

# **“PARK” SHELTER: AN ALTERNATIVE HOUSING SOLUTION**

Version 1.1  
Field of Vision  
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# INTRODUCTION

The “Park” Shelter concept installs tiny homes in available metered parking spaces in the city. Similar to the approach SF Parks and Recreation and local business owners have adopted using metered parking for the city’s “parklets”, the concept hinges on the reconsideration of a city’s infrastructure, expanding upon conventional understanding of urban space and exploiting the untapped potential of an existing resource.

## Background Statistics:

According to SF’s parking census, there are 275,450 street spots with 26,750 that are metered.

As of 2017 the homeless population is estimated at 7499.

Adults living on the streets of SF: 4353

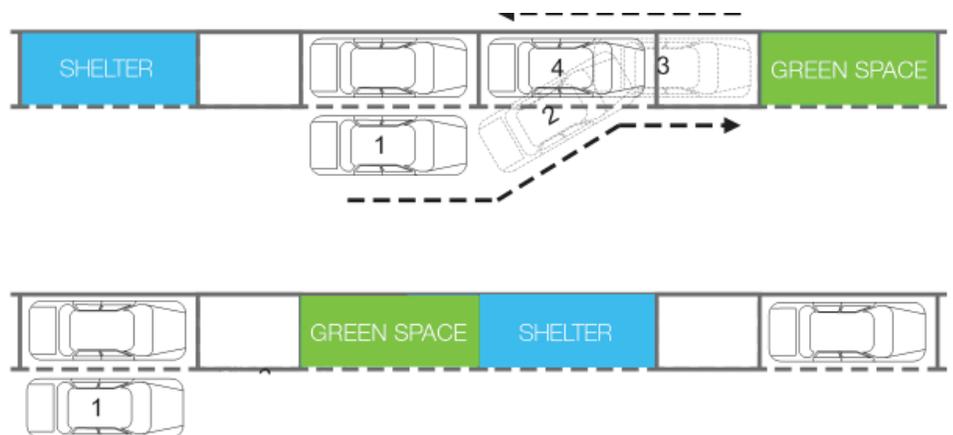
Adults living in SF emergency shelters: 3146

Under this concept, the city would relinquish 3000-4500 of the 26,750 metered spaces for temporary housing.

This method avoids negotiation with landowners (other than the city itself) for use of large continuous tracts / lots for legalized housing encampments.

Adopting a decentralized strategy for housing provides a more agile approach for rapid deployment to existing encampments and homeless populations.

Shelters at metered spaces can also be tracked and inventoried for mobilization around the city as necessary. Trackable housing also accommodates linkages to social services and tracking of registered shelter occupants.



Using shipping containers like a set of Legos, the housing concept utilizes a modular approach to design maximizing flexibility, shrinking, growing and changing configuration to accommodate site specific conditions and service needs.

Several types will be developed according to programmatic function, linked together in a chain to form “micro” blocks, a new streetfront abutting the existing sidewalk.

The container types will be as follows:

Living  
Shower  
Office  
Garden / Planter  
Trash  
Kitchen  
Health

**LIVING**

As the primary modular unit, the living unit will fulfill the most basic needs of the resident with room for a queen-sized bed, closet, storage, a writing desk, and bathroom with toilet and sink.

**SHOWER**

The unit is a gravity fed shower system containing 2 shower stalls and dressing areas. It will be a communal shower with the intent of simplifying construction of the living units by consolidating water usage needs.

**OFFICE**

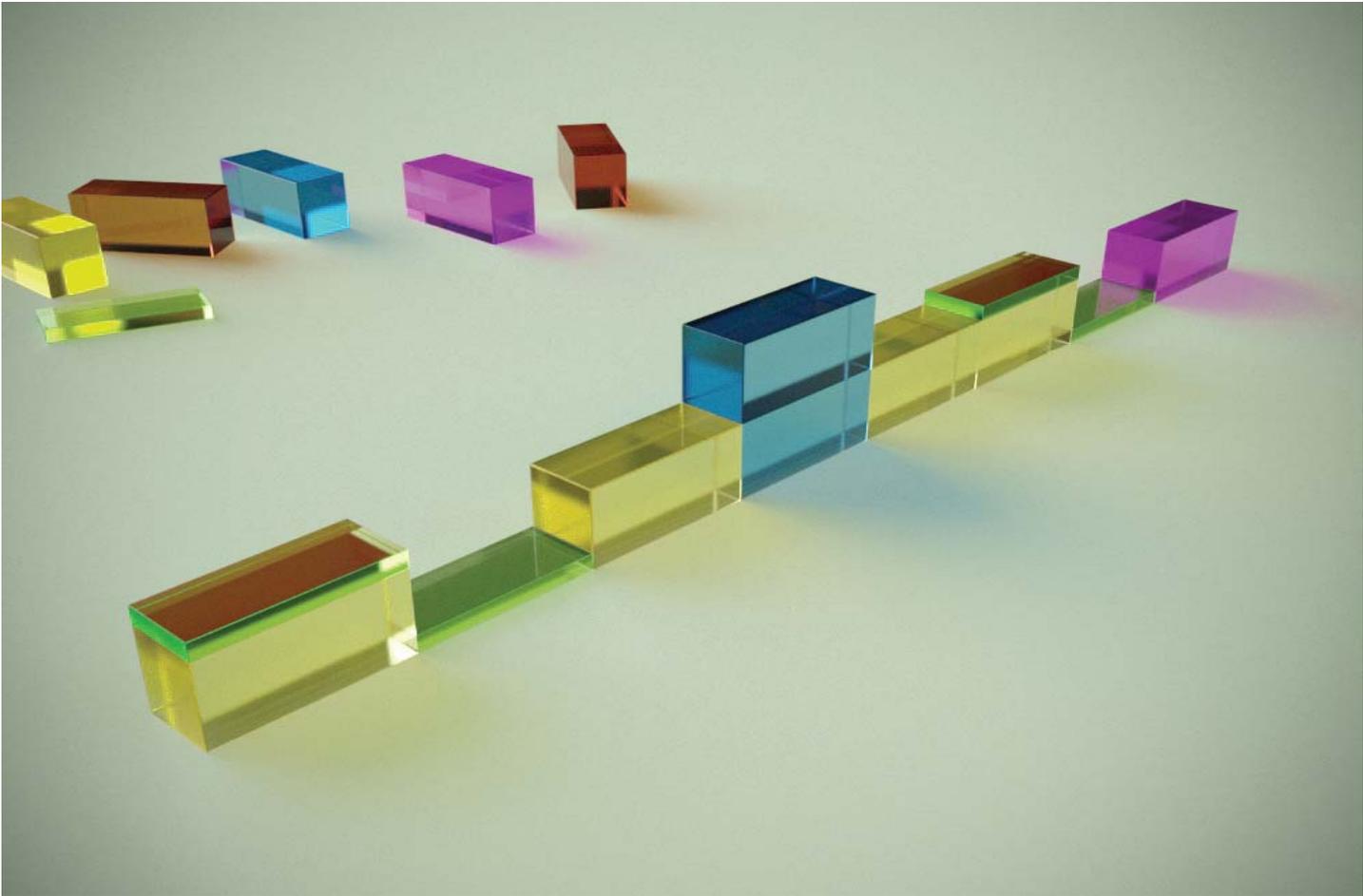
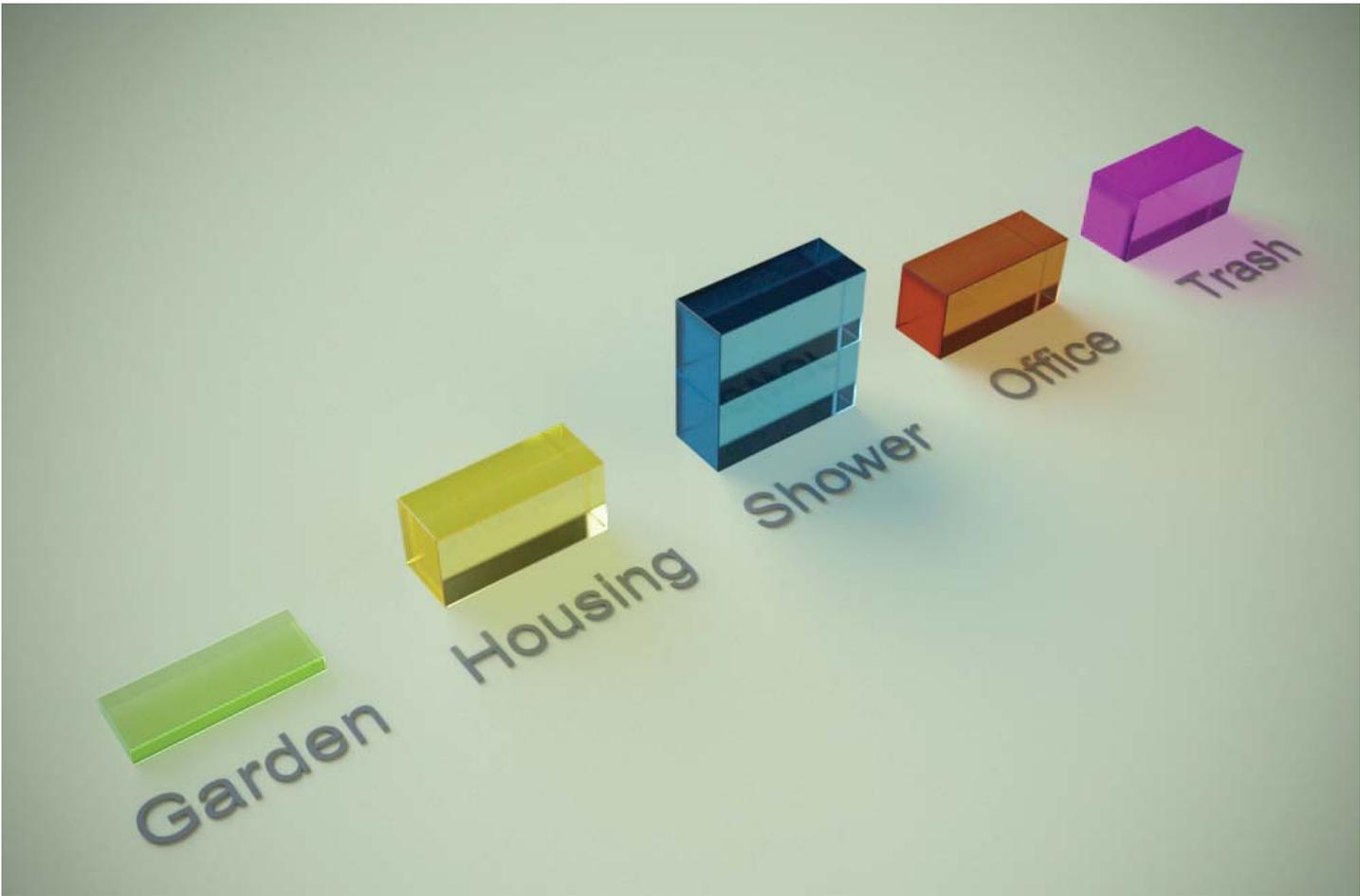
The office unit will be for onsite management of the micro block with regular and extended hours.

**GARDEN / PLANTER**

The garden unit will consist of a raised planting bed built on top of a container platform. Measuring only 20” in height without vegetation, the garden unit provides necessary breaks in the micro block for light and visibility while also creating green space in the City. Vegetation can vary in character from xeriscapes to edible crops. These units will also be placed on top of other unit types providing additional insulating value as well as plantable area.

**TRASH**

Shipping container unit self-explanatory in function with attendant recycling and composting bins. It is anticipated that the City will provide weekly trash pickup.



## KITCHEN

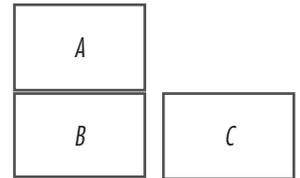
This will be a communal kitchen with stove, counterspace, cabinet space, and eating nook.

## HEALTH

This health unit will function as a field office for medical and social services. This will be the primary linkage for additional assistance to residents in moving towards improvement and rehabilitation.

## OTHER

There is potential space for expansion beyond housing the homeless. Shipping containers may be developed for micro businesses and commercial “pop-up” installations as part of the programmatic mix, weaving the micro block concept into the urban fabric. Rather than being a blight on the existing context, the containers can improve and activate the streetscape.



*A. Modular shipping container types diagram*

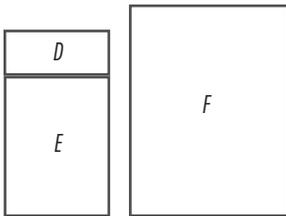
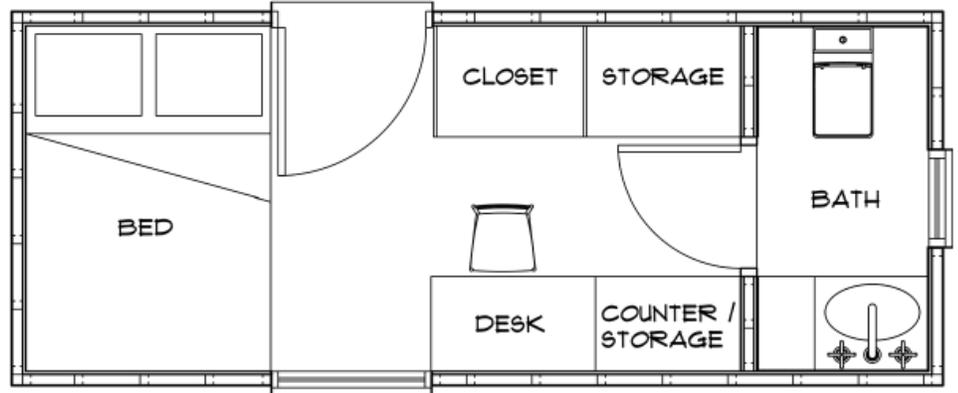
*B. Shipping container microblock sample configuration diagram*

*C. Shipping container microblock rendering*



## SHELTER DESIGN

Each shelter will conform to a 9'x20' parking space footprint. Configuration will vary pending design and development of housing types to accommodate homeless adults, youths, or families. The designs will also incorporate green design strategies such as the use of green roofs, compostable toilets, and solar power.



*D. Living Unit Plan*

*E. Living Unit Interior*

*F. Living Unit Interior*

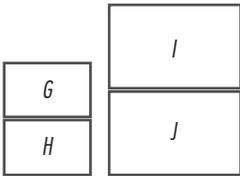




# PILOT PROJECT

The pilot project proposes the use of retrofitted shipping container to create micro housing blocks in San Francisco. The intent is to offset public housing shortages from existing stock while also recognizing the limited availability of public property to build otherwise conventional mid to high rise structures for housing.

The pilot project will consist of a programmatic mix of 18-20 shipping container types with 10 of those containers being living units occupying one city block. The project will include onsite management with additional support from health and social services using a dedicated shipping container as a field office for its administration.



*G. Existing Site*

*H. Visual simulation of micro block housing scheme*

*I. Existing Site*

*J. Visual simulation of micro block housing scheme*

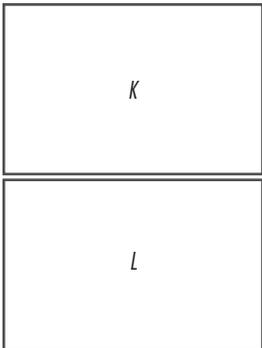




## SITE SELECTION

Exploiting the mobile nature of shipping containers, micro-block housing is adaptable to many site locations. In addressing anticipated concerns about proximity to neighborhoods and businesses, lessons can be drawn from understanding current settlement patterns of unsanctioned encampments throughout the city and applying them to the project.

1. Encampments typically occur in low-lying-flat areas with minimal topographical change.
2. Encampments will occur along backstreets away from major traffic thoroughfares or on streets with “blank” facades i.e. backs of buildings with no commercial streetfronts.
3. Encampments will occur away from residential blocks to minimize disturbance to itself via neighbor complaints or police canvassing.
4. Encampments will occur in areas with preexisting shelter i.e. under elevated highways, freeway ramps, or bridges where a canopy is present.



*K. Existing Site*

*L. Visual simulation of  
micro block housing  
scheme*

Shipping container housing can follow similar patterns albeit under improved conditions i.e. promote better hygiene and health, cleaner sidewalks and streets, and provide an ergonomic fit folding into the urban context via an organized modular system that works within the existing parking network.

The east side of Carolina St. between 16th and 17th is currently the proposed location for the pilot project as that face of the street is an expanse of blank corrugated wall, limiting interference with local businesses. The location was also previously an encampment site which was cleared by police earlier this year. We are now seeing recidivism along the north end of that block with several makeshift shelters repopulating that area. The pilot project proposes to organize what is already occurring / reoccurring into a programmatic structural framework.



## **RULES AND REGULATIONS**

As with other multi-unit housing developments, the “park” shelter micro-block will have CC&Rs to be determined. It is expected that residents adhere to these guidelines to maintain residency including the following:

1. No drugs will be permitted in or around the project area.
2. Tenants will not engage in any criminal activity.
3. Housing and exterior areas must be maintained and free of refuse.

In contrast to a Navigation Center’s maximum 30-day limit stay upon which prior residents are effectively recycled back onto the streets, there will be no universal time limit for the residents’ stay. The duration of stay will be determined on a case by case basis commensurate with the individual needs of the resident and his or her progressive path towards recovery. In the case of the proposed pilot project, the duration of stay will be for the full term of the project itself or 24 months pending determination of funding.

The cost per unit will vary depending on shipping container type. A target cost for design and construction of each container type is as follows:

- 1. Living unit      \$35,000 each    Qty 10
- 2. Office unit      \$30,000 each    Qty 1
- 3. Shower unit     \$45,000 each    Qty 2
- 4. Health unit     \$35,000 each    Qty 1
- 5. Garden unit     \$15,000 each    Qty 10
- 6. Kitchen unit    \$60,000 each    Qty 1
- 7. Trash unit       \$20,000 each    Qty 1

Maintenance aside, the initial cost of each unit is one time only after which the City will own the units in perpetuity. Against the backdrop of millions spent annually by the City for policing of illegal encampments, the same dollars can be put towards a more constructive solution.

Flexible in its life-cycle, the shipping containers can be retrofitted continuously to meet evolving demands and may be repurposed for other housing development projects entirely.

The development of shipping containers for housing also provides a possible pathway for job training and employment opportunities for shipping container residents themselves as well as members of the local community.

The purpose of the pilot project is to test the viability of alternative housing concept. Beyond its implementation, the empirical nature of this project will benefit from production of a report documenting lessons learned both from a social, economic, as well as logistical standpoint. Status reports will also be provided to the City every six months for the duration of the pilot study outlining monetary expenditures as well as progress on the health of the project and shelter participants.