Stone Cold Clean & Dry
A Substance Abuse Rehab Center In Manhattan

by
Charlie Byrd Hagen-Cazes
BFA School of Visual Arts, NYC (1994)

Submitted to the Department of Architecture in Partial Fulfillment of the Requirements for the Degree of
Master of Architecture at the Massachusetts Institute of Technology

February 2010

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Joseph Califano, founder and president of The National Center on Addiction and Substance Abuse (CASA) at Columbia University, declares drug and alcohol abuse the causes and contributor to “just about every intractable problem our nation faces” including health care, legal, poverty and social inequity issues. The US is 4% of the world’s population but it consumes more than half the world’s mood-altering and painkilling pharmaceuticals and two-thirds of the world’s illegal drugs.

Pharmaceutical industries have been on the brink of “curing” addiction for decades however, most experts agree that even in this age of neuroscience and advanced chemistry, the only proven treatment for addiction today is essentially a spiritual one. And it works.

This thesis aims to design a center for recovery from addiction where architecture is used to create places that bring their occupants closer to the cycles and patterns of human existence; that act as filters to provide safety inside and act as a lenses that reveal the world in new, sober and wonderful ways.

The project will be located in Manhattan, in the neighborhood of Kips Bay, among a large cluster of medical facilities. Unlike most rehab centers, this institution will negotiate its functions within an urban setting. It will interact with existing social and physical infrastructures in order to better service the patients while maintaining a disconnect that will nurture them in privacy.

This thesis seeks to use architecture as a tool for reconnecting inhabitants with their environment and ultimately, themselves. An individual's interaction with a building and a building's interaction with its environment can create a chain that will be beneficial to all involved.

Thesis Supervisor : Rahul Mehrotra, MAUD
Professor of Architecture
Thesis Committee:

**Rahul Mehrotra, MAUD**
Professor of Architecture
Thesis Supervisor

**Julian Beinart, BArch, MCP, MArch**
Professor of Architecture
Thesis Reader

**Duncan Kincaid**
Thesis Reader
Duffy's Pure Malt Whiskey

FOR MEDICINAL USE.

No Fusil Oil.

Absolutely Pure and Unadulterated.

In use in Hospitals, Curative Institutions, Insane asylums, and prescribed by physicians everywhere. Cures Congestion, Hernias, and all wasting diseases. Dyspepsia, Insomnia, Malaria. The only

Pure Stimulant

For the Sick, Invalids, Convalescing Patients, Aged People, Weak and Debilitated Women.

For Sale by Druggists, Grocers and Dealers. - Price, $1 per Bottle

The Duffy Malt Whiskey Co., Rochester, N. Y.

For Sale by NOYES BROS. & CUTLER, Wholesale Druggists, St. Paul.

243
Pre-war Heroin bottle, originally containing 5 grams of Heroin substance. Heroin (diacetylmorphine): — an addictive drug, originally sold as a cough treatment. Heroin was a Bayer trademark, until World War I.
STONE
COLD
CLEAN
&
DRY
Acknowledgements:

Rahul Mehrotra
Duncan Kincaid
Julian Beinart
Andrew Scott
Fernando Domeyko
Runo Okiomah
Malory Taub
MArch Class of 2010
Mio Uchida
Morgan Pinney
Salome Francpournoi
Pol Theis
Carl Hagen
Jean Cazes
Nick Hoell
Amy Brager
Bill's Friends

THANK YOU! THANK YOU! THANK YOU! THANK YOU! THANK YOU! THANK YOU! - I will be forever grateful.
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A Rehab is not a Prison; it is not a Hospital; it is not a Monastery; it is not a Retreat...

Prison and detox both require close supervision and restricted liberties.

Like time spent in a hospital, time in early recovery often centers on meeting the body's basic needs.

Beyond physical needs, recovery requires a spiritual approach to daily living which makes it akin to a monastery.

When body and mind are in good shape, living a sober life can bring more comfort and joy than was previously known. On a really good day a rehab can feel like a retreat.

...but it is like all of the above.
Interior life: the spaces of the modern American life.

Views of the Caron Treatment Center in Wernersville, Pennsylvania. A typical bedroom, the dining hall, a meeting room and lounge. This treatment Center is located on a beautiful parcel of land but you would never know it looking from within these facilities.

Ways of interacting with the elements: Zumthor’s Vals Thermal Baths in Switzerland: a sensual experience that brings one closer to physical reality; Thermal Delight in Architecture by Lisa Heschong- a different way of thinking about thermal issues in our environment; Igloo hotel in Norway, an unusual image of comfort; Scarpa, the Querini-Stampalia Foundation, embraces the canal instead of resisting it; Beaubourg protects by revealing: flexible and serene interiors exist behind the pipes and structure; The Hearth, for millennia, the center for human activity and life. Moroccan ventilation system, thermal considerations inform and shapes architecture.
In our quest for comfort we have developed a way of life that generally robs us from the pleasures of variations and is in many ways harmful to us; we have biological needs for the diverse experiences that our world has to offer. During the last century, a push towards efficiency conveniently teemed up with our desires for comfort to generate and propagate endless air-conditioned, brightly lit, deep-plan structures that disconnect us from the outside world and eventually from ourselves.

We sit in front of computers, we drive, we shop, we work out, we live in a series of such spaces and if we are cold or hot we push a button rather than put on or take off a sweater. If we want more light, we flip a switch instead of moving towards a window or going to sleep because it’s the middle of the night.

The most basic function of a dwelling is to shelter its inhabitants from the elements but “shelter” from does not imply “disconnect”.

Furthermore, the ways in which our shelters perform their functions is too often concealed. As inhabitants, we are not only disconnected from the outside, we are disconnected from the building itself.

We exist in magic boxes that somehow always maintain a supposedly perfect temperature and level of light, somehow always provide water and electricity and somehow disposes of our waste down a drain or a garbage chute. It’s processes are hidden and we take them for granted.

We are comfortable (or are we just numb?)
Nicholas Cage in Leaving Las Vegas based on a semi-autobiographical novel by John O’Brien about choosing addiction over life | Andrea Zittel “Escape Vehicles” interior and exterior of custom designed pods to escape into | Luxury Casket: the ultimate comfort

Buildings as mediators, filters, lenses: 2 case studies;

Pompidou Center creates a serene interior for art and culture by using all its systems and circulation as a filter. However, through interacting with this building a visitor’s perception of the city and of HVAC systems may never be the same again. Carlo Scarpa creates a zone to allow the water from the canal to penetrate the building, giving into it but taming it at the same time. The journey through the Querini-Stampalia Foundation addresses the city’s relationship with its most beautiful and dangerous attribute giving a visitor different ways of interacting with it.
Addiction to drugs and alcohol can be though of as a need for comfort taken to an extreme. In the grips of addiction, a person is so far removed from reality that they no longer can function within it; If they ever had it, their ability to derive pleasure from living in the world without the filters and shields of the substances they rely on is long lost. They have gone further into the comfort bubble than most of us. The distance and the crutches have become sources of all encompassing pain such that the only two ways to escapes from them are death or life without them.

I propose the design of a center for recovery from addiction as an opportunity to study and explore ways of creating spaces and systems that bring their occupants closer to the cycles and patterns of human existence; buildings that act as a filters in order to provide safe places inside; and acts as a lenses through which to see the world in new and healthy ways.

The project will be located in the New York City region. Unlike the majority of inpatient rehabilitation centers, this institution will negotiate its functions within an urban setting in order to provide a new vision rather than a different setting for its patients.

This thesis will seek to use architecture as a tool for reconnecting inhabitants with their environment and ultimately, themselves. An individual’s interaction with a building and a building’s interaction with it’s environment can create a chain that will be beneficial and sustainable for all involved.
"Now my brother John... He's a guy who really NEEDS A.A."
Bright Lights: Big City

Manhattan has a high concentration of just about everything. The drug and alcohol problems are not proportionally greater here than elsewhere. In fact as a state, NY fares rather well in terms of percentage of population that is considered addicted or abusing. However, because of its size and density, the actual quantity of individuals in or near the city in need of treatment is huge.

Advantages of detox and treatment in the city:

- Learning how to live sober in the addicts own setting: no re-entry issue.
- Continued care and connections with people and the center.
- More Affordable (?)
- Closer to family and friends who may partake in the recovery process
- Variety and quality of auxiliary care

Kips Bay: Med-Town

The area of midtown manhattan is dominated by the institutional buildings of New York University, including the Tisch School of the Arts, NYU College of Dentistry, NYU School of Medicine, Rusk Institute of Rehabilitation Medicine and Bellevue Hospital Center teaching hospital. The Manhattan VA Hospital is also in Kips Bay.

Adjacent areas Murray Hill and Gramercy Park are primarily residential. They are old and comfortable neighborhoods with relatively low structures which give Kips Bay proximity to a user friendly urban fabric.

Price and D’Aunno, Drug Abuse Treatment, R.R.Watson editor; p.37.
Hazelden/Caron, Prototypical Treatment communities: pastoral, disconnected, campus in the countryside.

Manhattan: Vertical Campus. Visible. Connected to the city- to the other buildings? The water? The sky?
Program & Scale of Project

Notes from “Design Considerations For Mental Health Facilities” from the chapter on Alcoholism and Drug abuse Facilities:

There should be active input for interdisciplinary assessments, treatment planning and direct services from the following service areas as appropriate:

- Chaplaincy
- Educational
- Medical
- Nursing
- Nutritional
- Occupational
- Psychological
- Recreational
- Social
- Vocational

An all inclusive program can provide detox then medium-term residence (3-12 months) and later outpatient care with consistent follow-through from one stage of recovery to the next. This type of consistency is beneficial to the patient.

The majority of inpatient programs (hospital and residential) are small—less than 25 clients but most of these small programs only provide detoxification and very few (18%) provide both detox and rehabilitation.

I propose that a “place continuum” between the detox phase and the rehabilitation phase is important. Stability should be provided in any way possible and being able to remain in one “place” can not only provide comfort but also a reminder of what one has gone through. Earlier stages should not be forgotten.

The site may be a large component in determining the size of the proposed treatment facility. However, given the wealth of medical resources at hand and the need for treatment programs, efforts should be made to make it as large as possible.

However, there are ideal group and community sizes. Within a community of less than 150, everyone can be familiar with everyone else and this creates positive social dynamics. (Dunbar’s number—The Tipping Point—Malcolm Gladwell) The staff needs to be counted and the overall number of persons involved with the facility should not exceed 120—given a certain client to counselor/staff member ratio, this will probably bring the number of clients to the Medium size, between 26 and 48.

- Very small—average 7 clients; range 1 to 12 clients
- Small—average 19 clients; range 13 to 25 clients
- Medium—average 36 clients; range 26 to 48 clients
- Large—average 71 clients; range 49 to 104 clients
- Very large—average 242 clients; range 105 to 3,000 clients

70% Detoxes are small or very small.

56% of facilities that have both Detox and Rehab are Large or Very Large.

Only 17% of facilities that offer both rehab and detox are of Medium size.

If a multipurpose room is used for dining, social, and recreational activities or meetings, there should be sufficient space to accommodate each of the activities without their interference with one another. Provide for dining, social, recreational activities, and group therapy. There is to be at least one room providing privacy for interviewing and counseling of patients on an individual basis. Additional rooms shall be provided in a ratio of 1:8 patient beds or major fraction thereof.
In order to care for one’s self and surroundings, one must engage in activities that build self esteem and are conducive to clean living: generally called chores, beyond acquiring the good habits these activities have valuable lessons to teach recovering addicts: patience, regularity, cause and effect, a sense of accomplishment and independence... It also allows patients to engage with each other in a way that promotes camaraderie.

cooking

dishes

laundry

ironing

mopping

making beds

grocery shopping...

AA service: empty ash trays, greet new comers,
answer phones, make coffee, run meeting,
collect donations, keep accounts, attend business meetings, welcome newcomers...

Laundry Room

Bedrooms

Pantry

Kitchen

Bathroom

Basic Space Planning considerations
from the AIA Committee on Architecture for Health:

**Patient Rooms**

<table>
<thead>
<tr>
<th>Room Type</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-bed room</td>
<td>80 s.f.</td>
</tr>
<tr>
<td>Mutle-bed rooms</td>
<td>70 s.f.</td>
</tr>
</tbody>
</table>

**Toilet and Bathing Facilities**

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toilet</td>
<td>1 toilet/1 lavatory for every 6 persons</td>
</tr>
<tr>
<td>Bathing Facility</td>
<td>1 for every 8 persons</td>
</tr>
</tbody>
</table>

**Clinical Facilities**

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dining rooms</td>
<td>will seat at least 50% at each meal</td>
</tr>
<tr>
<td>Activity and therapy room</td>
<td>at least 25 s.f. Per patient</td>
</tr>
<tr>
<td>Medical examination room</td>
<td>110 s.f.</td>
</tr>
<tr>
<td>Utility and storage for medical and</td>
<td>150 s.f.</td>
</tr>
<tr>
<td>nursing supplies and equipment</td>
<td></td>
</tr>
<tr>
<td>Storage facilities</td>
<td>100 s.f.</td>
</tr>
<tr>
<td>Patient room for detoxification</td>
<td>100 s.f.</td>
</tr>
</tbody>
</table>

Allow / Discourage:

DIGNITY

SUPERSVISION

PRIVACY

ISOLATION

COMMUNITY

SUB-GROUPING
Who and How Many?

A rough count of who will be populating the building

A staff/patient ratio of 1:3 is generous and desirable for an inpatient program. This center will also serve as an outpatient facility therefore counsellors will have more patients than the current residents, hence the 1:2 ratio which in fact is more like 1:3 for the inpatient facility.

Here, staff designates the following:

3- psychologist
2- psychiatric social worker
10- counsellor
1- vocational rehabilitation (postgrad.)
1- recreational director (postgrad. occupational therapist)
1- general physician
3- graduate nurses
3- nursing aids

Other building users:
10- administration
3- kitchen staff
3- janitorial staff

48 patients + 24 staff + 14 other
= 86 occupants

TOTAL ~ 10,772 SQ.FT.
20% for circulation = 2154

TOTAL (MINIMUM) ~ 12,926 SQ.FT. (1200 SQ.M.)
15000 square feet on various size lots:

- **100x50**: 5000 SF x 4
- **50x50**: 2500 SF x 6
- **20x50**: 1000 SF x 15
- **20x20**: 400 SF x 37.5

15000 square feet, combination of floor plates
A possible day in the life of a patient - Spacial sequence

Program & Scale of Project

Loose or controlled environment

Quantity of interaction

Possibility of different spacial experience daily
"Quick, Henry! Who did this to you?"
Addiction: A Disease- A Syndrome.

A number of major studies have investigated the effectiveness and costs of drug addiction treatment programs, and their results indicate that drug treatment is both effective and economical. A prominent study by the Institute of Medicine that compared drug treatment to various alternatives (no treatment, incarceration, and probation) concluded that drug abuse treatment is a judicious public investment and is less expensive than the alternative. Why doesn’t treatment get a bigger allocation in the federal budget? One important reason is that most alcoholics and drug addicts suffer occasional treatment relapses, which gives the impression that treatment does not work. But that is not the case. Actually, the medication and behavioral compliance rates of drug addicted patients are comparable to the compliance rates of patients receiving treatment for diabetes, asthma, and hypertension. In other words, treatment for drug addiction has a failure rate no different than that of other chronic diseases.

From The Drug Problem by Martin Levinson

Some Facts about addiction in the U.S.

One of every eight Americans has a significant problem with alcohol or drugs, with 40 percent of the group having a “dual diagnosis,” or concurrent mental/nervous disorder;

Approximately 27 million Americans either use illicit drugs regularly or are “heavy drinkers.” Of these almost 16 million are estimated to need immediate treatment;

By age eighteen, almost 12 percent of all young people are illicit drug users;

An untreated alcoholic’s medical costs are approximately 300 percent higher than non-alcoholic’s medical costs;

Approximately 70 percent of illegal drug users are employed and contribute significantly to workplace absenteeism, accidents and injuries, decreased productivity, increased insurance expenses, employee turnover costs and on-the-job violence;

The estimated annual direct cost to our society resulting from substance abuse is more than 250 billion dollars;

It is generally accepted that chemical dependency, along with associated mental health disorders, has become one of the most severe health and social problems facing the United States.*

* Source: SAMHSA (U.S. Substance Abuse and Mental Health Services Administration)

AA, Anonymity & Rehab

There are two sets of guiding principles with AA: the twelve steps, which deal with the individual’s recovery and the Twelve Traditions which advise groups on how to be a society and deal with the larger society.

Tradition Twelve states: “Anonymity is the spiritual foundation of all our traditions, ever reminding us to put principals over personalities.”

It is important to not however that no rehabilitation center or medical facility have any affiliations with AA. AA does not endorse any facilities. Their guidelines are designed to ensure the survival of the AA fellowship and are not meant to be applied to everything concerning recovery from alcoholism. If drug and alcohol rehabs are currently anonymous in our environment, it has nothing to do with AA’s endorsement of anonymity; It probably has more to do with shame and stigma than anything else.

46% of people who need treatment for drugs are not getting it either because of the stigma or because they don’t know where to go!

Above: Percentages of Persons Aged 12 or Older Who Reported Different Reasons for Not Receiving Treatment for Illicit Drug Use or Alcohol Use among Those Who Perceived an Un-met Treatment Need: 2002

"Addiction is a neurobiological disorder. Clinically, it’s a very clear syndrome. If you look at all drug addictions from tobacco to heroin, there’s only one clear statement that applies to all of them: uncontrolled use despite negative consequences."

Bertha Madras, Professor of Psychobiology in the Department of Psychiatry at Harvard-Quoted in “Deep Craving” article by Craig Lambert in the Harvard Magazine- March-April 2000
In the past, addicts were looked down upon as people with inferior will power and shaky morals. They were held responsible for their own demise and pushed to the fringes of society to self-destruct.

The fact that addiction to drugs and alcohol is a disease is today widely accepted. The American Medical Association declared it so in 1956. This has two very important implications:

1. The addict is a sick person, not morally defective or deviant because of their affliction.

2. Effective treatment exists today and more and better treatment should be sought by the medical community and supported by our social structures (legal, educational, financial).

As a disease, it is categorized as progressive and chronic. This means that it is not curable, but treatable in the same way that diabetes or asthma is manageable with proper treatment.

In recent years, there has been much research done to establish a model of addiction that would define it as a syndrome rather than “just” a disease. This has many important implications for how we regard and treat this affliction:

1. As a syndrome, addiction is an underlying condition which can spur a variety of different manifestations.

2. Relapse is not a moral failing or a lack of willpower; it is a relatively normal incident associated with most chronic syndromes.

3. A holistic approach to the treatment of addiction is necessary to insure that other manifestations of the syndrome do not “pop up” as a result of the treatment of one.

Clinicians, guided by the assumption that a particular object is responsible for a distinct addiction, have tended to focus on their diagnostic and treatment efforts narrowly on specific substances or activities. However, new research reveals that there are common underlying characteristics to many different manifestations of addiction, including both substance and behavioral expressions (e.g., excessive drinking and gambling). Physical dependence and addiction are not necessarily mutually exclusive. (...) The syndrome model encourages clinicians to take a broader view of addiction, one that takes into account the various relationships among the multiple influences and consequences that lead to and follow an expression of addiction. These factors can impact treatment and increase the potential for new manifestations of addiction to develop. This interconnectedness of causes and consequences is recursive or circular, precluding the treatment of a distinct manifestation of addiction as an independent problem. According to this new perspective, relapse and "addiction hopping" would no longer be viewed as a moral failure or the result of a lack of motivation to change, but rather as a probable and varied expression of the underlying syndrome.

From Addiction as Syndrome by Siri Odegard, B.A., Allyson Peller, M.P.H. and Howard J. Shaffer, PhD., C.A.S.
Residential Treatment for Drug Abuse and addiction has existed for 40 years.

Residential treatments, also known as therapeutic communities, are located in residential settings. They use a hierarchical model, with treatment stages that reflect increased levels of personal and social responsibility. Peer influence, mediated through a variety of group processes, is used to help individuals learn and assimilate social norms and develop more effective social skills.

Residential treatment is different than other treatment methods in many ways. Individuals are able to leave their destructive environment and enter into a clean and sober atmosphere. Their “reminders” of drugs, such as the cabinet where they kept their alcohol or the drawer where they kept their stash are no longer a temptation reminding them of their Drug Addiction. Additionally, individuals are able to associate with others who share their same goal of addiction recovery 24 hours a day, 7 days a week. This availability of individuals and staff at any hour is invaluable when a person is going through residential drug treatment.

The idea behind residential treatment is that the individual suffering from Drug Addiction is able to live in an environment that is drug free. They begin to see how to live life without drugs and alcohol through their time spent away from their previous environment. As time progresses, they are able to handle more and more responsibility within the residential treatment facility and are expected to be part of the community in which they live. This means helping those who are just beginning as well as others around them. The Drug Abuse Treatment Outcome Study (DATOS), the most recent long-term study of drug treatment outcomes, showed that those who successfully completed residential treatment had lower levels drug use, criminal behavior, unemployment, and indicators of depression than they had before residential treatment vs. other treatment methods.

A note on the importance of the physical environment on treating Addiction (for rats):

Professor Emeritus of psychology at Simon Frase University in Vancouver Bruce Alexander has studied the role of environment in addictive behavior. His research challenges the idea that the substances themselves are addictive and puts forward the hypothesis that addiction is in large part a result of undesirable conditions.

From America Anonymous by Benoit Denizet-Lewis, p.193:

“Bruce Alexander and his research team had a simple hypothesis: The rats (lab rats in small cages on which scientists test drugs to see how they are addictive) had awful lives. They were stressed, lonely, bored and looking to self-medicate. To prove it, Alexander created a lab rat dream house he called “Rat Park Heaven”. The two-hundred square-foot residence featured bright balls and tin cans to play with, painted creeks and trees to look at, and plenty of room for mating and socializing. Alexander took sixteen lucky rats and plopped them in Rat Park Heaven where they were offered water or a sweet, morphine-based cocktail (rats love sweets). Alexander offered the same two drinks to the sixteen rats he isolated in cages. The results? The Rat Parkers were apparently having too much fun to bother with artificial highs because they hardly touched the morphine solution, no matter how sweet Alexander and his colleagues made it. The isolated and stressed rats, on the other had, eagerly got high, drinking sixteen times the amount of the morphine solution as the rats in rodent paradise.”
What does Addiction Treatment actually consist of?

- Despite its best (and continuing) efforts, the field of pharmacology has had limited results in treating this affliction. Some medications are sometimes used in the detox phases of recovery to ease the effects of withdrawal. Other medications are sometimes found to be needed in order to treat conditions that only become apparent once the addict is clean but these are not treating addiction.

- Replacement therapy such as Methadone is controversial. The goal of recovery is to reach a state of chemical independence.

- Various types of psychotherapy are the main source of treatment today: Group therapy as well as intensive one-on-one therapy; Employment counseling and training; Anger management for some; participation in self help groups (Alcoholics Anonymous; Narcotics Anonymous...) is always encouraged, sometimes mandated.

Benefits of combining detox, residential treatment and outpatient treatment

A patient may enter treatment at any of these stages but if they are all within the same facility they will have the benefit of the experience of piers who have been there longer. A sense of community can develop within a place that allows for graduation from one stage to another. Patients from later stages can be of assistance as well as serve as role models to newer patients while those newer ones are living reminders of the progress that has been accomplished. These bonds to the people and the place of recovery can be maintained for as long as needed through continued care in the outpatient program.

From Chapter 3 of HSTAT’s TIP 38: Clinical issues Related to Integrating Vocational Services: Developing Social and Life skills

“The first task in helping a client move toward employment is motivating the client to want to join society rather than be on its fringes. (...) The newly employed client can practice effective communication skills in a new environment, including learning how to talk to persons in authority, mange anger, and raise issues effectively. Developing confidence in appropriate self-expression, especially when it leads to desired result, can enhance the client’s sense of self-efficacy. Researchers have demonstrated that when people believe that they are capable of performing a new behavior (i.e., have efficacy expectations) and know that the new behavior will get them what they want (i.e., have outcome expectations) they are likely to persist and be successful in their attempts for change (Bandura and Adams, 1977).

National Library of Medicine/ Health Services/Technology Assessment Text: Treatment Improvement Protocols (TIP) #38: Intensive Outpatient Treatment for Alcohol and Other Drug Abuse
from Chapter I-introduction:

"... the treatment of AOD use disorders has historically been fragmented in several ways. For instance, clients often receive a burst of intensive inpatient treatment followed by low-intensity aftercare services that are inadequate and insufficient. Also, patients who require multiple treatment services often must obtain these services at different

Treatment Improvement Protocols (TIP) #38: Introducing Substance Abuse Treatment and Vocational Services

From the Executive Summary and Recommendations

“Employment and vocational services should be a priority in substance abuse treatment programs, and employment should be addressed as a goal in treatment plans. The Consensus Panel recommends that if possible, a substance abuse treatment program should add at least one VR (vocational rehabilitation) counselor to its staff.”

From Chapter 3: Clinical issues Related to Integrating Vocational Services

Clients returning to work, or those attempting to maintain employment for the first time after a period of withdrawal from society, may be deficient in the basic skills needed to function within an organizational culture, manage resources, and gain social acceptance. Specific skills that may be needed include:

- Communication skills, including appropriate and inappropriate responses to supervisors and coworkers.
- Cleanliness, personal hygiene, and appropriate dress.
- Management of personal finances.
- Healthy eating habits.
Each of the critical issues in alcoholism therapy listed by Dr. John Wallace could be considered however abstractly, as notions that might guide spacial considerations and avenues of interest for the design of an environment that would be suited to supporting the work done by patients and therapists in a treatment facility.

<table>
<thead>
<tr>
<th>Denial versus Premature Self-Disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>(... the therapist must insure a therapeutic context in which high levels of support are available as the client uncovers aspects of self and discloses these to others.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guilt versus Sociopathy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal guilt serves a highly useful function. It acts as an important feedback signal to the person that his actions are no longer in harmony with his central, core beliefs and values.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-Blame versus Blaming others</th>
</tr>
</thead>
<tbody>
<tr>
<td>(the rebellious client) is hypercritical of the therapist, his information, and his therapeutic techniques. Argumentative, negative, and close-minded, the client is very often preoccupied with finding faults with the treatment center, therapists, and staff rather than with making therapeutic progress.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rebellion versus Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(... the therapist should adhere to the following central principle: Employ the least amount of external therapeutic force necessary to achieve belief and attitude change. (...) If too much external force is applied during treatment, then the source of sobriety is seen as external and the justification for its continuance remains outside the client.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acting-Out versus Repression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incapable of “letting go”, the client is likely to keep a tight rein on feelings, actions, and attitudes. Early on in treatment, the therapist should respect these rigid boundaries in his client and not try to breach them prematurely.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Obsession with the Past versus Refusal to Consider it</th>
</tr>
</thead>
<tbody>
<tr>
<td>The therapist can be an invaluable aid in helping his client see that the events once set in motion may have to proceed to their natural conclusions. (...)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indiscriminate Dependence versus Stubborn Independence</th>
</tr>
</thead>
<tbody>
<tr>
<td>For too many alcoholics, the belief that they could solve their problems by themselves has led them from one drinking disaster to another.</td>
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<tr>
<th>Compulsive Socializing versus Alienation</th>
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<tbody>
<tr>
<td>While alienation is a clearly undesirable alternative, the development of a pattern of compulsive socializing is to be avoided as well. Just as the alienated alcoholic needs to reach out more to others, the compulsively social alcoholic needs to learn to be alone without feeling lonely.</td>
</tr>
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<tr>
<th>Perfectionism versus Inferiority</th>
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<tbody>
<tr>
<td>The therapist should facilitate the view that personal shortcomings are either problems capable of solution or unchangeable conditions that must be accepted.</td>
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<tr>
<th>Self-Obsession versus Obsession with Others</th>
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<tbody>
<tr>
<td>Throughout years of alcoholic drinking, alcoholics tend to become highly self-centered. (...) Self-centeredness in this sense refers to the alcoholic’s highly subjective perceptions and his tendency to focus his attention back upon himself.</td>
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<tr>
<th>Pessimism versus Pollyanna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovering alcoholics should be counseled to face life realistically, not in terms of improbable outcomes.</td>
</tr>
</tbody>
</table>

From the chapter “Critical Issues in Alcoholism Therapy” By John Wallace in Practical Approaches to Alcoholism Psychotherapy
"It was driven only forty-five miles by an active alcoholic.”
The Communicare Chemical Dependency Unit, known as Haven House, is a 48-bed residential facility for the treatment of drug and alcohol dependency serving seven counties in northern Mississippi. Located on a steeply sloped, three-acre site surrounded by woods, the 14,000-square-foot building includes five counseling offices, variously sized group meeting and conference rooms, lounges, and a kitchen and dining room that serve three meals a day. It replaces an old wood-framed church.

Historically, Haven House catered only to men. One-fourth of the new building’s rooms are dedicated to women, though, and mixing the sexes in a non-lockdown environment created several design challenges for the architects. A further challenge arose from the need to separate clients in acute care from ones in transitional care.

The architects solved these problems by creating a hierarchy of spaces. The center’s first level contains common rooms, the second floor contains suites for male clients, and the top level contains rooms for female clients. Exclusive access stairways lead to the second and third floors.

Formal name of Project: Communicare Chemical Dependency Unit

Location: Oxford, Miss.

Gross square footage: 14,899 sq. ft.


This project is roughly the same size and program as the one being developed for this thesis. It is interesting to note that all the functions have been housed under one roof despite the location which could have allowed for a more spread out configuration. Still, it benefits from being a freestanding building in the country in that all faces it's facades have windows and views to nature.

Segregation between programmatic elements such as Men and Woman’s sleeping quarters or activity spaces and dormitory spaces, is achieved vertically. The Lobby Atrium in the center between two blocks serves to separate programs horizontally: on the ground floor offices are one side and day rooms are on the other.
Case Study: 2 rehabs in England; reports from Alcohol and Drug Dependence- Treatment and Rehabilitation (see bibliography)

layouts | sub-grouping | isolation

“The Pinel House provides inpatient accommodations of 17 to 19 men and 3 to 5 women in dormitories containing two to five beds. Dining and recreation space is adequate and is multipurpose in that the group therapy sessions also take place in this area. The total floor area is approximately 470 m² giving an area per patient of 265 m².

It is housed in an existing two-storey pavilion, originally designed as the isolation unit of the old mental institution. The accommodation consists of a number of small rooms and spaces arranged in a linear form mainly on one side of a single corridor. It has become obvious that the fragmented layout of the converted building, if it does not exactly encourage sub-groups, does nothing to make it easier to prevent their formation. Clearly, a structure that can reflect the inward-looking process of group psychotherapy and actively discourage, or even prevent escape from group life with the opportunity for working through of new insights in the new ‘family’ setting, is highly to be desired.

The Royal Edinburgh treatment facility depicted on the left is situated in part of the former Jordanburh Hospital and is directly linked to the Andrew Duncan Clinic. A major conversion and extension was carried out in order to provide purpose built accommodation for a total of 18 inpatients (13 men, 5 women) in single and multi-bed rooms. The compactness of the plan and the small amount of space wasted on corridors are reflected in the economical floor area - approximately 558 m² giving an area per patient of 33 m².”

These two layouts are very different in nature and the authors of the study clearly prefer the Edinburgh facility. Their most notable concerns is for what they refer to as sub-grouping, which is said to remove patients from the treatment process, greatly increasing the risks of relapse of all those involved. The layout is seen as capable of aiding in promoting social interaction and avoiding isolation. The Pinel House layout, having been created for the expressed purpose of isolation people from one another is particularly ill-suited to facilitate a lively community within it. It also gives little control to the employees and supervisors over patients. The Edinburgh facility on the other hand is compact and functions are intermingled. The Bedrooms are near the offices and all the common spaces are central and unavoidable. The lighting situation cannot be ideal, however for the purpose of discouraging isolation looks like a very effective floor plan.

staff | independence | responsibility

“Experience of running the unit (The Pinel House) with a comparatively small staff has highlighted the importance of the positive part the patients themselves can play in their own treatment, particularly in group life. One group therapy session a week is conducted by the patients without staff attendance. Control of admissions to ensure that at least 50% of the group at any one time have completed half the basic treatment program (three months) helps to build up a constructive element in the group which makes the group process work with minimum staff supervision and guidance. This fact combined with the method of selecting and appointing leaders, enables the group to be completely self-sufficient as regards to domestic work in the unit (all cleaning, bed-making, transport arrangements and serving of meals is done by the patients themselves). Even more significant from the staffing aspect is the fact that Pinel House is not staffed at night. A single visit from the night superintendent (on duty at the main hospital building), who receives a routine report from the group leader and who is on call if required in an emergency, is all that is needed in the way of staff cover at night.”
Design has the capacity to provide dignity to its users, even in the most difficult times of their lives, when they are deprived of their health or freedom. The Following pages show projects in which preconceptions about certain programs have been challenged, Institutional norms have been either ignored or transformed. These buildings are examples of what architecture (only) can provide, what it can do for the individuals who use the spaces. They also give the institutions that they serve a new identity and offer a new perspectives on their function and their potentials. This summer further research will be done on these building types through history as well as in current practices.
Images from the Maggie’s Cancer Caring Centers Website: http://www.maggiescentres.org
Case Study: Judicial Center Leoben; Hohensin Architektur
Images from the Architect’s website: http://www.hohensinn-architektur.at/jz_leoben.html
Manhattan:
Between 25th & 26th street,
Between 1rst & 2nd avenue.

Views On 25th Street

Looking West onto 25th Street from First Avenue

Getting Map- areal view

Looking South From 26th Street through to 25th
Site: Neighborhood Building Heights

- < 45m
- > 45m
- > 70m
Two Typical Weekday Schedules

A Typical Weekend Schedule
Many Rehabs make their typical schedules available online for prospective patients to get an idea of how their day might be structured.
Program: Hypothetical Daily Schedule for 48 Patients
Program: Hard & Soft

Table Summing up the number of times each patient performs/participates in an activity as displayed in graph on previous page.

Total number of patients: 48
Colors code activities as in graph.
Human Interaction Scale

- **Intimate**
  - 1.5 ft.
  - Soft voice whisper
  - Intimate style
- **Personal**
  - 4 ft.
  - Conventional modified voice casual or consultive style
  - Loud voice when talking to a group
- **Social-Consultive**
  - 10 ft.
  - Full casual voice max
  - Can see detail of facial expression
- **Public**
  - 22 ft.
  - Full public speaking voice frozen style
- **Beyond Interaction Realm**
  - 8 ft.
  - Too far for conversation
  - Beginning of mandatory recognition distance

Data From *The Hidden Dimension* by Edward T. Hall
Program: Size Considerations For Therapist Office

9X9
MINIMUM
no group/ family

12X16
IDEAL

12X20
MAXIMUM
Program: Size Considerations For Small Group Meeting Spaces

- 9ft.
  - 16 people
  - 10 people
  - 13 people
- 12ft.
  - 10 people
  - 32 people
- 1ft., 4ft., 8ft., 10ft.
  - 32 people
  - 16 people

Dimensions and seating arrangements for different group sizes.
offices may share walls

Wall to the outside or other program need careful insulation or ideally, a space that serves as a buffer
GENERAL PRINCIPLE

EXPOSED - INTERACTING
ALONE
ISOLATED

EXAMPLE:
Lecture
A.A. Meeting
Detox Unit

OCCASIONAL DEVIATION  Requires Extra Supervision

EXPOSED - INTERACTING
ALONE
ISOLATED

EXAMPLE:
Meditation Room
Visit to External A&A Meeting

* Outside: all activity and people that are not part of the inpatient schedule (street but also administration offices, wellness center...within the building complex)
Thoughts about the interaction of people and spaces—inspired by photographs of Paris through the century by Robert Doisneau;

**This Page:** Top - The power of a wall: a garden, cherished land between riots and rubble
Bottom - Don’t need a forest; just one plant that needs care

**Next Page:** Left - Covered streets: a home outside, a microcosm, a weatherproof public space that can be intimate.
Right, top: A plant, a ray of sun and a few feet above the street: a home despite its surroundings.
Right, bottom: Exterior ‘room’ as a buffer zone—between a wall and a metal fence.
A plant, a ray of sun and a few feet above the street: a home despite Artery: interior street: covered gallery
Very private from 25th street.
The tower is barely visible.
Big meeting room “in the sky”
Circulation from bedrooms is visible from below:
When all move, great show
If only one is retreating, they cannot do it secretly
Buffer balconies
Bedroom apt.
Common spaces: meeting rooms- dining- lounge
med+ detox
Therapy/counsel
Wellness center
Administration
Traditional Chinese Courtyard Houses. The interiority and potential for variety and privacy make this a relevant form to study. The measurements of this particular plan happen to be very close to size of my site.

Opposite Page: This massing comes from looking at the Chinese courtyards for the low parts and the proportions of the cast iron loft buildings for the ‘tower’.

Next Pages: An other Chinese courtyard house layout and a section. Trying to determine the gradations or layers of spaces between outside and inside by color coding and relating plan to section.
**This Page:** Program & rough circulation of various people through the buildings. Program distribution is affected by access from street as well as from residential floors and issues of privacy — both from the street and from the courtyards— which are different types of privacies: there is more of a need for anonymity from the street— but more need for auditory privacy from the courtyard.

**Opposite Page:** The Inpatient Residences—The residents are divided on four floors— 12 per floor. Each floor is a duplex loft with three rooms of four people who share a bathroom. This structure gives a patient several possible sizes of groups to interact with — and help prevents isolation or a feeling of being overwhelmed or lost in a crowd.
Sharing of space and Utilities

Groups and Subgroups

4 people per room
12 people per floor

Meditation,
Small meeting space

Lounge sofa
Kitchen/Dining

Circulation within bedrooms

Two layouts for the North facing side:
For the South facing side:

1/4" = 1'
There are two 4-bed rooms on the north side of the loft—each have two beds on each level. On the south side, one 4-bed unit is stretched on the upper level in order to maximise daylight into the common living space on the lower level.

Each resident has a space that can accommodate a twin bed, a desk and chair and tall and narrow dresser that can serve as a room divider. These elements are proportioned with the floor area so that they can be combined in various ways, giving the resident the opportunity to customize their space to their needs and preferences.
Level 1

FLOORPLAN OF ONE TWO STORY UNIT FOR 12 RESIDENTS

Section B

Section A

Level 2

FLOORPLAN OF ONE TWO STORY UNIT FOR 12 RESIDENTS

Section B - South Facing

Section A - North Facing
Table **Below** shows the breakdown of floors and areas (in Square Feet)- and the center’s Floors to Area Ratio - which is approximately 3.5.

The diagram to the **Right** indicates three areas on the site that could be developed independently from the center without affecting the daylight conditions too drastically - or the circulation patterns. Just adding some floors to those areas could easily bring the project’s FAR to the maximum allowable in this zone, about 6.5
Sketch Of All Buildings On Site & Program Location

Therapist and Counsellor’s offices
Job Training/Medical/Detox
Circulation Artery/Contemplation wall/Meeting rooms
vertical Circulation -from Pool to Chapel

Entrance Loby, Administration & Meeting Rooms
Dining/Lounge
Deli/Restaurant
Gym & Public Access to Swimming Pool
Meditation/Chapel
Residences
Swimming Pool & Lockers
Level +4  Rehab: Detox- 6 Bedrooms + Nurse Station
General Rehab Population Communal Lounge/dining top level

Level +3  Rehab: Detox- Common Lounge+ 4 Bedrooms + Nurse Station
General Rehab Population Communal Lounge/kitchen/dining bottom level

Level +2  Rehab: Medical- reception+2 offices+ 3 exam rooms
Deli: larger floor Space;  Large Gym Room
Level +1  Rehab: Administration; Meeting Rooms; Therapists; Training Center
Deli Double Height Space; Smaller Gym Room

Level 0  Rehab: Entrance/Loby; Administration; Meeting rooms;
Therapists; Training Center; Public Entrance to Deli; Public Entrance to Gym

Level -1  Swimming Pool
Changing Rooms/bathrooms -man/woman
Section: North/South; Facing East

Level 7/9/11/13:
Inpatient loft apartments, upper level-
8 bed nooks + 1 bathrooms + 1 lounge space

Level 6/8/10/12:
Inpatient loft apartments, lower level-
Apartment entrance + 4 bed nooks + 2 bathrooms + kitchen
Section: North/South, Facing East

Middle Courtyard From Bottom Of Artery

Basement Swimming Pool

Swimming Pool
View From 25h Street Though To 26Th. On The Right, Consecutive Entrances To Therapy, Rehab & Gym.

Entrance to Medical/Extended Assistance Building On 25th Street
The circulation spine, or artery that faces south is one of the most visible elements of the project. It is seen from 25th street behind the two storey structure that is held up above the sidewalk by another structure rising from the basement pool which holds the therapist’s offices. The articulation of these two elements is dictated by their functions as circulation conduits between destinations and their potential to provide moments of escape from the surrounding city and population. The Spine is entirely open, and covered with vegetation. The therapy hall delicately hovers over the water of the pool and is enclosed in glass and brick. These structures would be poured concrete giving them the presence of solid ruins with overgrown vegetation playing along for the part.
Sketches for the Spine

Sketches for the Therapy Offices, columns growing up from the underground pool
Penultimate November 19th
Level 0  Rehab: Entrance/Loby; Administration; Meeting rooms; Therapists; Training Center
Public Entrance to Deli; Public Entrance to Gym

Level +1  Rehab: Administration; Meeting Rooms; Therapists; Training Center
Deli Double Height Space; Smaller Gym Room
FINAL DECEMBER 14TH
Addiction is not an accident or a virus. It cannot be cured with surgery or antibiotics. Yet our treatments for addiction mostly take place in hospitals and emergency rooms. Patients are removed from their surroundings and placed in facilities that provide medication and counsellings, and then releases them as if they were cured. The reality and specifics of the disease of addiction are that it is a chronic and progressive illness that requires a different kind of treatments, one that is holistic and whose goals must include the adoption of a drastic psychological shift in the patient’s perspective on life. It is of the utmost importance that these changes be permanent, that the treatment is not seen as a phase but as a new way of life.

I believe a place for this to happen needs to be rooted in a patient’s world. In this case it means existing within an urban context. This goes against the fossilized belief that for the sick, health is to be found out in the country. The Sanatoriums of the previous centuries have put forward a model that is still in use today, namely the campus-style health facility that is removed from the perceived noxious effects of the urban environment and sprawled over a large, preferably bucolic landscape. This may have been valid at a time when the best that the medical profession had to offer was the benefit of rest and relaxation. Today however, the profession has much more to offer. Our understanding of addiction makes it clear that there are great benefits to a multi-specialist treatment for addiction. It also is unequivocal about the fact that it is a chronic disease that needs
to be treated regularly, therefore its treatment facilities should be continuously accessible.

The larger design challenge of this project has to do with building’s relationship to the city; the rehab center must act as a selective filter. It needs to embrace enough of its surroundings so that a patient is never too far removed from the conditions they will eventually have to learn to live in; at the same time, it needs to be a place that is removed enough from a patient’s everyday life so that they can find the space and faith to begin creating a new life for themselves. The new outlook on life that the recovering addict is developing in recovery must be compatible with the specific physical characteristics of living in New York City – ie: density-movement, constant temptation. The rehab must be able to isolate patients from the city and re-connect them to it at the same time. Leaning to find calm and balance within this environment is an essential tool for longterm sobriety.

Seemingly opposing needs also must also be accommodated within the rehab:
- The rehab should be an environment that provides stability and enhances routines while allowing diversity and singularity of experiences.
- It should foster community and socializing, for its own sake but also to ensures a necessary level of safety and surveillance over the individual. But it also has to provide privacy and moment of contemplation, which are essential to a patient’s process of becoming self aware and self sufficient

1- About the Site
2- About the Program: 4 phases of recovery

1- The site for this project in Kips bay in NYC. This area of Manhattan is a residential neighborhood, with all the usual commercial amenities this implies in the city; But more importantly,
it is home to several major medical institutions, including NYU Medical and Bellevue Hospital (run by NYU) as well as The Veteran's hospital and Hunter College Medical school. These facilities are all within a 5 minute walk from the site.

2-The process of Recovery can be divided into 4 distinct phases, each of which has its own spacial requirements. These phases are:

1-Detox: This phase is medically intense. The Patient is going through chemical withdrawal and needs careful monitoring.

2-Inpatient Treatments: It consists of a gradual re-learning of basic living skill as well as intense psychological counseling. Throughout this phase patients develop healthy coping mechanisms while they try to deal with whatever issues their lives demand they take care of (Family,Job, Medical...)Living together they learn to deal with other people in a positive, supportive ways that create healthy bonds that will be necessary for them to develop a new life.

3-Outpatient-Treatment: The Outpatient program is the continuation of many of the services that were provided to the patient while they were Inpatients. They provide the support needed to make the transition from inpatient into a new, sober life. Counseling and Therapy may be as intensive as they were for outpatients if necessary. Housing assistance as well as schooling, job training and placement are provided by counselors who understand the specific difficulties addicts face as they enter the workforce and society, sometimes for the first
time.

4-Recovering citizen: Addiction is a chronic condition that needs to be treated on a regular basis, much like diabetes or asthma. Involvement in twelve step groups is a widely accepted component of long term recovery. Weekly counseling is recommended and other support should be available as needed.

About this proposal - Design Drivers...

1-NY Loft Living + Traditional Chinese Courtyards (and a little Pompidou Center) = Basic Overall Site Layout

2- Faubourg: Public, Covered Street + Gym, Pool, Restaurant& Grocery Store = Enhanced Public Interface for smooth interaction and transition.

3- Maximum South-Facing Exposure = Tall, Thin South Facing Element on Back of site; Long & Low on the Front; Two sites where vertical expansion would not affect courtyards; Interior design of residential lofts.

The center, not including the public spaces, is designed to be used by about 150 people. This includes 48 inpatients and 10 detox patients who reside there, the rest being administrative staff, therapists and counselors and a few other employees.

Inpatient Residential; This facility accommodates 48 inpatients in this phase of recovery which lasts between 90 days and a year.
The centers public components (swimming pool, gym, grocery store) are accessible to the inpatient with the supervision of counselors and serve as regular points of contact with the outside world.

The Center’s public health club facilities are also a resource that aims to keep the addict connected to the new, healthy habits they were encouraged to adopt as inpatients. The food store, also open to the public serves as a way to encouraged healthy habits by providing healthy foods and assistance with nutrition issues. The Main dining facility provided for inpatients may also be open to outpatients with a meal plan service, where they could have lunch or dinner there in order to maintain contact and good habits.

The Center’s meeting rooms provide spaces for independently run AA and NA meetings which are attended by recovering addicts of all provenance, not just patients from the center.

The gym and the food store will also provide a permanent connection with the new healthy habits that the center promotes.

The center’s public amenities are the spaces that will always be available to patients as they become part of society at large. (The public street and the building’s presence in the city)
Basement

Basement Rehab: Laundry Room; Gym: Pool, Lockers
Ground Floor

Rehab: Entrance-hall/Administration/ 3 Meeting Rooms/ 6 Therapists Offices; Training Center: Entrance/ Work Rooms; Deli: Public Entrance; Gym: Public Entrance
Level One

Rehab: Administration; 2 Meeting Rooms / 6 Therapist Offices; Training Center; Deli: Double Height Space; Gym: Smaller Room
Level Two

Medical: Reception+2 Offices+ 3 Exam Rooms; Deli: Larger Floor Space; Gym: Large Room
Level Three

Detox: Common Lounge + 4 Bedrooms + Nurse Station; Rehab: Communal Lounge / Kitchen / Dining (Bottom Level)
Level Four

**Detox:** 6 Bedrooms + Nurse Station; **Rehab:** Communal Lounge / Dining (Top Level)
Loft - Upper Level

6 Bed Nooks - 1 Bathrooms - Lounge Space

Loft - Lower Level

Kitchen - Living Room - 4 Bed Nooks
Entrances On 25th Street
Therapy Office Building Corridor, Second Floor
Artery, Ground Level: Looking Into Laundry Room & Pool Beyond

Swimming Pool
Detox Unit: Between Floors, Common Spaces
Descent from Second Floor Artery into Large Courtyard

Below Stairs, Outdoor Seating Space
Large Courtyard - Dusk.

THE END~
About This Book

I am finishing this as the sun is rising. These last few hours, from Thursday to Friday the 15th of January 2010, have been my last all-night-er as an architecture student: the book is due later today.
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