Assembling the Pieces

A design for a mental health treatment center sustaining a lifestyle for the mentally ill.
problem statement

How can a facility aid in the development of a support system that monitors the chronic mentally ill’s health, safety and welfare in an effort to re-enter society and create a diversion from incarceration and homelessness through architectural design?

project introduction.
Many mentally ill are left without a place to go that offers a sufficient support system that both enables and facilitates their growth towards a sustainable lifestyle including job opportunities, housing, and ongoing treatment.

As the patient develops, treatment needs to be monitored in a community based housing setting that accommodates their illness. Many of the patients tend to go untreated, also many that have been treated go into relapse with the belief that they have been cured and no longer need assistance. The environment that needs to be developed needs to be a place that gives them a sense of belonging, support, and community.

Many chronic illnesses are in need of consistent monitoring by professionals that facilitate a community based environment in a facility that accommodates these needs and gives them housing opportunities, mental health programs and group/support treatment.

The environment created needs to enable ongoing treatment and support in an effort to divert the chronic mentally ill from homelessness and cyclical incarceration.
In 2009 approximately 4,035 people in Hennepin County were homeless ("Number of homeless," 2009). Homelessness can be caused from a multitude of reasons, however, a primary cause are chronic mental illnesses that leave many cycling through the streets and in prisons without proper treatment plans and the necessities to sustain a stable life in our society. Many current treatments facilitate a short term support system leaving the responsibility of maintaining a successful treatment plan after release in the hands of the patient. Many are left without a place to receive consistent monitored treatment resulting in cyclical imprisonment and homelessness.

project justification

In 2009 approximately 4,035 people in Hennepin County were homeless ("Number of homeless," 2009). Homelessness can be caused from a multitude of reasons, however, a primary cause are chronic mental illnesses that leave many cycling through the streets and in prisons without proper treatment plans and the necessities to sustain a stable life in our society. Many current treatments facilitate a short term support system leaving the responsibility of maintaining a successful treatment plan after release in the hands of the patient. Many are left without a place to receive consistent monitored treatment resulting in cyclical imprisonment and homelessness.

project typology

Mental Treatment Facility

project introduction.
currie ave and hawthorne.

Minneapolis, M.N.

project introduction.
Urban land

**Extent:** 65 to 85 percent of the unit

**Geomorphic setting:** Outwash plains and stream terraces

**Slope range:** 0 to 2 percent

**Flooding:** None

**Ponding:** None

**General description:** Urban land consists mainly of industrial parks, office buildings, warehouses, and railroad yards and is covered by impervious surfaces. Most areas were originally wet, mineral or organic soils in depressions. Because of the variability of this component, interpretations for specific uses are not available. Onsite investigation is needed.

("Soil survey of hennepin county," 2004)
TEMP
46 degrees
WEATHER DESCRIPTION
minimal wind
rain, wet, cloudy

NORTH
salvation army/pawn-shop/church
NORTHEAST
parking ramp
EAST
parking ramp
SOUTHEAST
downtown highrises
SOUTH
parking lots/billboards/highrises
SOUTHWEST
cvs/lowrises
WEST
firestone/lowrises
NORTHWEST
interstate/minneapolis public works

project introduction.
concepts. documentation. research

THE PROCESS

18 yr olds

Emergency Assistance
Homeless Prevention

Natural Care Center
Acupuncture
Chiropractic

Dining
3 Meals 1000 Meals Per Day
7 Paid Staff

Chapel
Winter Warming Room
Setup for 50
Now Has 80-100

Healthcare / BOLT
Christian Restoration

Safe Bay
Bunks & Lockers
Mainly Chronic Drug Use
Mental Health Issues

T Harm Reduction / Care Committee

NATIONAL LEADERS IN HOPE
HOMELINE

More Supporting Housing
ARCH Murray Legge Architects

Austin Resource Center for the Homeless

concepts. documentation. research THE PROCESS
CONCEPTS/LEADING DESIGN PRINCIPLES:

Ground Level Development
Crime Prevention Through Environmental Design (CPTED)
Defensible Space Theory
Community vs. Individual Growth
Interaction With the Downtown Area
Creating a Connection for Transitional Services
"the criminal is isolated because his turf is removed"

Oscar Newman

The environment never influences behavior directly, but only through the brain. Any model of crime prevention must include both the brain and the physical environment. ... Because the approach contained in Jeffery's CPTED model is today based on many fields, including scientific knowledge of modern brain sciences, a focus on only external environmental crime prevention is inadequate as it ignores another entire dimension of CPTED -- i.e., the internal environment.

Matthew Robinson

“extend the realm of their homes and the zone of felt responsibility.”

Oscar Newman
concepts. documentation. research  THE PROCESS
- Rethink a campus like program on the site
- Haven for Home
- THINK Sustainability

concepts. documentation. research
Crime Prevention Through Environmental Design (CPTED)

Defensible Space Theory

Oscar Newman
Notes For Defensible Space Theory

- Housing development is only defensible if residents intend to adopt this role
- An area is safer when people feel a sense of ownership and responsibility for that piece of community
- "The criminal is isolated because his turf is removed."
- A watchful community means intruder feels less secure committing a crime.

4 Factors

(a) Territoriality  (b) Natural Surveillance
(c) Image      (d) Milieu

Main goal is to give residents of a community control of public spaces that they formerly felt were out of reach.
THE MIDTERM.

Client Resources - Overlooking Downtown Minneapolis

Moving Forward

Passive and active systems integration
detailing
Site detailing
Material choices

Give a story to the design...
What is the clients day like?

Southeast Looking North

Housing Community Living Room - Overlooking Downtown Minneapolis

West Entry - Atrium

Client Resources - Overlooking Downtown Minneapolis
materiality.

material studies. THE DESIGN

WARMTH
COMFORT
DURABILITY
LIFESPAN
THE DESIGN.
context ANALYSIS

1. Salvation Army
   - Public Nutrition
   - BOLT
     - Spiritual Growth
     - Educational Growth
     - Vocational Growth
2. Technological Resources
3. Housing
   - Emergency
   - Long-Term
4. Beacon Program
   - 12 Step Dependency Program
5. Healthcare
6. Groveland Food Shelf
7. Minneapolis Comm./Tech. College
8. University of St. Thomas
9. Capella University
10. Target Center
11. Target Field
12. First Ave.
13. Cowles Center for Dance and Performing Arts
14. Minneapolis Library
15. Orpheum Theatre
16. Loring Park
Community Produce Gardens
Used to harvest and serve in the dining hall.
Allows for client therapy, site enhancement, and downtown integration.

Greenhouse
Creates a transition between the buildings and develops anchoring points on the site.
Passive system integration, transferring humidity and heat throughout the two building wings.
Creates a connection between community resources and emergency housing.

Central Courtyard
Sculptural/artistic opportunities creating a space for individual reflection.
Allows for an open gathering space integrated with community surveillance.

Consultation and Waiting Room Roof Structure
Allows a personal environment for the consultation and individual reflection.

North Courtyard
Creates a space for community gathering that is off the streets and away from downtown Minneapolis.

Public Transportation
Circulation of two bus routes surround the site.
1. West Entry
2. Main Circulation Core
3. Community Resources
4. Professional Offices
5. Waiting Room/South Entry
6. Pharmacy
7. Central Courtyard
8. Consultation Rooms
9. Greenhouse
10. Dining Services
11. Waiting Room
12. Kitchen
13. North Courtyard
14. North Entry
15. Parking and Utilities Access
16. Produce Gardens

plans. elevations. sections

THE DESIGN
Second Floor

1. Classroom
2. Computer/Library Resources
3. Study Space
4. Atrium
5. Housing
   - Apartment A
   - Apartment B
6. Laundry Room
7. Living Community Space
SOLAR ACCESS:

spring equinox
SOLAR ACCESS:
summer solstice
SOLAR ACCESS:

fall equinox

passive systems. solar studies. THE DESIGN
solar access:

8am

11am

3pm

6pm

winter solstice

passive systems. solar studies. THE DESIGN
HVAC Systems located on level 6 with designated rooftop space above
- Building integrates a Variable Air Volume (VAV) Heating and Cooling System
- Separate zones for housing, offices, dining, and public spaces
- Systems are screened off with metal cladding

Roof Systems
- Extensive Vegetation (ie. Sedum)

Water Collection
- System is composed of a butterfly rooftop and two water cisterns located below the gardens at approximately 10,000 gallons each.
- Water is then pumped to maintain the gardens.
GREENHOUSE LOOKING EAST
CLIENT RESOURCES
- Improvement to the surrounding resources and their facilities, for example the Salvation Army

- Expansion to the parking lot South of the site proposed for the project adding more resources, and housing.
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the conclusion...