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This amazing experience will stay with me forever. I will always work hard and never give up.

Thanks again to everyone who supported me these years!

Shiduo Lang
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Introduction

Background Information & Project Introduction

Mission Statement

Create, on 7.5 acres in Mueller, places that provide flexibility to adapt to changes in lifestyle, climate, transportation and employment. Define a prototype for the next 50 years. Make the space attractive, affordable, innovative and sustainable. Provide incubator space to experiment and test different models for living, creating and doing business. Provide a model that can be adapted to meet the challenges of any location in the world (ONEderment Central, Preston Tyree, 2019).

Background Information

The trend of aging is unstoppable globally. My own grandmother is suffering.

Location: Mueller, Austin, Texas
Design Period: 2019 Fall - 2020 Spring
Type: Mixed Use with Living & Community House
Area: 81376 ft²
Old people need access to nature, but there are several barriers. Policies, people's attitude, health conditions and accessibility issues related to building conditions. People benefit from interacting with nature, getting involved in physical activity and enjoying daylight. It helps with blood pressure, hormone balance, sleeping patterns, vitamin D absorption, attention restoration and social interaction.

It is necessary visually connect indoor and outdoor spaces for both mental and safety reasons. We could create transition zones with comfortable seating areas (furniture, material, green plants). The interface should be friendly to aging adults. Automatic doors are expensive but it help aging adults. Clean surface and flat thresholds help old people go outside. To make sure that the outdoor space as a garden could be used frequently, the location of it is critical. Entry garden is a great idea. We could place the outside area near the main entrance. It can’t be cut off from the building. The front entrance is always obvious and more used compared with a backyard. Staff could see patients and aging adults easily through the windows in the main lobby. A good view of the entry garden should provide at least three views: A view of the outdoor garden, a view of indoor lobby, and a view of drop-off area.

What can we do to enhance their outdoor experience? Greenery and interesting views are helpful. Trees, shrubs, and flowers can be smelled and touched. Interesting views including people. Roo's can be terraces and gardens. Walkway layout around the entrance should have comfortable seatings. Moveable chairs, non-glare material, non-skid paving is widely used. Outdoor micro climate could be changed by ceiling fans and heaters. Also, people could enjoy physical activities including gardening, horticultural therapy, exercise and stretching, special events, games and sports. Children and pets or other animals provide different social interaction which is also good for their health.

Roof gardens are popular recent years due to the continuous increase of population and long-term need of land. Xue-nong suggests that building roof garden can widen the green area and expand the green space effectively. They have ecological functions for improving the environment, beautification function for molding a person’s sentiment and colorful practical function. They can promote the ecological balance of the city and optimize the environment for human residence to meet the needs of people to approach nature and return to nature (Xue-nong, 2002).

The Green House Project is a deinstitutionalization effort that restores individuals to a home in the community. It combines small homes with the full range of personal care and clinical services expected in high-quality nursing homes. Green House homes typically are licensed as nursing homes but may be created under assisted living or other residential care regulations under certain circumstances. The Green House model of elder care is a total re-envisioning of a skilled nursing home—it cannot be overlaid on an existing large facility. The program creates an intentional community to support the most positive elderhood and work life possible. To achieve these goals, the model changes the philosophy of care, staffing assumptions, organizational configuration, and architecture (The Green House Project Team, 2009).
Case Study

**Blog Picture**

Outdoor Spacing

- Multi-story aging living
- Mixed used aging facility
- Intergeneration living pattern
- Chaos around site in city
- Connection with city
- Awarded project
- Micro climate

**Community House**

The ONEderment Community House is designed to be an inviting gateway to all and to meet unmet needs for community space.

We are visualizing an option to include short-term residential above the two floors of the community house. In addition, there will be an opportunity for shared space and facilities with the ONEderment Community Center: workout space, banquet/large meeting room, and more intimate spaces for small groups.

**Project Introduction**

**Big Picture**

Build a place that provides the Mueller/East Austin community with access to housing, transportation and healthcare and creates a neighborhood that works together to practice We Are All ONE!

We envision ONEderment Central, (located on the four city-block/7.5 acre site in Mueller, at the SW corner of Berkman at 51st), as a welcoming place for people living in neighborhoods surrounding Mueller as well as within Mueller.

**Outdoor Spacing**

Open courtyards in each block with innovative shade treatments. This is the space where people mingle.

Central courtyard in each block that are open to the public.

- Sidewalks expansive enough to share tables, walking, and riding.
- Fountain Plaza with permeable surfaces including natural turf.

**Architect**

Richard Beard Architects

**Location**

Kobe, Hyogo Prefecture, Japan

**Area**

500000 ft²
Site Development

Site Planning & Planning Analysis

Concept: Green Space
Activity: Planting & Education
Type: Planters & Pavilion
Purpose: Intergenerational Activities

Site Location

Surrounding Interaction
Refined Site Plan Section

1 Site entrance
2 Pavilion
3 Garage entrance
4 Farming Garden
5 Tunnel
6 Roof Garden
7 Logistic Place
8 Activity Space
Indoor Activities

Floor Plans & Function Analysis

Location: First floor, 3rd floor & 4th floor
Activity: Living & Entertaining
User: Aging and others
Purpose: Intergenerational Activities

Four L-shaped building create a partially enclosed intergenerational community with a shared central community building.

Diagonal path divided the building into two parts: aging living and short term living. The path is a connection between the site and the H.E.B commercial zone.

Outdoor space on the site was prioritized. Two towers on larger plinths below provide roof gardens for more outdoor opportunities.

A outdoor pavilion is connected to the building with a shaded walking path.
Ground Floor Plan

1. Family Meeting
2. Rehabilitation Gym
3. Senior Library
4. Office Space
5. Dental Clinic
6. Daycare Classroom
7. Work Hub
8. Commercial Kitchen
9. Cooking Class
10. Cafe
11. Music Hall

Second Floor Plan

1. Roof Garden
2. Daycare Classroom
3. Indoor Activity
4. Outdoor Activity
5. Children Activity
6. Rooftop Garden
7. Outdoor Activity
8. Living Unit
9. Office Space
10. Balcony
11. Meeting Space
12. Art Class
13. Senior Activity
14. Fitness Room
15. Meeting Space
Outdoor Activities

Roof Garden & Pavilion

Location: Second floor & Ground level
Activity: Dinning & Relax
User: Aging and others
Purpose: Access to nature

Outdoor Activity Analysis

A covered walkway provides shading and articulates the path from the site to the commercial zone.

The roof terrace has an exercise area for seniors and a playground for children.

The farming garden is an active place for both aging people and young children. Plants are put in planters to make gardening a more accessible activity.

Dinning space is not only located in community house but also in the outdoor pavilion. The garden is next to it so residents can plant their own food and enjoy!
Building Appearance

Facade Design & Elevations

**Inspiration:** Traditional Fabric

**Reason:** Flexible Home Style Pattern

**Material:** Metal Frame Glazing System

**Purpose:** Enough sunlight in living unit

Facade Analysis

Well organized pattern from traditional fabric

Flexible openings and safety from railings to protect senior residents

Section Perspective 1

Big glazing facade not only provides sunlight for residents, but also makes the public space on the ground floor attractive by visual connection.
The street view is warm with home style facade. Visual connection between outdoor meeting space and the H.E.B commercial zone attracts people to come.

Combination of stone panel and wood panel divides the building into two parts: public space and residential area.
Dinning pavilion and farming garden is the core of the site. Outdoor public space could be seen from all other sections.
Project Performance

Section & Construction Detail

Wall Section

- Metal Copping
- Wall Panel
- Metal Lath
- Gypsum Board
- Air Barrier

- Water Drainage
- Rigid Insulation

- Concrete Slab
- Metal Decking
- W18*40 Steel
- Spray Applied

- Fire Stop
- 3/8" Gypsum Board

- Acoustic Sealant

Bracket
Gutter Pipe

Rigid Insulation

Spray Applied
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