

Gateway Orbital is actually a collection of multiple attractions, themed food and dining opportunities, entertainment spaces and impromptu character encounters all themed around the titular near future asteroid mining station and the International Space Elevator.

Guests arrive at the area at ground level, and approach a low show building themed to the *Multinational Terrestrial Tether Facility*. It surrounds half, and provides access to, the main attraction of the area; the *International Space Elevator*.

This 240ft tall attraction is buried almost entirely underground, with only about 40ft above. The show building houses three drop/multi-motion towers, each with six ride vehicles accommodating 10 guests each. Multiple experiences and lengths are available, from calm to extreme, depending on guest preference. Accessible routes are available as well with traditional elevators.

Guests departing from the surface will arrive after their journey at the *Gateway Orbital* themed area, which is housed inside a highly scenic domed structure, where projections create the illusion of being at the edge of space on the asteroid looking back at the Earth. This highly themed area is split between the Tourist decks and the Resident decks, and both feature a variety of food, dining, shopping and entertainment outlets. A roaming cast of characters also provide serendipitous encounters, and invitations to explore.

Two additional attractions (show buildings A and B) are accessible from the Gateway Orbital area, and invite guests to experience thrilling adventures before departing asteroid 6497-Venturi back to Earth aboard the elevator.

## SHOW BUILDING - EXPLODED ORTHO SCHEMATIC

Gateway Orbital Station

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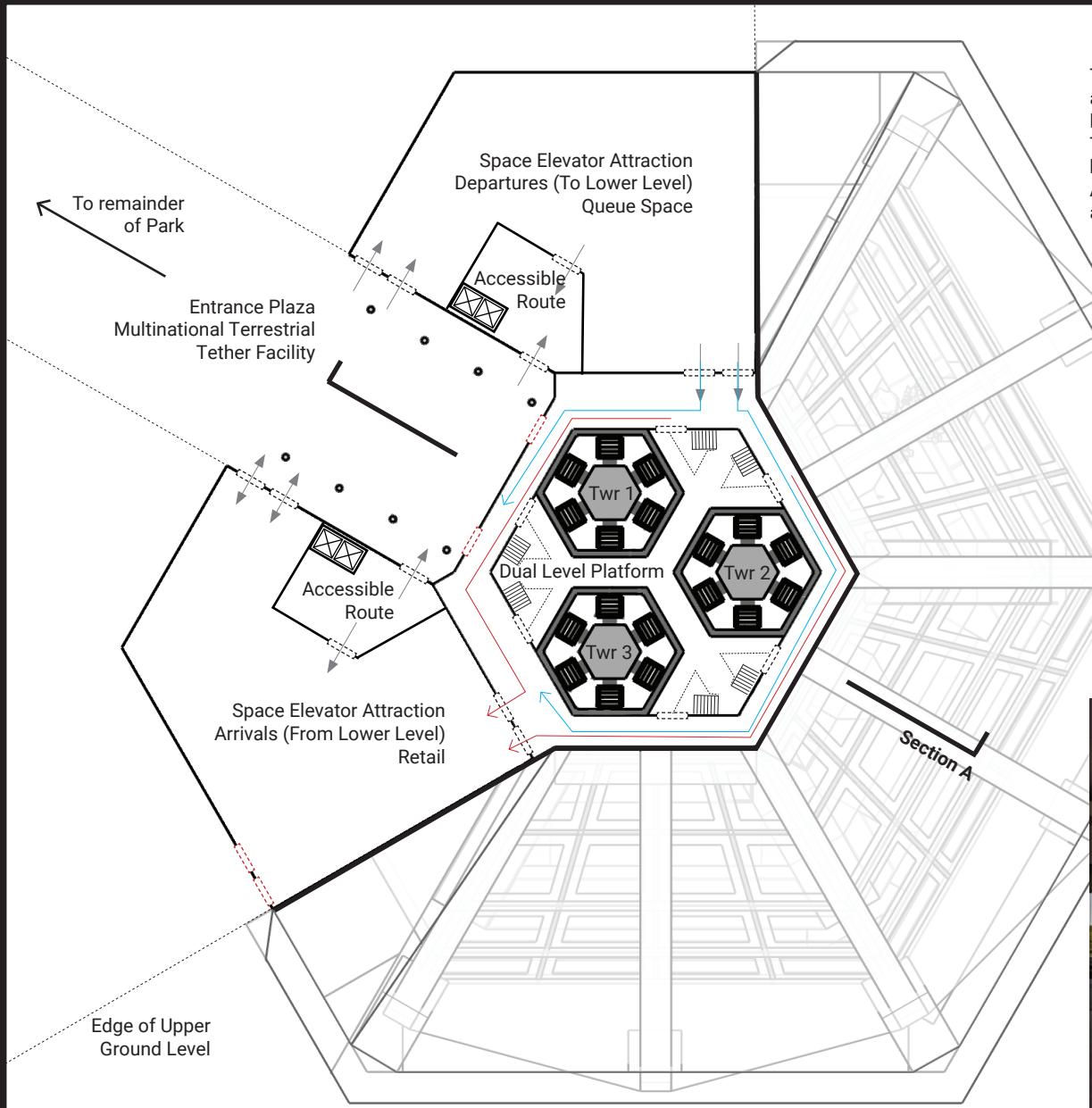
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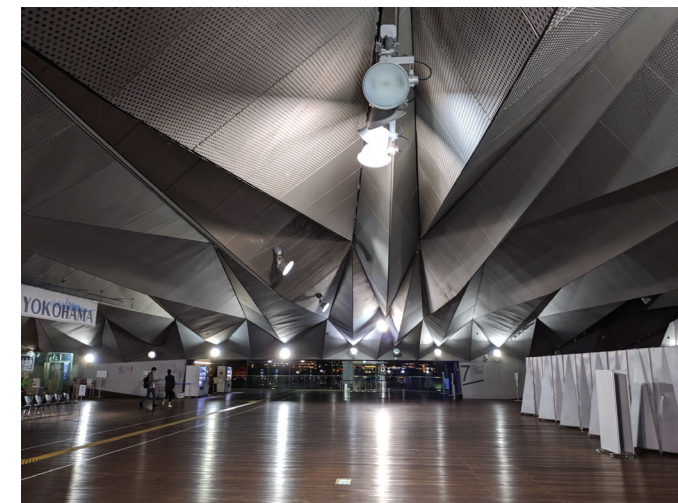


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The entrance plaza and show building visible from it is themed to the Multinational Terrestrial Tether Facility. An air of officialism; of industry and science. Very heavy materials; concretes, metals. The view above is obscured (thematically to shield guests from the elevator launch; literally to avoid the obvious lack of a space elevator). The facility is not without style though. The interior is more modern and warm. Touristic touches of wood, interesting lighting, glass. The queue space features a museum of the International Space Elevator Project's history. While the exit has retail, thematically similar to a National Park, to commemorate your trip. It's busy, but organized. Audio: Functional, with bespoke noises from scanners, customs gates, etc. Punctuated every so often with the whine of an elevator launch, or air rush of an arrival.



All photos R Ricupero

# SHOW BUILDING - PLANS - MTTF APPROACH LEVEL

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The intention of *Gateway Orbital* is to be constructed into the side of a hill, or cliff face, allowing exterior access to both the top and bottom of the attraction. Guest approach is carefully crafted to hide much of the attraction.

**Ground Level, far-side of attraction**  
Service, maintenance, backstage, emergency

**Ground Level at Area Entrance**  
Guest entrance, scenic approach

Space Elevator  
Attraction Vehicle

Structural Wall

Projection Screens  
within Attraction Space

Scenic 'Structure'  
(Projector / light mount)

Roof Structure of  
Main Attraction Space

*Gateway Orbital*  
Scenic & Projection Space

Outer  
Structural Wall

Thematic  
"Dome"  
Structure

*Gateway Orbital*  
Guest Area

*Gateway Orbital*  
Attraction  
Space

Backstage /  
Service

Tech / Utility Space  
within scenic

Emergency  
Exit Corridor

Lower Load /  
Unload Level

Emergency  
Exit Corridor

Base of Structure  
Lower Ground Level

Attraction,  
Tower 1

Upper Load /  
Unload Level

Attraction,  
Tower 2

+21336 mm

Top of Show Building

Area Entrance / Exit Plaza  
(Terrestrial Tether Facility)

+00000 mm

Upper Ground Level - Area Entrance  
Upper Load/Unload Platform

Space Elevator  
Attraction

Attraction Space A

-30480 mm

Top of Rear Walls

-48768 mm

Top of Scenic Dome Structure

-60960 mm

Lower Load/Unload Platform

-65532 mm

# SHOW BUILDING - SECTION A

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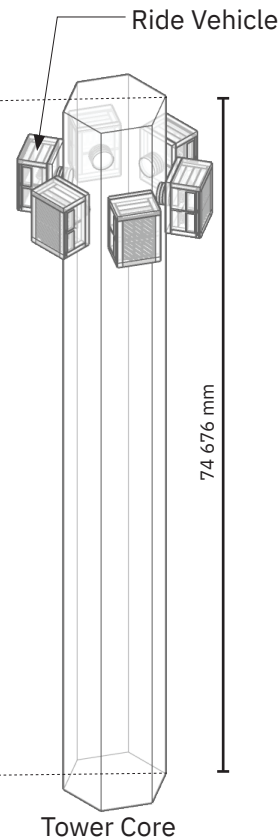
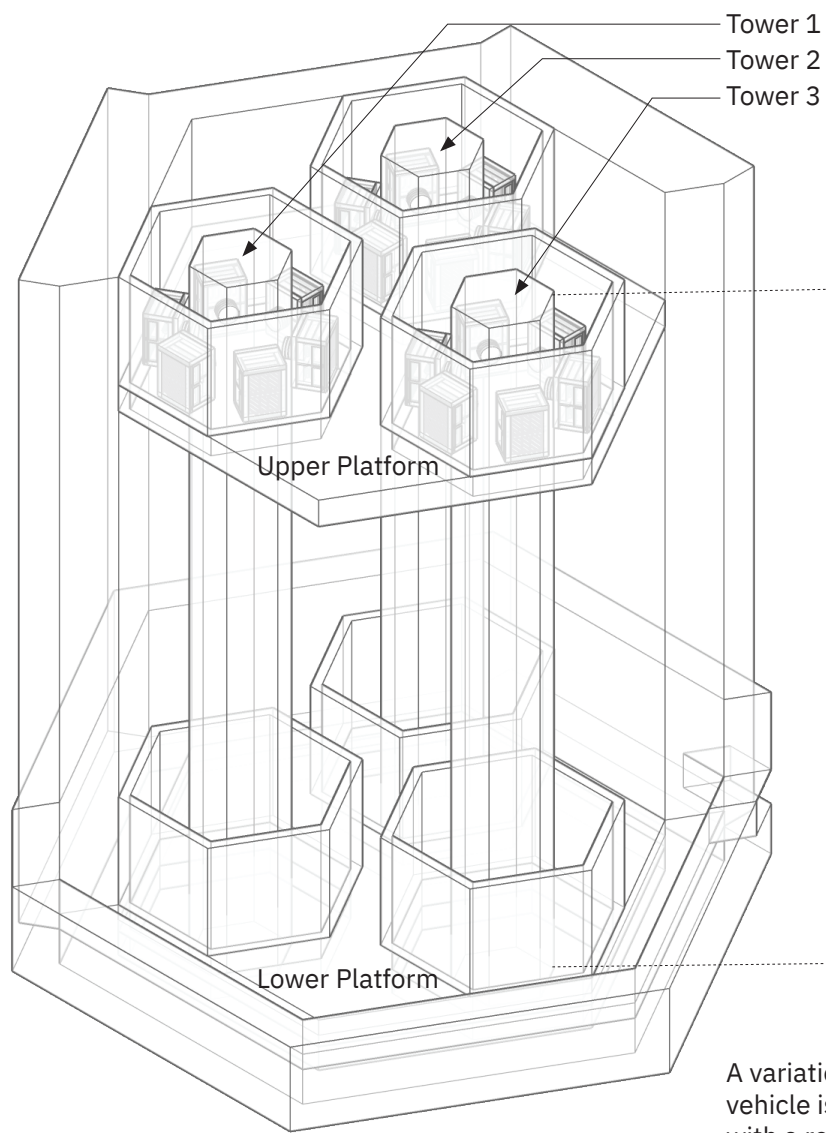
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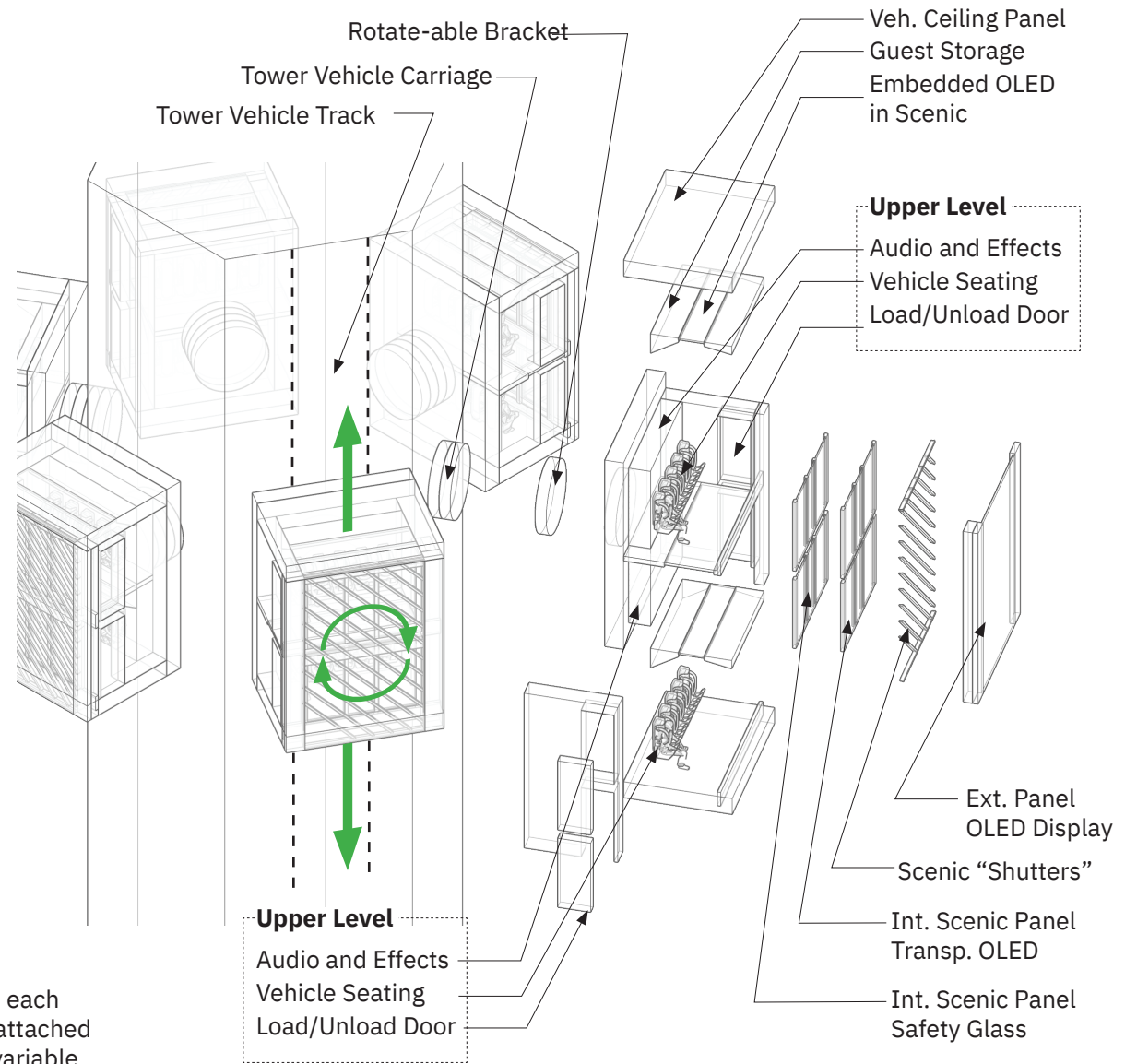
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A variation of the drop tower ride, where each vehicle is on an independent track, and attached with a rotate-able bracket, allowing for variable rise/drop speeds and full rotation of the vehicle.



# SHOW BUILDING - SPACE ELEVATOR ATTRACTION OVERVIEW

Gateway Orbital Station

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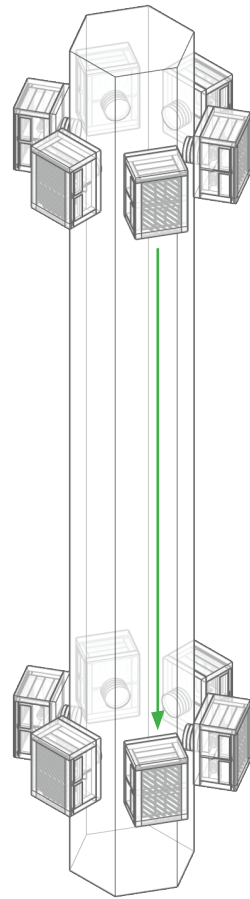
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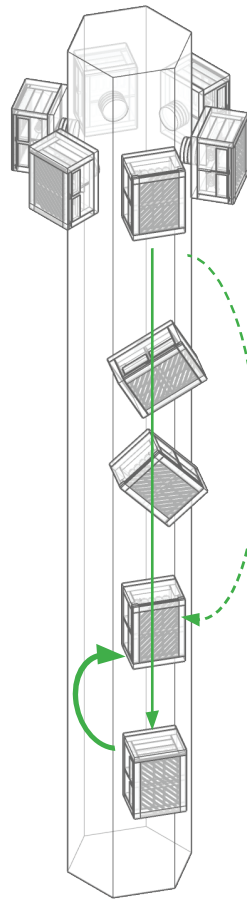


### Ride Type A

Vehicles start at upper platform upright

Vehicles move at a slow rate from upper to lower platform. Small rotations of the cab help simulate motion.

Vehicles arrive at lower platform and slow to a stop.



### Ride Type B

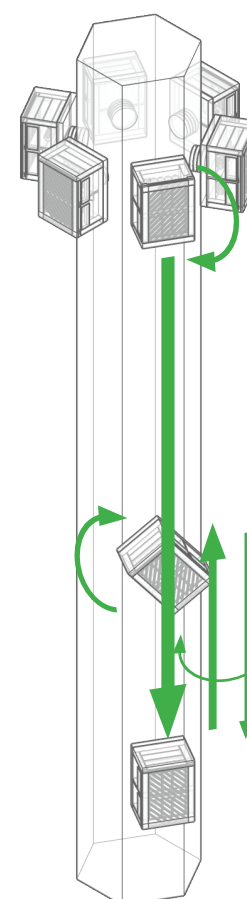
Vehicles start at upper platform upright

Vehicles move at a slow rate from upper to lower platform, while continuously and slowly rotating 180 degrees.

Before arriving at lower station vehicle is completely inverted.

A sudden flip back to upright simulates a flip in gravity.

Vehicles arrive at lower platform and slow to a stop.



### Ride Type C

Vehicles start at upper platform upright, but invert prior to moving.

Vehicles are dropped from upper platform at a high rate of speed, and right themselves as falling

Vehicles jostle back and forth, and “bounce” near the bottom of the tower, shooting back up briefly.

The airtime simulates brief loss of gravity during trip.

Vehicles arrive at lower platform and slow to a stop.

In all cases, the ride is simulating a trip on the Space Elevator from the Earth to 6497-Venturi (or back). Display screens embedded in each ride vehicle display video of your transit up the elevator from the equator in Somalia, to the edge of space, and toward Gateway Station. With screens attached to the vehicles, the visuals can remain aligned with guests and each vehicle can operate independently. Depending on which ride type is being experienced, the video can be a tranquil view of the Earth from surface to the edge of space, or thematic elements can be integrated; such as the need for a ‘gravity flip’ to align with the station, or passing through the wake of an errant shuttle flying too close to the elevators.

Embedded lights and audio help sell the illusion, which an intermediate transparent OLED display between the guest and primary display can display additional thematic details.

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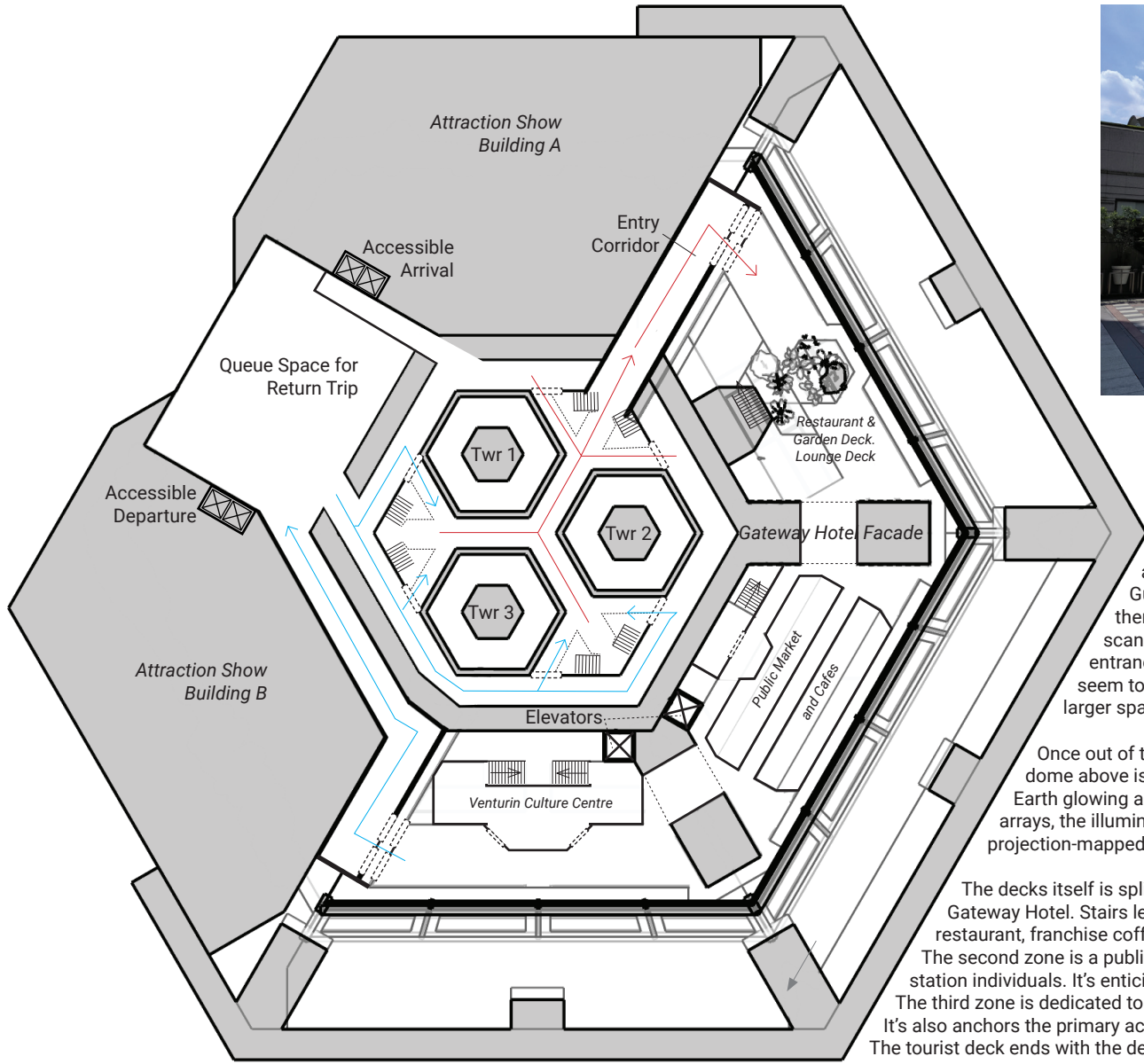
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The tourist deck of Gateway Orbital is a mix of functional architecture, and small, but decorated plazas and spaces. Guests unload from the Space Elevator attraction, and find themselves in the arrival corridor. They pass through security scanners in a utilitarian corridor, and ushered toward the entrance to the tourist deck itself. Facade doors and passages seem to branch out from the arrival corridor, suggesting a much larger space, but area not open to guests.

Once out of the corridor the stunning space becomes evident. The dome above is imposing, but expansive windows allow you to see the Earth glowing above. The cables of the elevator, lights on communication arrays, the illuminated supports and even the hard rock walls of 6497-Venturi all come together to create a mesmerizing vista (in actually projection-mapped on scenic elements outside the dome, and on project screens hidden between scenic structures).

The decks itself is split into three distinct zones. The first; the restaurant, hotel, garden and lounge deck is dominated by the facade of the Gateway Hotel. Stairs lead up to a large garden space, though hardy plants and vines spill out over the edges and cascade to the main level. A restaurant, franchise coffee shop, and art displays invite guests to relax, and spend money. It feels similar to a winter garden. The second zone is a public market and smaller cafes, offering a variety of different foods and wares supplied by both Earth-side operators, and on-station individuals. It's enticing, but also has the air of being a bit fake; like a tourist hot-spot of an exciting city. The third zone is dedicated to more lounge space to watch the Earth, but also the Venturin Culture Centre; a museum and gallery produced by Orbitech. It's also anchors the primary access to the Resident deck below, via stairs at the back of the centre, or elevators just outside. The tourist deck ends with the departures corridor, snaking back through the facility to the queue space for the guest's trip back to Earth.

# SHOW BUILDING - PLANS - TOURIST DECK LEVEL

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Render - Looking up at Earth from the Tourist Deck

# SHOW BUILDING - TOURIST DECK LEVEL - ENV. RENDER

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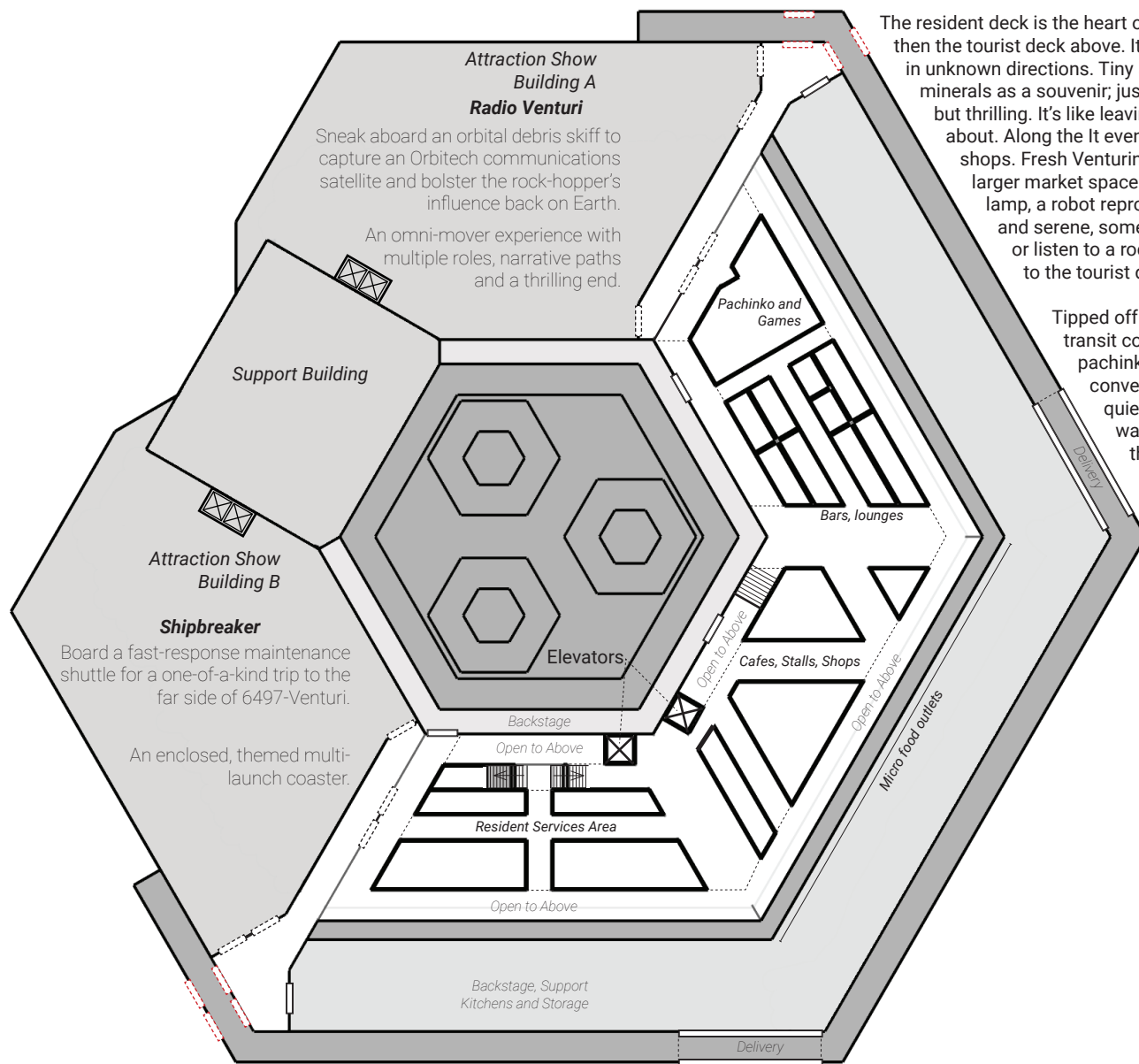
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The resident deck is the heart of Gateway Orbital. Though only a single level, it has significantly more space than the tourist deck above. It is also much more chaotic, confusing and busy. Corridors and alleys lead off in unknown directions. Tiny shops sell unexpected merchandise (how about a hunk of beautiful Venturin minerals as a souvenir; just don't get caught with it). The smells, sounds, lights and action are dizzying, but thrilling. It's like leaving that tourist hot-spot and stepping into the night market only locals know about. Along the it even extends into the exterior walls of the station itself...tiny standing ramen shops. Fresh Venturin canjeero and baasto. Synthesized lamb kebab. Explore further and you'll find larger market spaces selling re-used and up-cycled mining tech; a pressure helmet turned into a lamp, a robot reprogrammed to sing karaoke... Tiny bars and watering holes; some fashionable and serene, some loud and energetic, some dark and moody. A good place to meet a contact or listen to a rock-hopper complain about Orbitech. The further from the elevators and stairs to the tourist deck you go, the more you discover where the real life of Gateway is.

Tipped off by a tired miner at a hole-in-the-wall bar called Occam's, you walk toward the transit corridor connecting the main station with the mining docks. The screaming of pachinko machines is incessant and the lights nearly blinding; you can barely hold a conversation. But the scrawled map leads you well, and soon you find a forgotten, quiet entrance to the transit hub. Ducking inside you hope everything stays that way, but you feel deep down that it won't. The risk is worth helping the locals though, and Orbitech has kept secrets for long enough.

In reality the resident deck has the bulk of the guest-facing attractions. Much of the tourist deck above is facades, housing kitchens, utility space and services for the food and attractions below. Central kitchens offer safe, clean space for the preparation of unique dishes inspired by African, Asian and European cultures; ramens, rice dishes, sweets and baked goods. All with a slant of sustainability built-in. After-all, importing food to the station is expensive. Hydroponic grown legumes and act as bases and meat substitutes. Unleavened breads, fresh noodles, dishes not typically seen in theme parks. Even vat-grown meats, or meat substitutes are more common than the actual thing. It is vegetarian / vegan first, globally inspired, and can be spicy as all hell! (if you want it that way). But mostly, it's delicious. Central kitchens feed the tiny standing bars behind the scenes keeping guests moving and ensuring high turnover. Bars, nightclubs and watering holes are really a single alcohol-licensed establishment creatively themed with multiple entrances and exits. Meanwhile everything is brought to life by a multicultural cast of characters going about their lives.



All photos R Ricupero

## SHOW BUILDING - PLANS - RESIDENT DECK LEVEL

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# SHOW BUILDING - RESIDENT DECK LEVEL - ENV. INSPIRATION

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