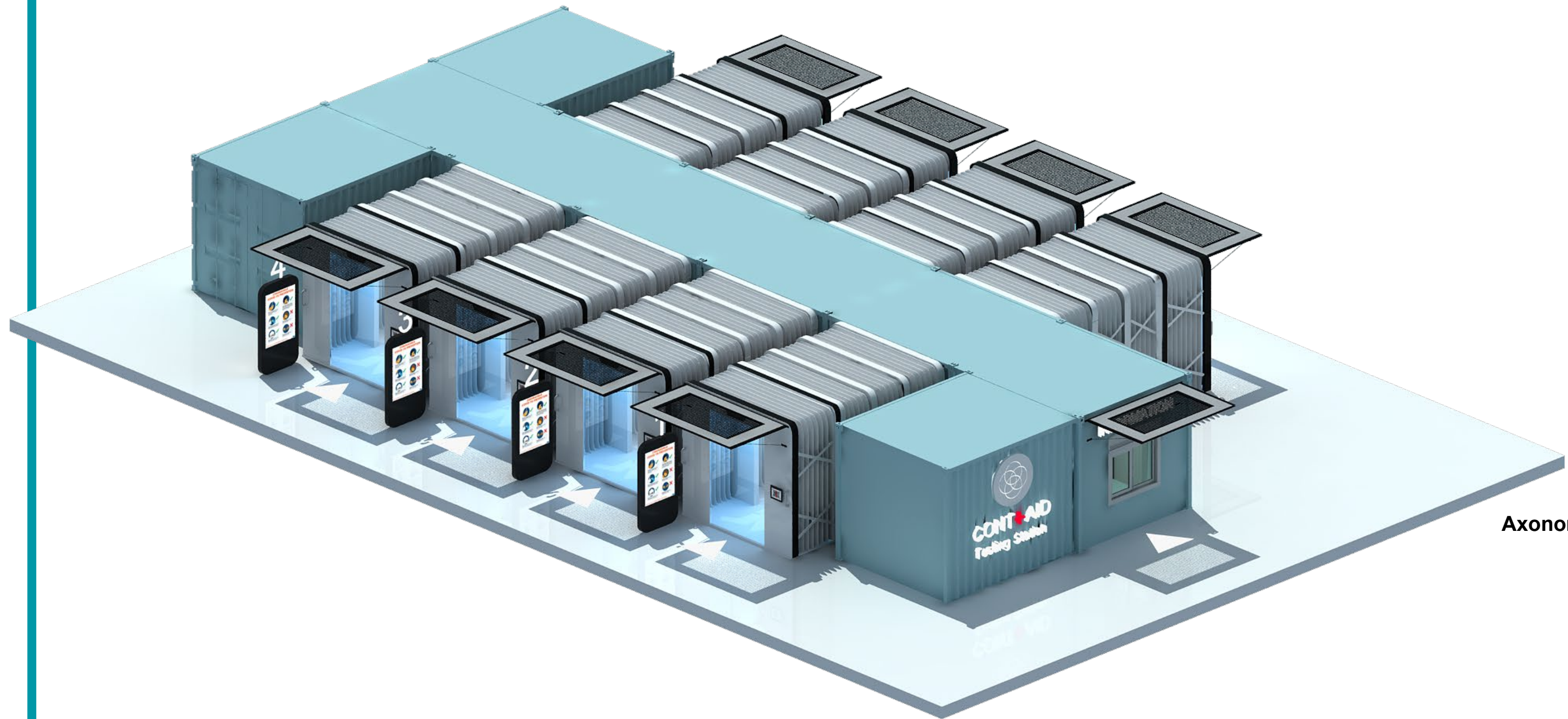


Elevation View

Layout Option 1 (Parking Lot / Interior)



Layout Option 2 (Parking Lot / Interior)

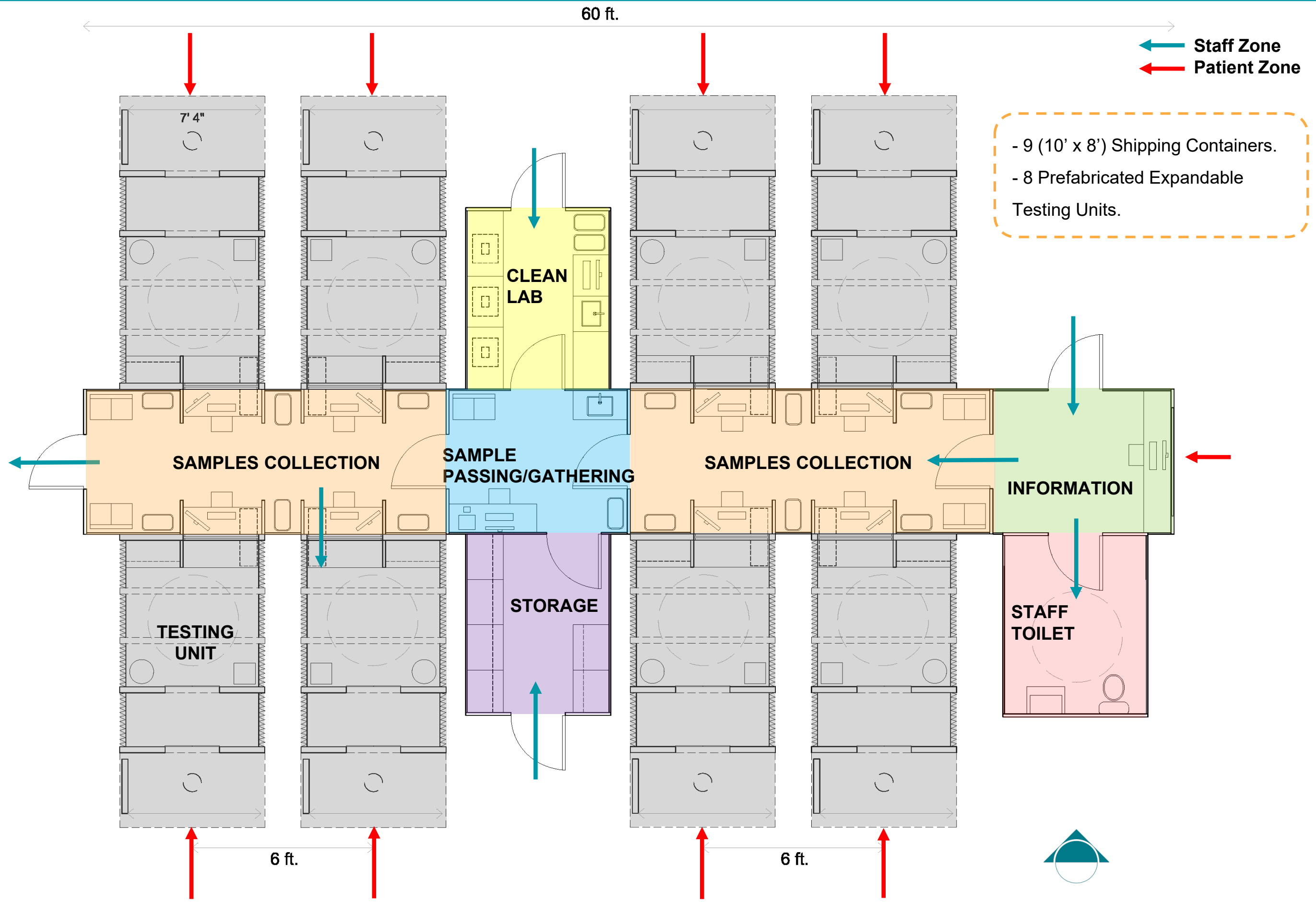


Axonometric View

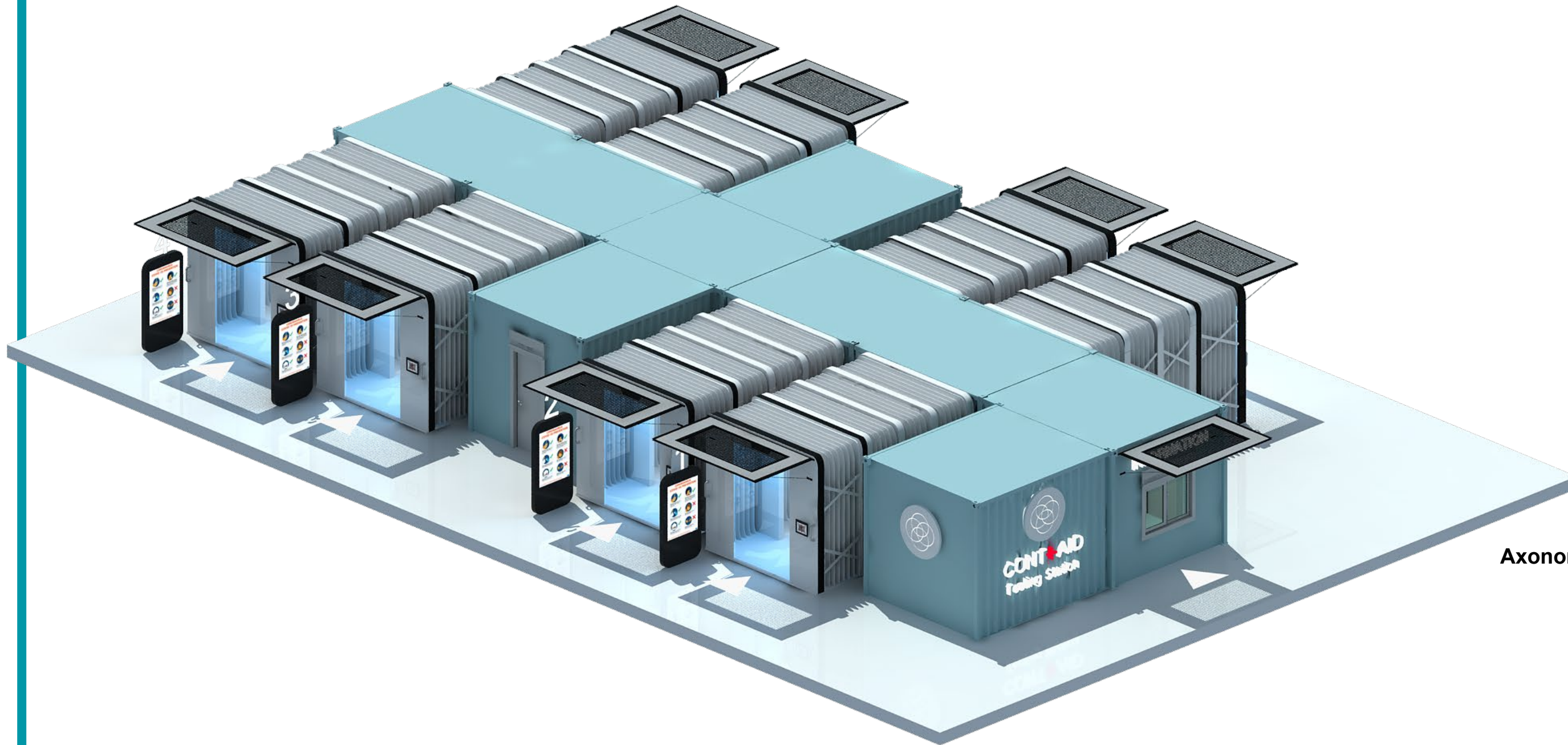


Elevation View

Layout Option 2 (Parking Lot / Interior)



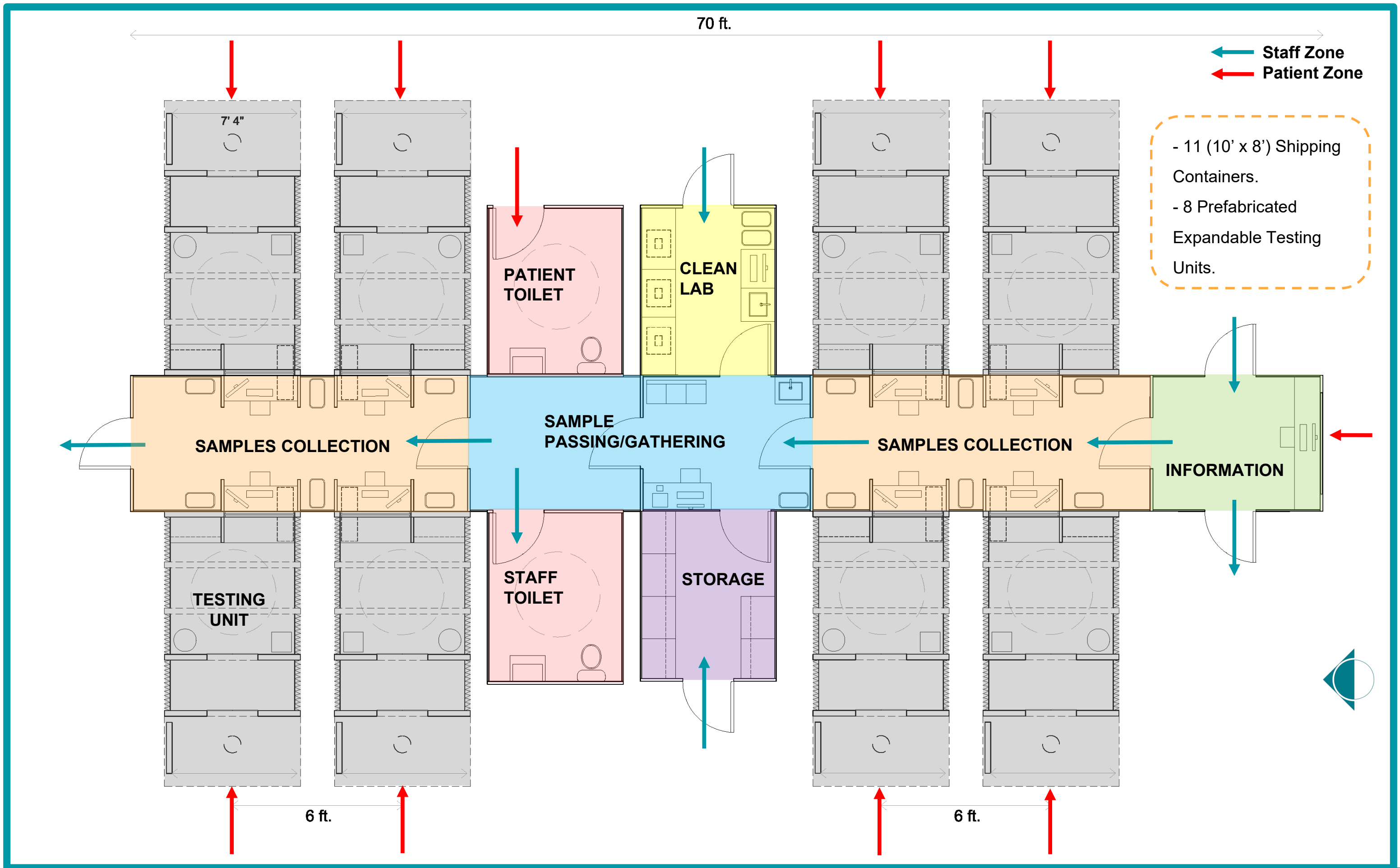
Layout Option 3 (Parking Lot / Interior)



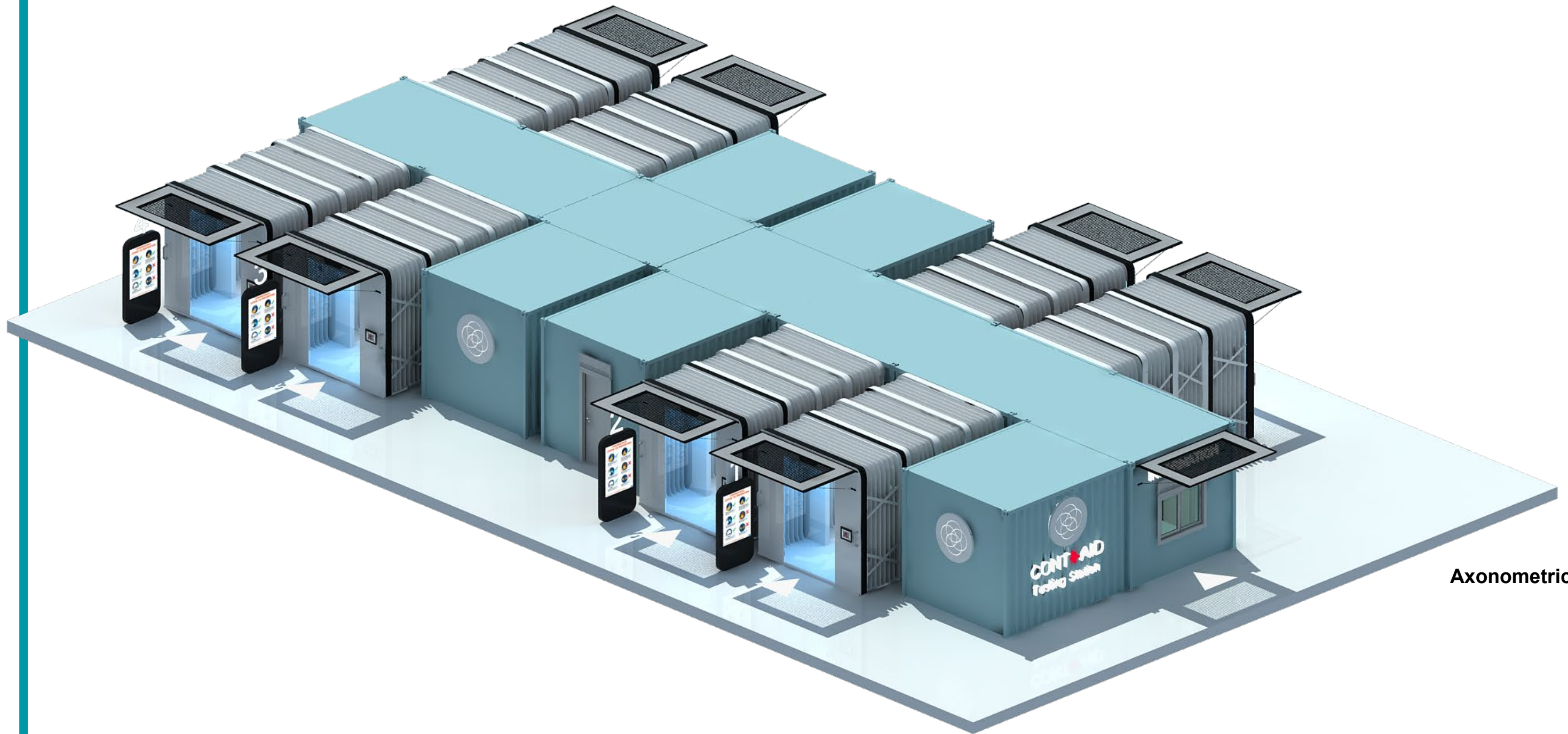
Axonometric View



Elevation View



Layout Option 4 (Parking Lot)

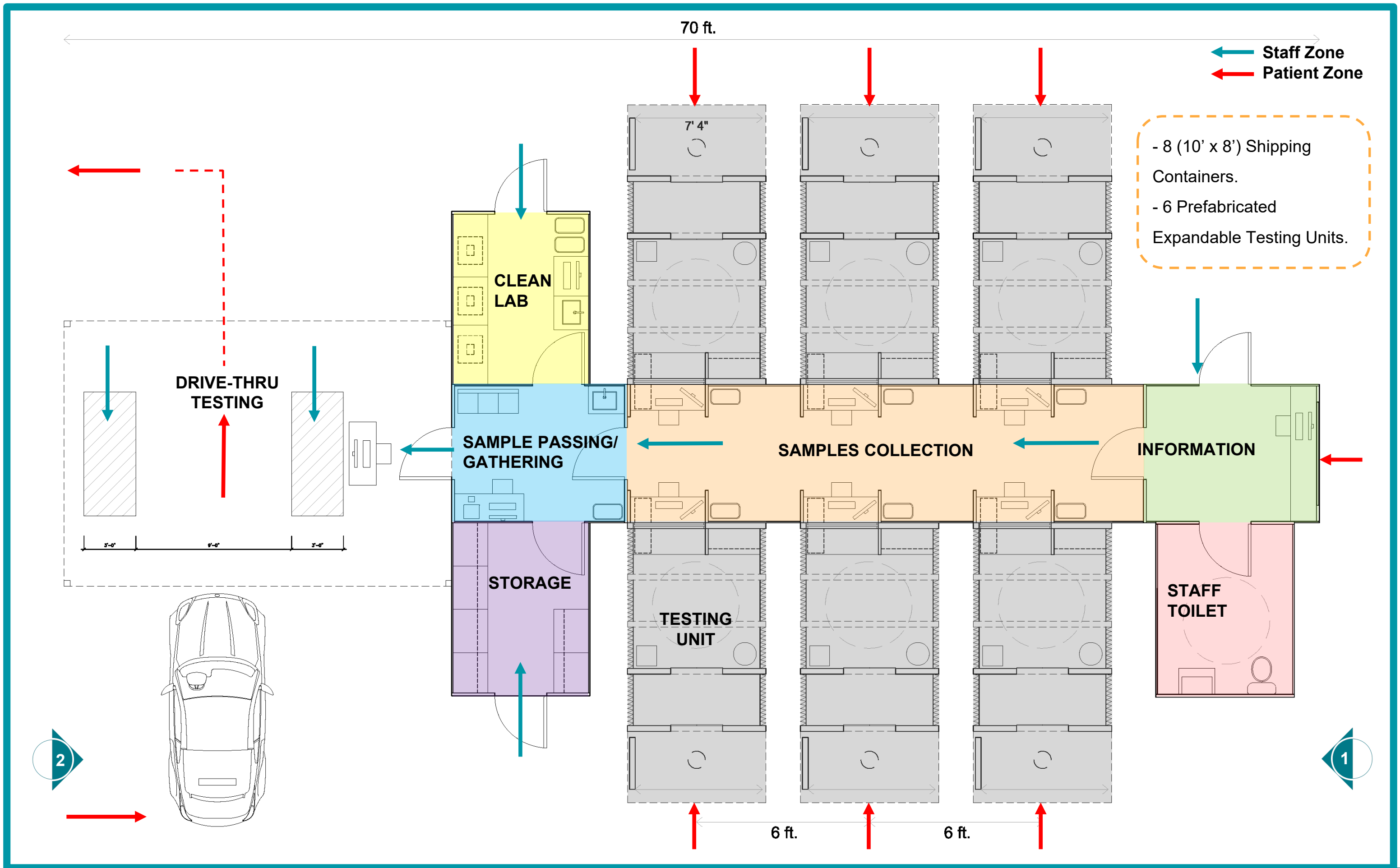


Axonometric View

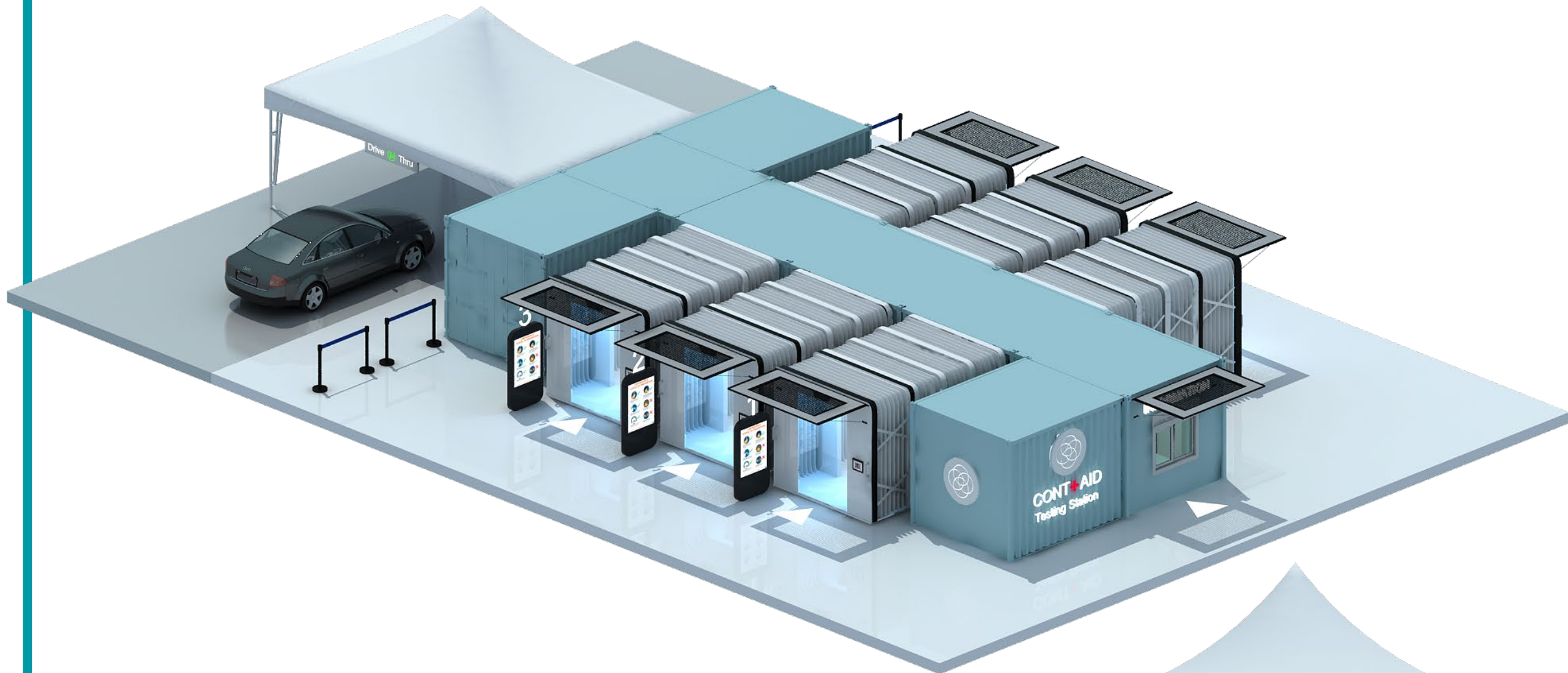


Elevation View

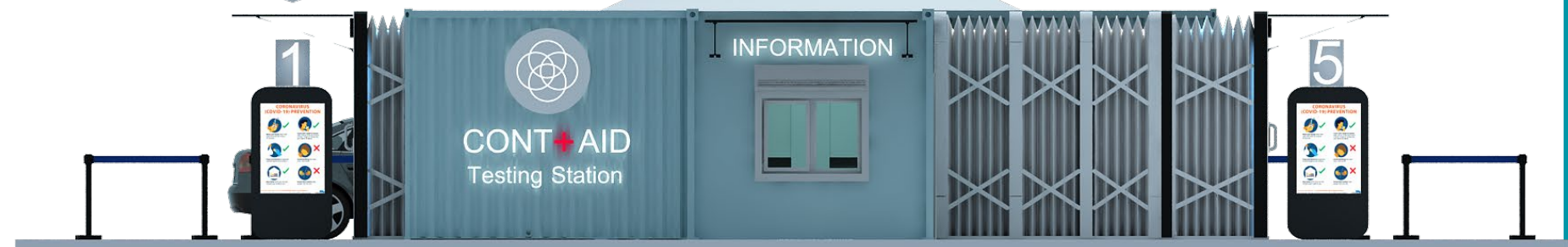
Layout Option 4 (Parking Lot)



Layout Option 5 (Parking Lot/ Drive-Thru)



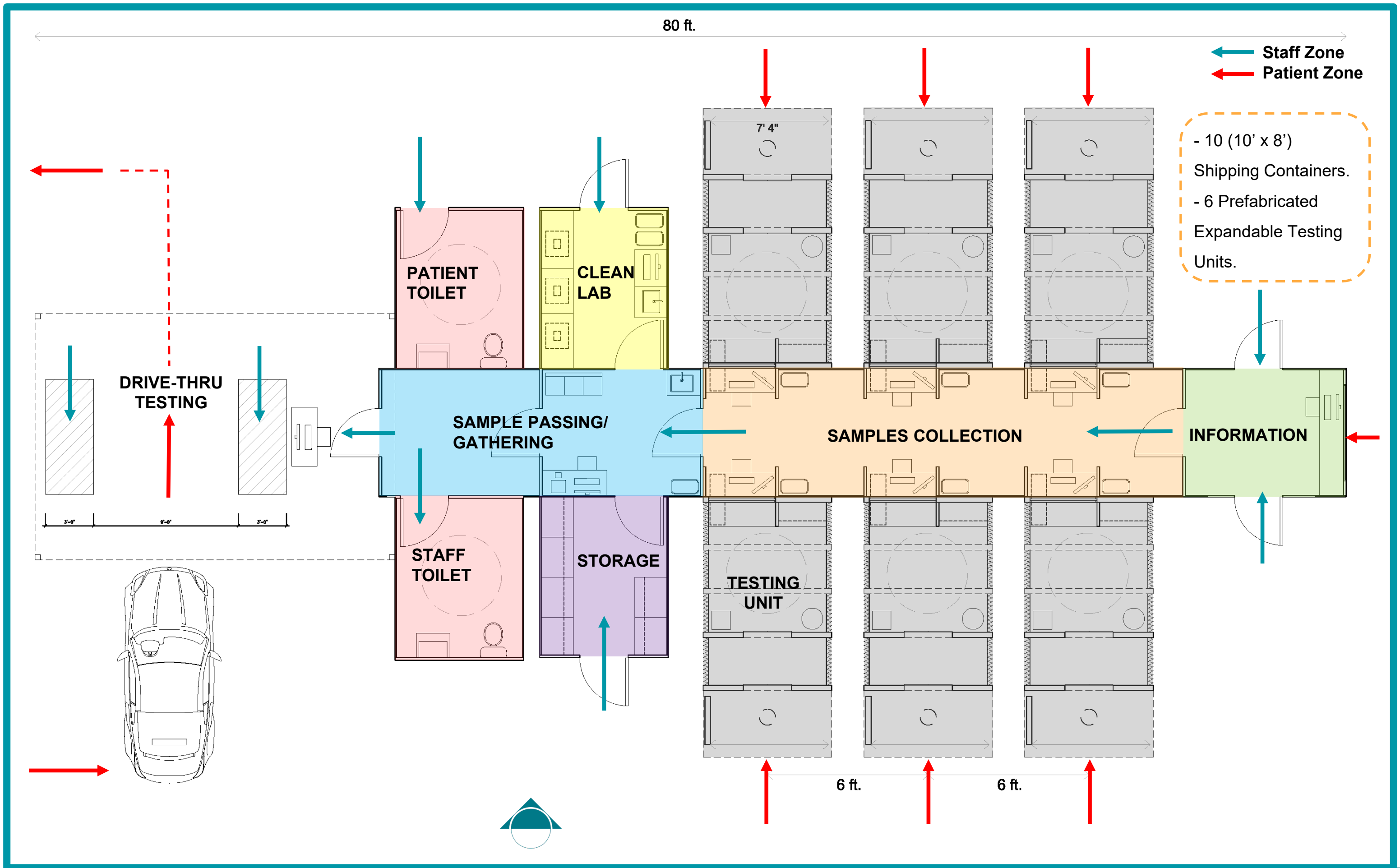
Axonometric View



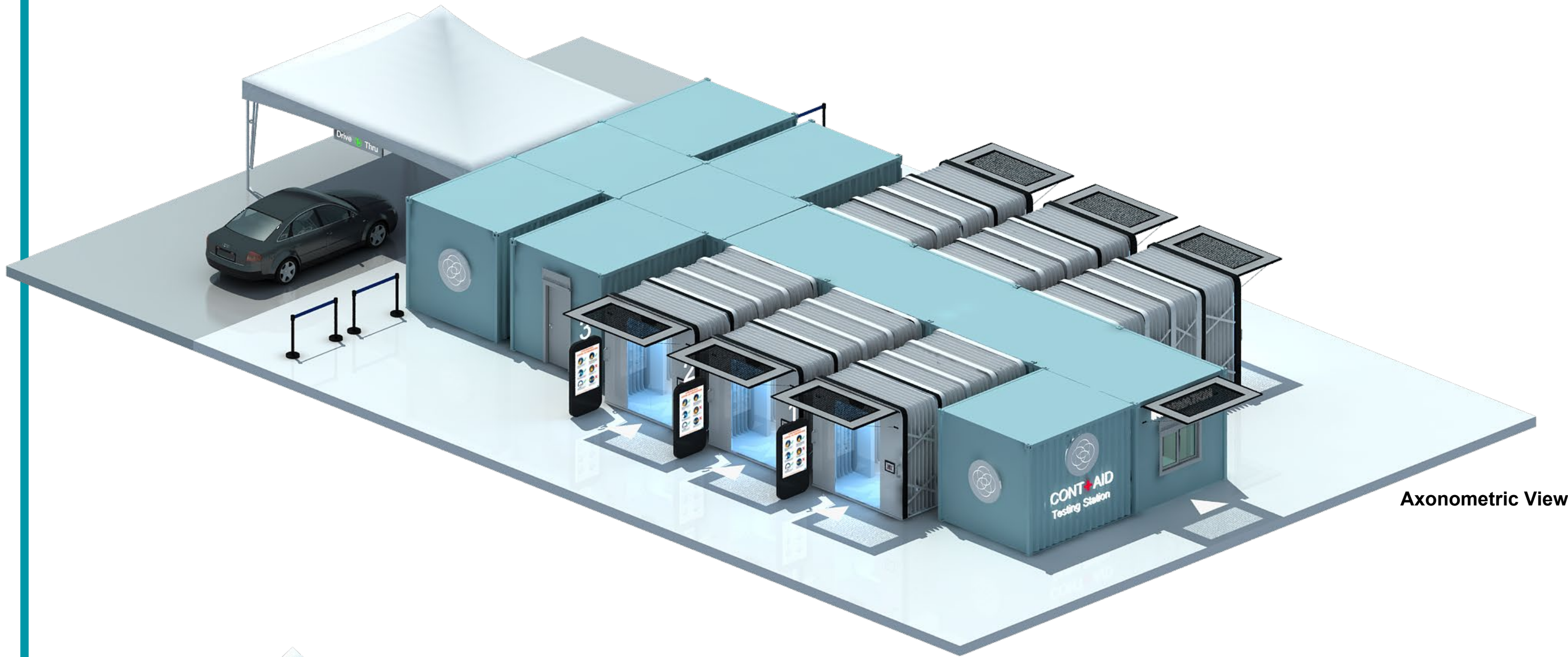
Elevation View 1



Elevation View 2



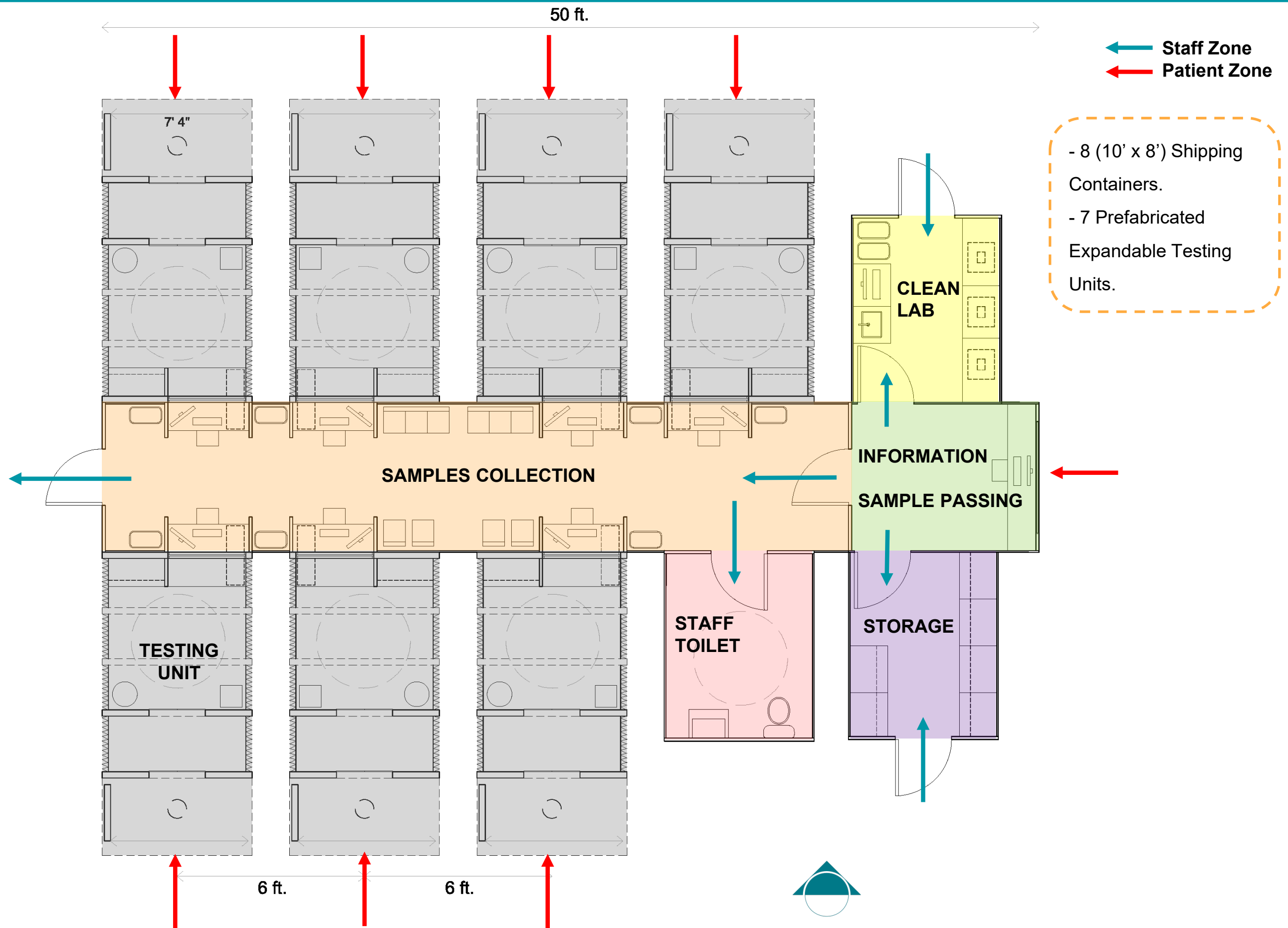
Layout Option 6 (Parking Lot/ Drive-Thru)



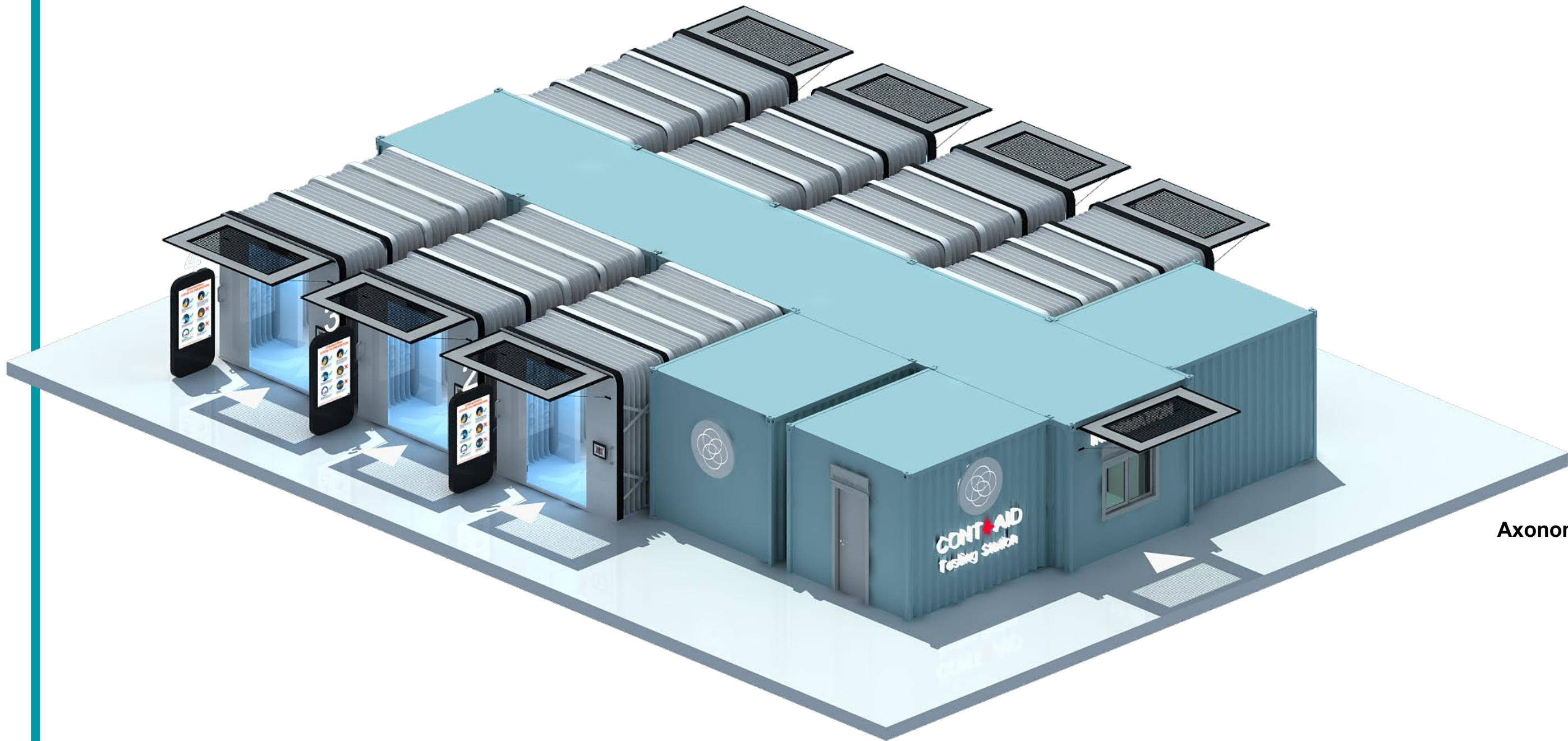
Axonometric View



Elevation View



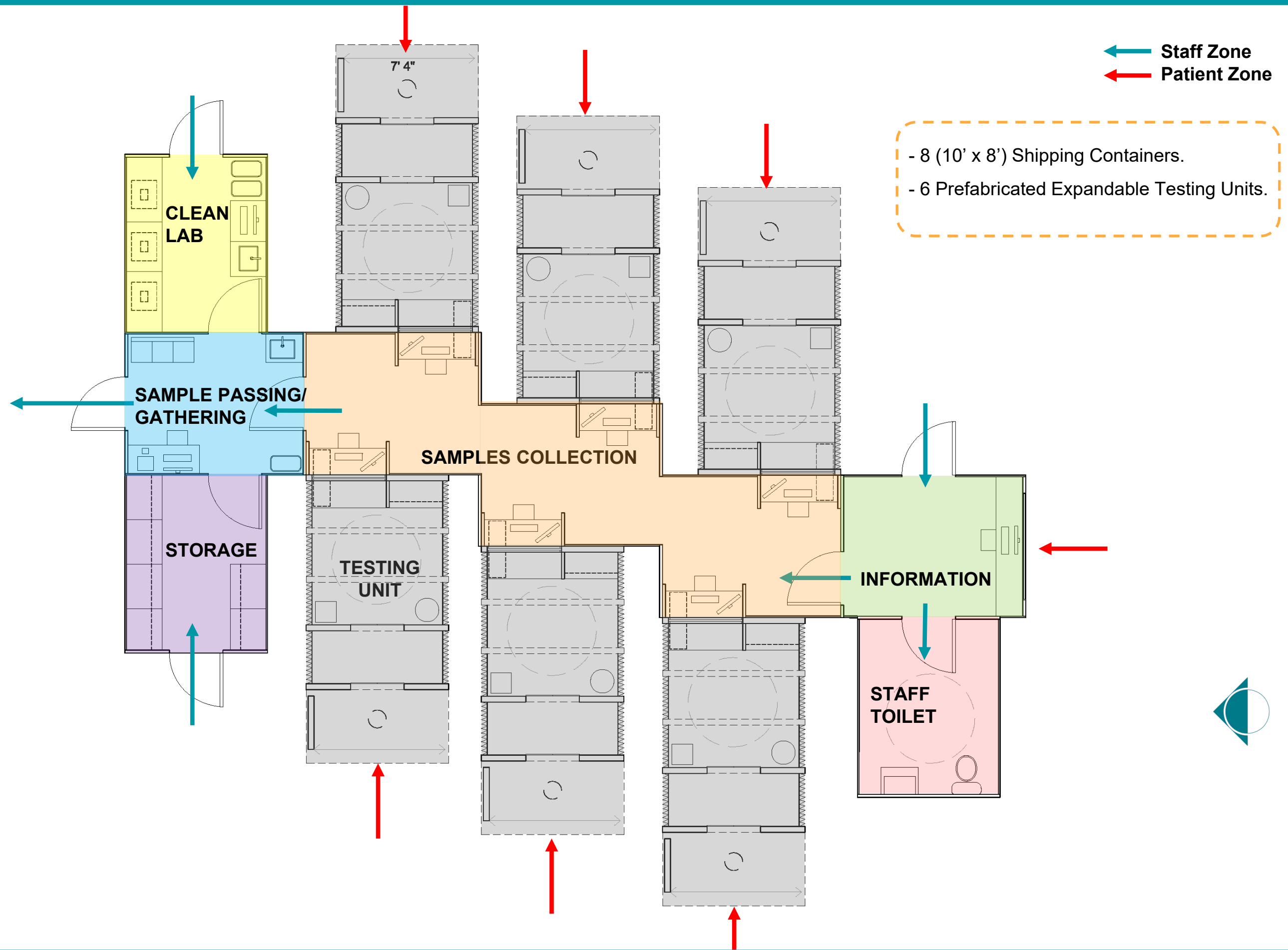
Layout Option 7 (Parking Lot / Interior)



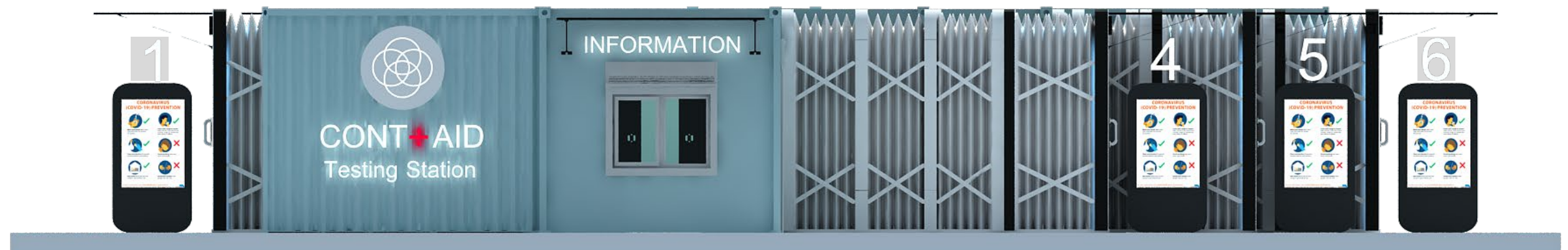
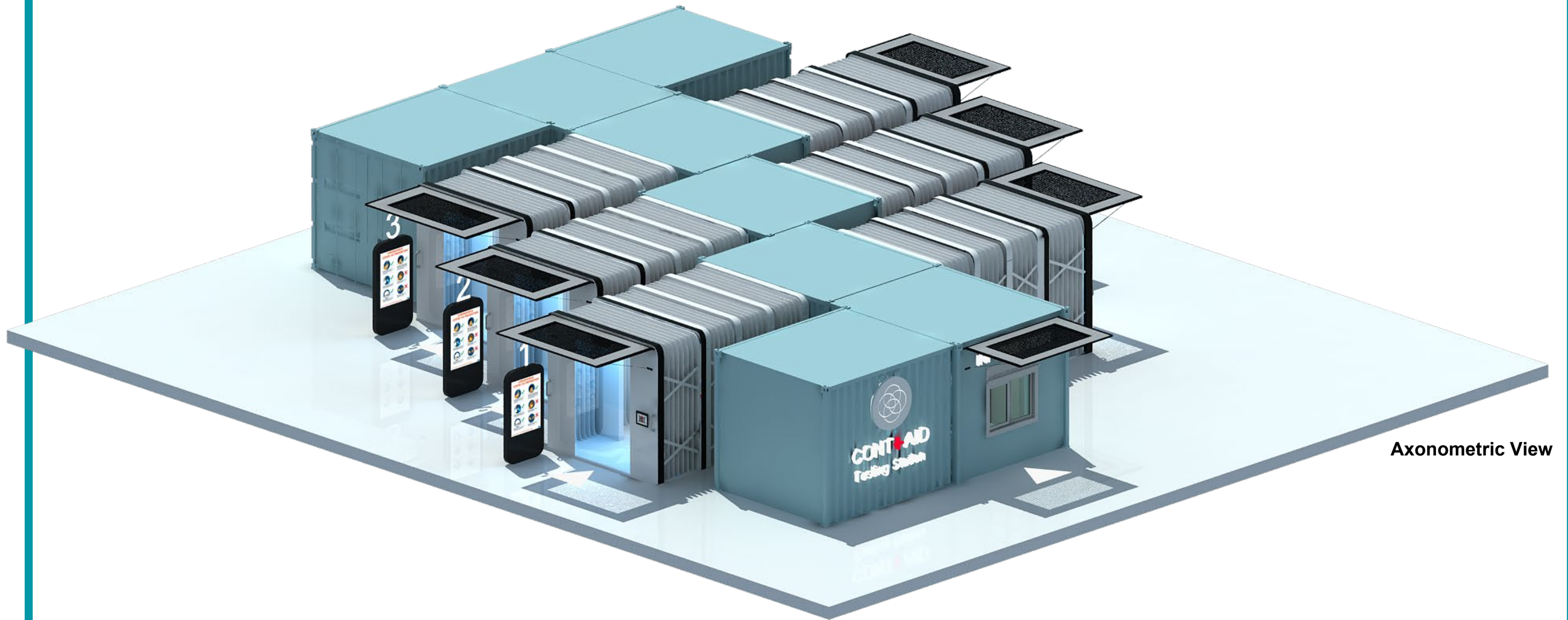
Axonometric View



Elevation View



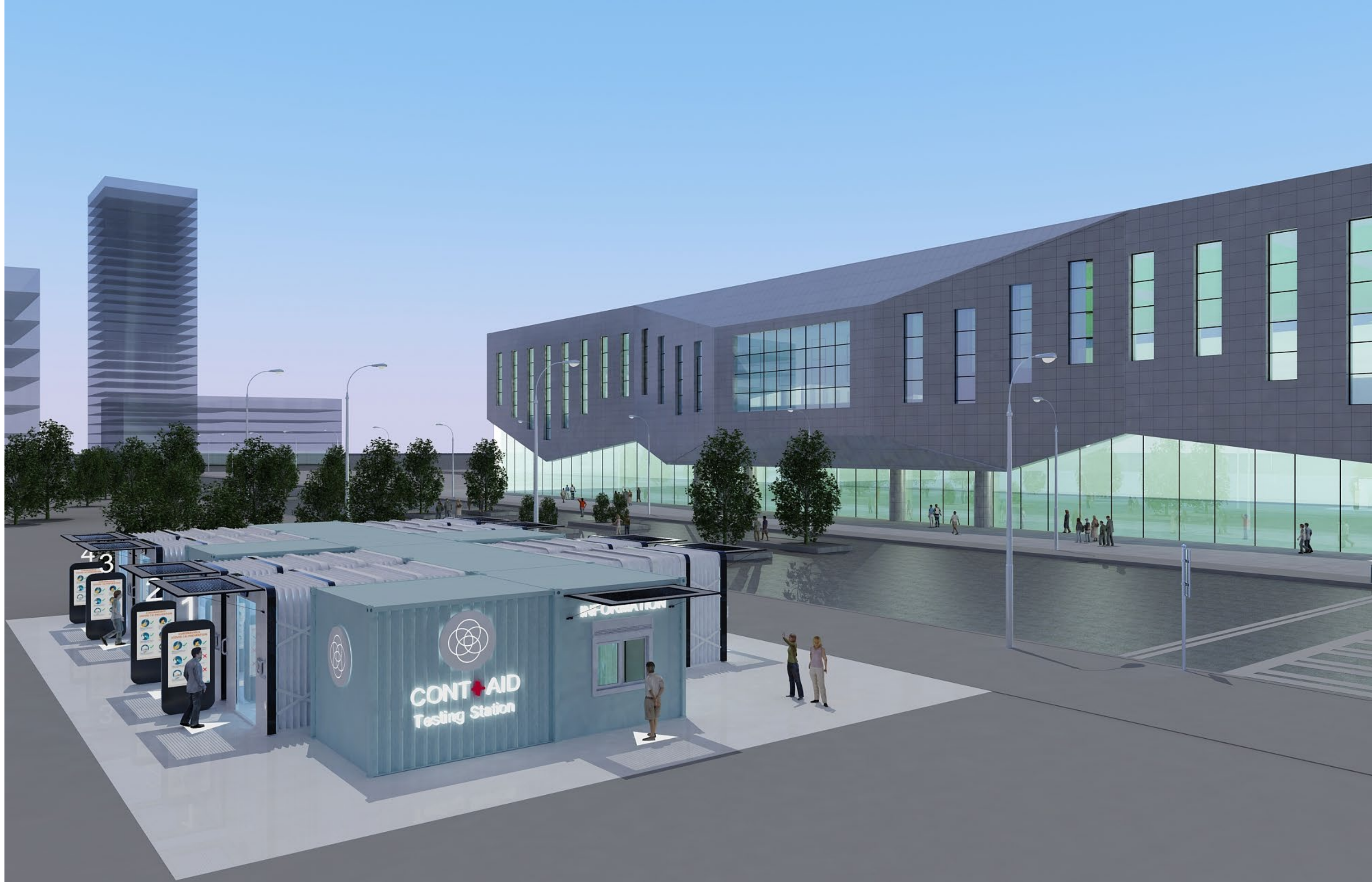
Layout Option 8 (Parking Lot)



Layout Option 8 (Parking Lot)



Next to A Shopping Center





Hospital Parking Lot



PROGRAM

Zone	Structure Name	# of Units	Individual Size	Structure Material	Components
Information/ Control station	Foldable Shipping Container	1	10' x 8'	Steel	Desk, chair & computer.
Testing	Prefabricated Expandable Booth	8-9	12' x 10'	POE plastic (Polyolefin Elastomers)	<ul style="list-style-type: none"> - Automated sliding glass doors with sensor. - Bar code scanning machine. - Sterilization zone equipped with (high-intensity ultraviolet light disinfectant source). - Patient zone equipped with (remote-controlled medical robot, surveillance camera, speakers, chair, storage cabinet, staff glass window and a moving tray).
Sample Collection	Foldable Shipping Container	4	10' x 8'	Steel	- Individual staff zones connected to the individual patient booths through a glass window and equipped with (counter desk, moving tray, microphone, computer, master controller, samples collecting tray).
Samples Gathering/ Passing	Foldable Shipping Container	1	10' x 8'	Steel	- Sterilized zone equipped with (computer, desk, chairs & cabinet).
Clean Lab	Foldable Shipping Container	1	10' x 8'	Steel	- Fully equipped lab with (steel samples collection trays, samples testing equipment, steel countertop, sink, computer and samples discarding bins).
Storage	Foldable Shipping Container	1	10' x 8'	Steel	- Storage cabinets.
Digital Screen Dividers		8	3' x 4" x 6.7'	N/A	N/A
Drive Thru	Shading Tent	TBD	TBD	Steel, Polyester	N/A

THANK YOU