

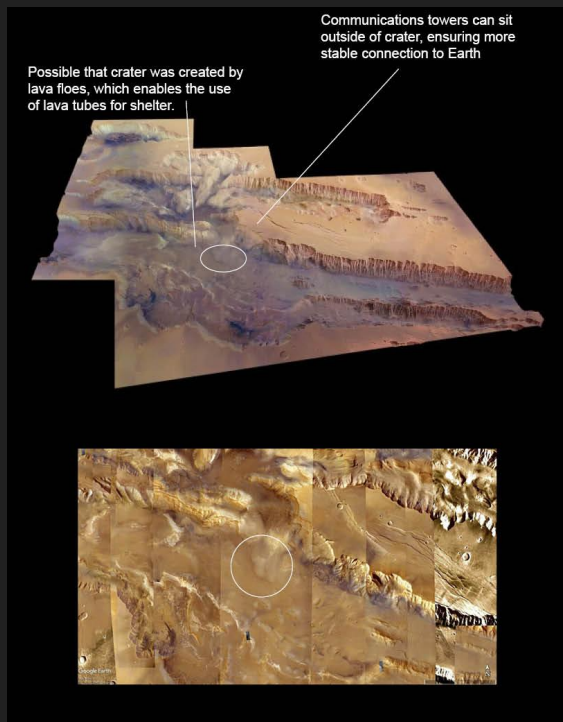


Mars Colony

The Virgil Villages

Meredith DeLong, Hallie Chuba, Daniel Stepanek, Brenden Erickson

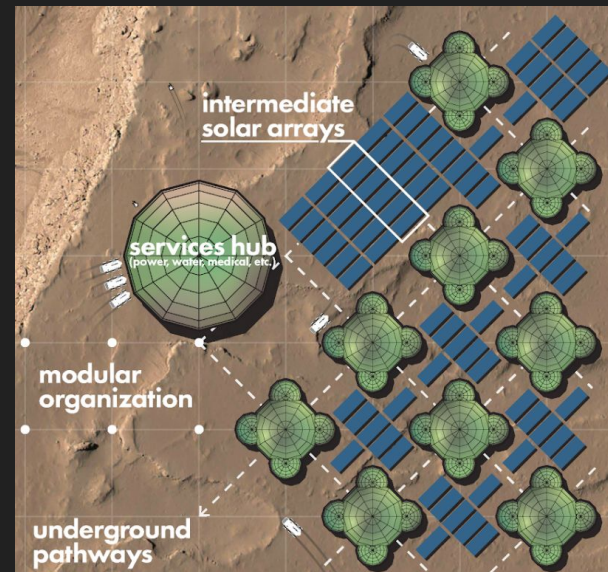
Project Recap



Site - Melas Labes in
Valles Marineris



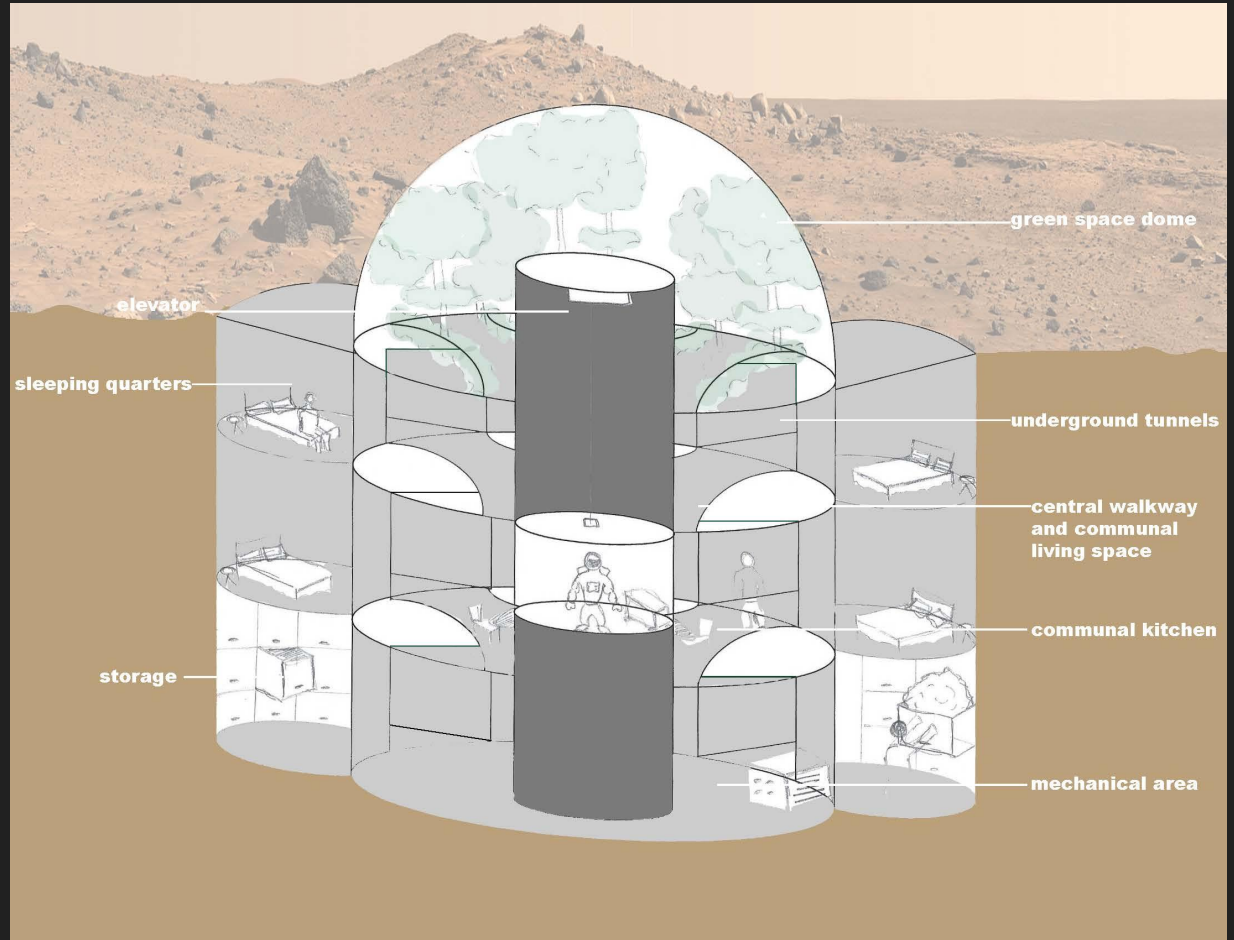
Precedent -TERA by
AI SpaceFactory



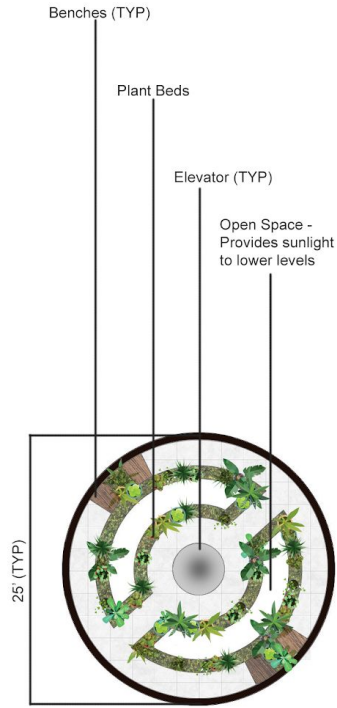
Our Design - A modular
colony of smaller,
self-sufficient houses
interconnected with
larger common areas

Section Drawing

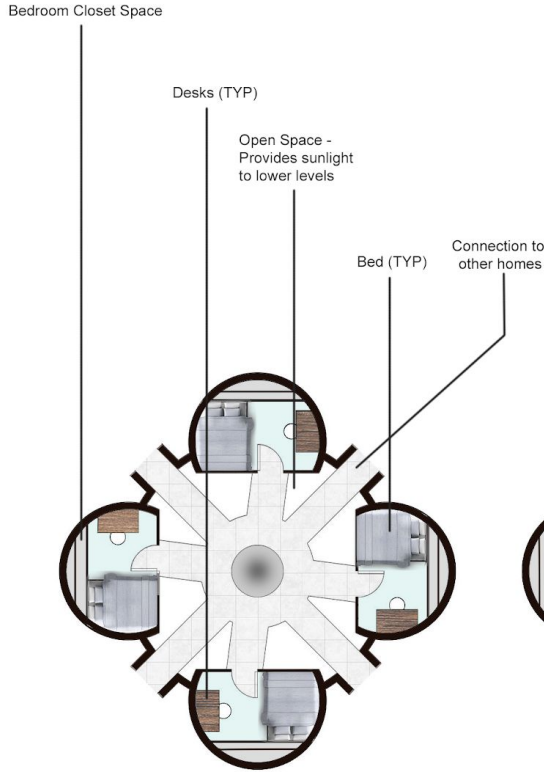
- continued with original layered design
- central cylinder flanked by four smaller cylinders
- only portion above ground is the green dome
- central walkways allow for light and air circulation from top to bottom



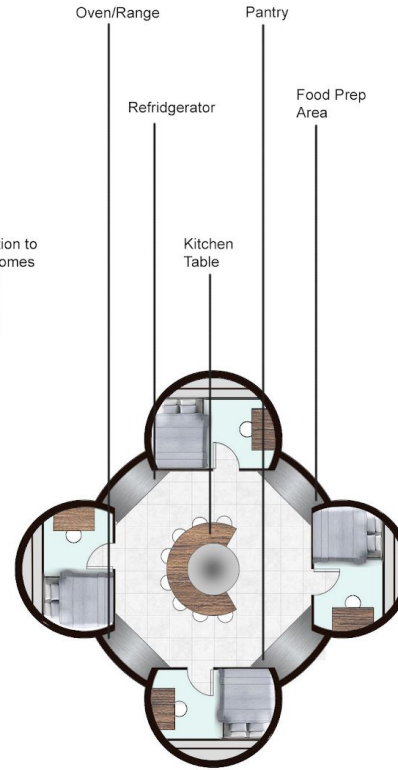
Plan Drawing



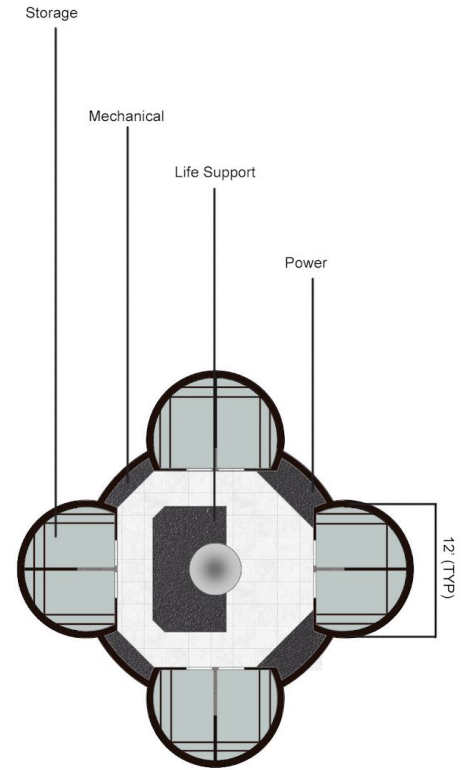
Garden Level
0



Common Level
-1



Kitchen Level
-2



Support Level
-3

Exterior Render

View of the colony from the canyon.

Surrounding cliffs

Lower altitude = denser atmosphere
More protection from radiation.



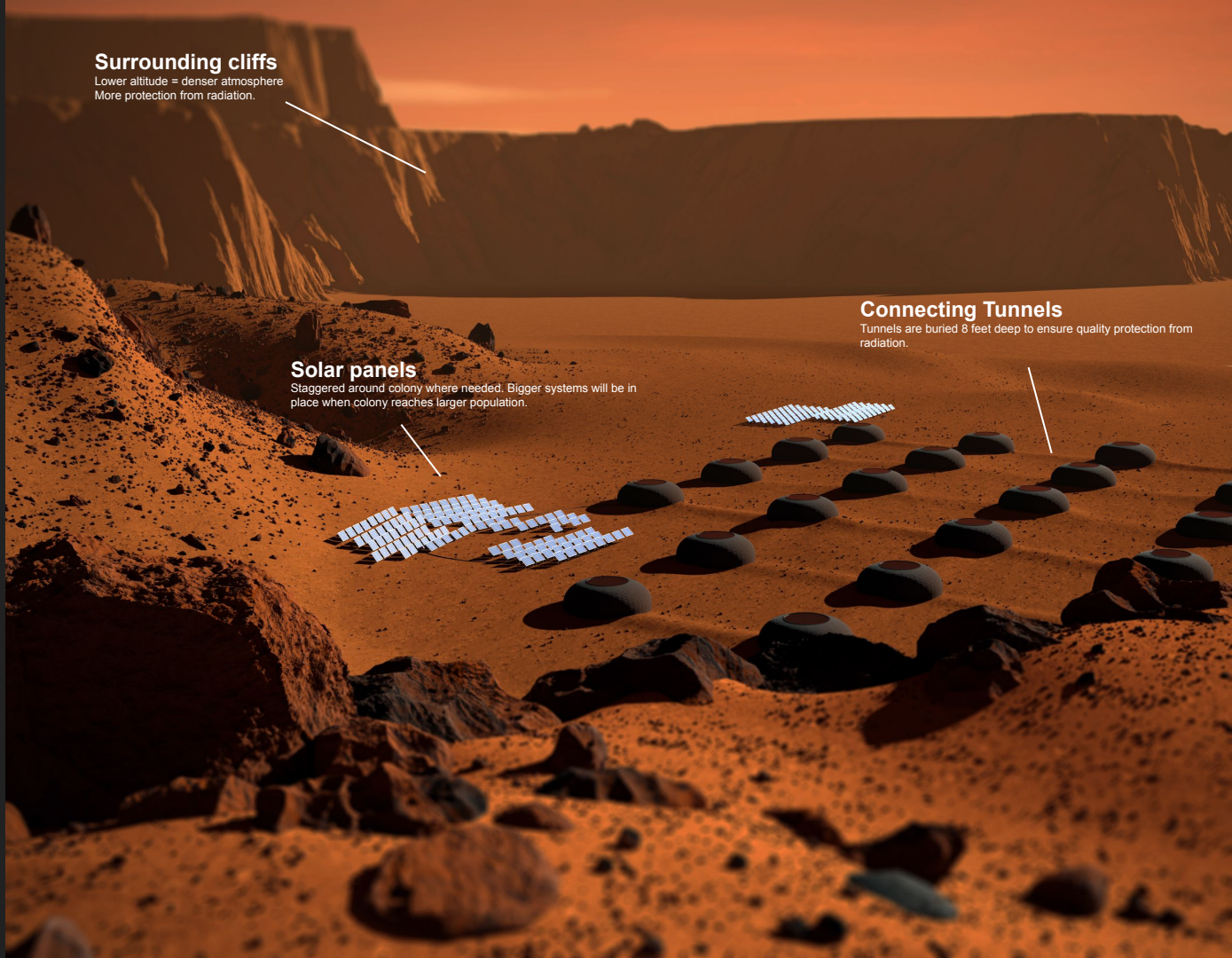
Solar panels

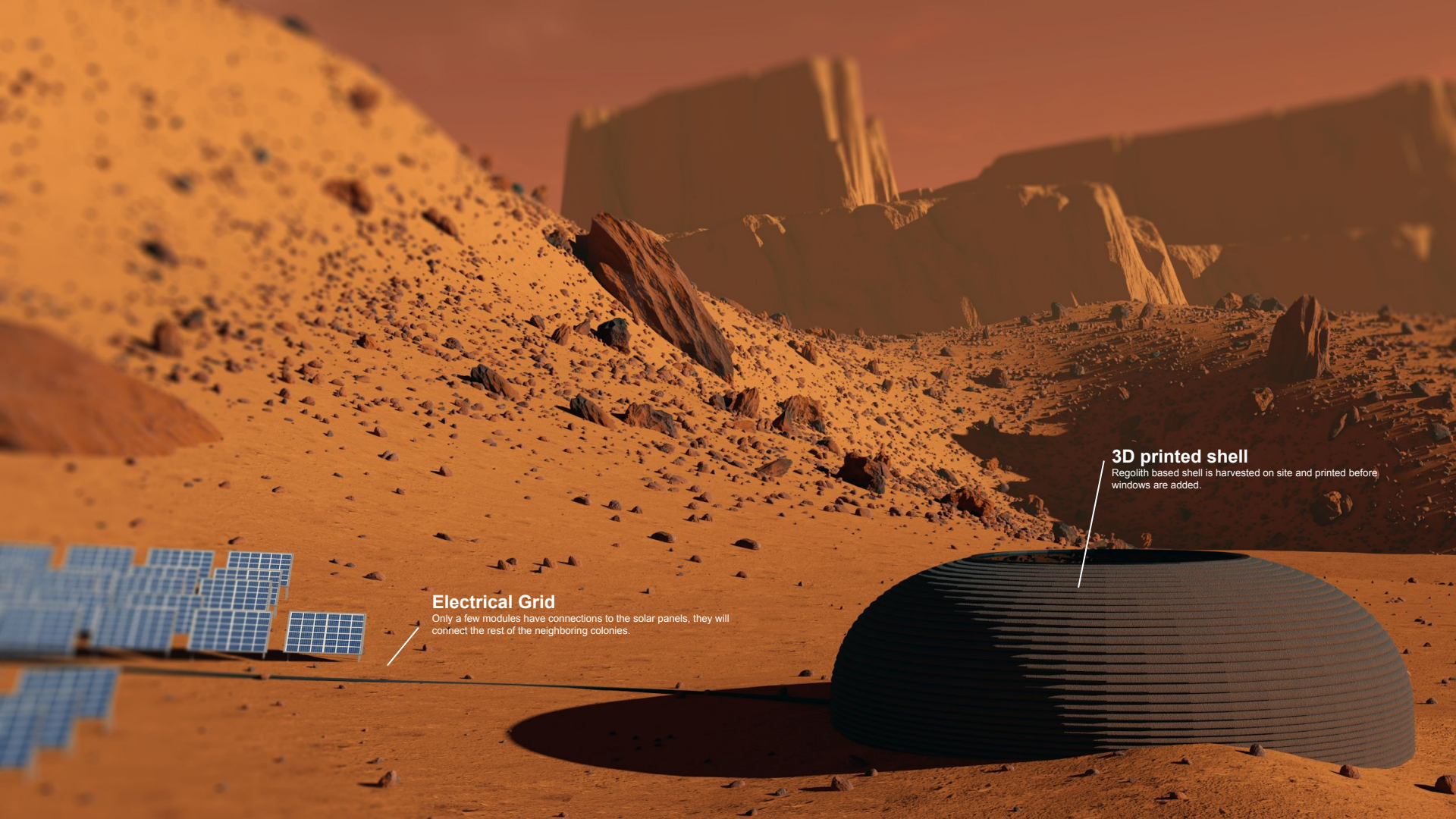
Staggered around colony where needed. Bigger systems will be in place when colony reaches larger population.



Connecting Tunnels

Tunnels are buried 8 feet deep to ensure quality protection from radiation.





3D printed shell

Regolith based shell is harvested on site and printed before windows are added.

Electrical Grid

Only a few modules have connections to the solar panels, they will connect the rest of the neighboring colonies.





A full-page background image showing the reddish-orange surface of Mars. The horizon is visible, with a bright sun rising directly behind it, creating a lens flare and illuminating the scene. The surface of Mars is covered in craters and a prominent dark, linear feature (a canyon or valley) runs vertically through the center. The sky is a deep black, dotted with small white stars.

Questions?