



HUMANE ARCHITECTURE TO BEFRIEND THE ANIMALS WE LIVE WITH
[ANIMAL SHELTER IN BEAUTIFUL ALEXANDRIA, VIRGINIA]





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ABSTRACT

This thesis is a study of architecture on how to improve the life of homeless animals through strengthening the relationship between us, humans and the animals we live among.

There are millions of shelter animals being killed every year which is both dreadful and expensive. This number can be decreased greatly if people acted more responsibly towards the creatures they have domesticated. It is true that most people enjoy taking care of animals, they usually feel a strong emotional connection with them, specially those who share their homes with their pets. The problem is that many find the animal shelters a depressing place filled with sick unwanted animals.

How can we, design professionals, encourage people to interact more with animal shelters? How can the design affect both physical and emotional health of these animals? Can architecture raise awareness about the creatures in our urban civilization?

This project explores a few design approaches that can teach people about shelters and urban animals and how physically different we are from them. The building is also a study of an animal shelter as a system that can improve their day-to-day life to become healthier and happier. It is proposed that these architectural changes would aid the adoption rate as well as creating a happier pet and owner.



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GENERAL ABSTRACT

Each year millions of adoptable animals are killed in shelters simply because people are not responsible enough to take action. People have always loved animals and have domesticated them from thousands of years ago. This makes us responsible for their lives and their well being.

The general understanding is that animal shelters are very sad depressing places filled with sick unwanted animals. This keeps people away from animal shelters. People usually show affection to animals when they are interacting with them. How can the housing for these unwanted animals be a desirable place where people want to visit? How can it be the place where our physical differences are celebrated so we learn about their different needs?

This project explores different ways to encourage interaction between humans and animals as well as to create a wholesome place for the animals to live. Through the beautiful experience of the shelter, these design approaches would motivate people to adopt healthy and happy animals.

“You become responsible, forever, for what you have tamed” (Saint-Exupéry 65).

ACKNOWLEDGMENTS

To my parents,
I could have never done this without your support. Thank you for teaching me how to be kind and respectful to all species!

To my committee members and faculty at the WAAC, thank you:



Paul, for your thoughtfulness and patience, for encouraging me to dream again and for teaching me to grow my imagination.



Marcia, for your kindness and teaching me about embodiment and showing me how important the details are.



Susan, for your greater view and teaching me how important each building is, in a bigger picture of the city.

And to my amazing friends, everyone at WAAC and all our furry friends!

TABLE OF CONTENTS

01	Key Words
03	Why should we care about animals?
05	History of Animal Welfare
07	Animals for Architecture
09	Architecture for Animals
11	Precedents
15	Program
17	Facts and Statistics
19	Animal Housing
21	Site
47	Landscaping Tactics
29	Preliminary Design
39	Final Design
53	Bibliography and Image Credits

KEY WORDS

Through researching the etymology connected to animal ownership and domestication, the relationship between people and animals over time becomes clear. People have become closer and felt more affection for cats and dogs. For example the word "pet" originally comes from "child", subject to the highest level of affection and love from humans.

shelter (n.)

1580s, "structure affording protection," possibly an alteration of Middle English sheltron, sheldtrume "roof or wall formed by locked shields," from Old English scyldtruma, from scield "shield" (see shield (n.)) + truma "troop," related to Old English trum "firm, strong" (see trim).

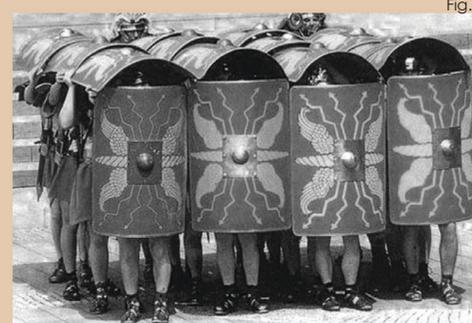


Fig.1

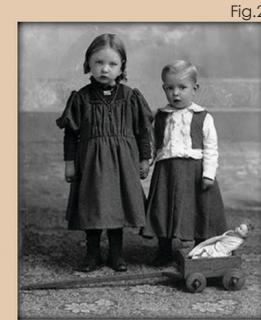


Fig.2

pet (n.)

"tamed animal," originally in Scottish and northern England dialect (and exclusively so until mid18-c.), of unknown origin. Sense of "indulged child" (c. 1500) is recorded slightly earlier than that of "animal kept as a favorite" (1530s), but the latter may be the primary meaning. Probably associated with or influenced by petty. As a term of endearment by 1849.

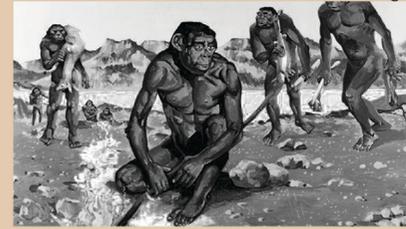


Fig.5

sanctuary (n.)

early 14c., "building set apart for holy worship," from Anglo-French sentuarie, Old French saintuaire "sacred relic, holy thing; reliquary, sanctuary," from Late Latin sanctorium "a sacred place, shrine" (especially the Hebrew Holy of Holies; see sanctum), also "a private room," from Latin sanctus "holy" (see saint (n.)).



Fig.4

refuge (n.)

"shelter or protection from danger or distress," late 14c., from Old French refuge "hiding place" (12c.), from Latin refugium "a taking refuge; place to flee back to," from re- "back" (see re-) + fugere "to flee" (see fugitive (adj.)) + -ium "place for."



Fig.3

humane (adj.)

mid15-c., a parallel variant of human (adj.), with a form and stress that perhaps suggest a stronger association with Latin humanus than with Old French humain. Human and humane were used interchangeably in the senses "pertaining to a human being" and "having qualities befitting human beings" (c. 1500). The latter at first meant "courteous, friendly, civil, obliging," then "marked by tenderness, compassion, and a disposition to kindly treat others" (c. 1600). By early 18c. the words had differentiated in spelling and accent and humane took the "kind" sense.

Compare germane, urbane. Meaning "inflicting less pain than something else" is from 1904. Inhuman is its natural opposite. The Royal Humane Society (founded 1774) was originally to rescue drowning persons; such societies had turned to animal care by late 19c.

Text: Etymonline.com

cat (n.)

Old English catt (c. 700), from West Germanic (c. 450-400), from Proto-Germanic *kattuz (source also of Old Frisian katte, Old Norse kött, Dutch kat, Old High German kazza, German Katze), from Late Latin cattus.



Fig.6



Fig.8

habitat (n.)

"area or region where a plant or animal naturally grows or lives," 1762, originally a technical term in Latin texts on English flora and fauna, literally "it inhabits," third person singular present indicative of habitare "to live, inhabit, dwell," frequentative of habere "to have, to hold, possess" (see habit (n.)). This was the Modern Latin word that began the part of the scientific description of a plant or animal species that told its locality. General sense of "dwelling place" is first attested 1854.

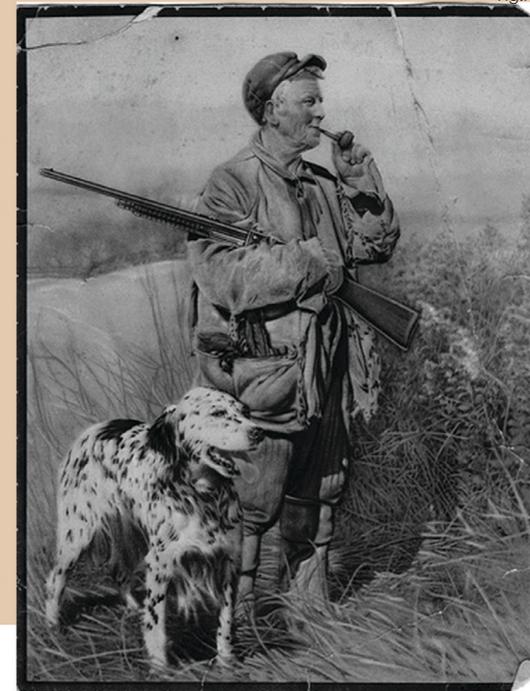


Fig.7



Fig.9

animal (n.)

early 14c. (but rare before c. 1600, and not in KJV, 1611), "any living creature" (including humans), from Latin animale "living being, being which breathes," neuter of animalis "animate, living; of the air," from anima "breath, soul; a current of air" (see animus, and compare deer). Drove out the older beast in common usage. Used of brutish humans from 1580s.

dog (n.)

Old English docga, a late, rare word, used in at least one Middle English source in reference to a powerful breed of canine. The word forced out Old English hund (the general Germanic and Indo-European word; see canine) by 16c. and subsequently was picked up in many continental languages (French dogue (16c.), Danish dogge, German Dogge (16c.)), but the origin remains one of the great

veterinarian (n.)

animal doctor, 1640s, from Latin veterinarius "of or having to do with beasts of burden," also, as a noun, "cattle doctor," from veterinum "beast of burden," perhaps from vetus (genitive veteris) "old" (see veteran), possibly from the notion of "experienced," or of "one year old" (hence strong enough to draw burdens).

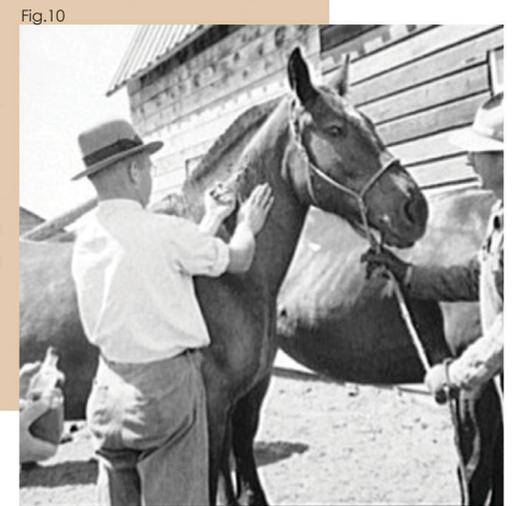


Fig.10

WHY SHOULD WE CARE ABOUT ANIMALS?

"of course, we humans are much more like other animals than was once thought, much more so than many people like to, or are prepared to, believe...every time cruelty is overcome by compassion, we are moving towards that new and boundless ethic that will respect all living beings. Then indeed we shall stand at the threshold of a new era in human evolution- the realization of our most unique quality: humanity" (BeKoff X).

-Jane Goodall

In the bigger picture, the answer to this question is because of the environment. Human species have affected the planet earth vastly in their short existence. We have done a lot of damage to our surroundings, thus it is our responsibility to care and do some damage control, at least for our own species.

Pets may help us to reconnect with the world of nature from which we have evolved. One of the ways that many people start caring for other animals (since we are ourselves animals as well) is by growing affection for their pets. Love for nature has a very close connection to loving animals. Some studies have shown that affection for pets goes hand-in-hand with concern for the natural world. It seems that people are roughly divided into those that feel little affinity for animals or the environment and those who are predisposed to delight in both adopting pet-keeping as one of the few available outlets in today's urbanized society.

Lastly, humans have domesticated cats and dogs thousands of years ago; dogs as companions for hunting and cats as a tool to get rid of rodents. Because we have impacted their evolution greatly we cannot simply deny being responsible for their lives today. They bring joy to our homes and help us learn to love others and be responsible for more than ourselves. There are also many studies that show us, how they can be so beneficial to human health. So let's save them all!



Panbeh, our 4 year old cat



Fefel, kitten I rescued but sadly passed away in a few weeks, due to an illness from his tough days on the street.

As an Iranian who has lived her life in one of the busiest cities of Iran (Karaj), I was always in touch with street animals, specially cats. Iran as a country is famous for it's beautiful cats. Sadly, at the present most of these animals don't have a very good life on the streets. In the older days when there were less vehicles on the streets and houses were more open, inviting and had many hiding places, city animals had great lives. These days the streets are not safe for them to live and they belong to safer places.

Growing up I spent my time with many cats and learned a lot from them. Watching them play and taking care of their babies taught me how much feelings they have and how much they need us to survive. Many people have not had this exposure to animals and usually that is one of the main reasons that they do not feel affection towards them.

During the process of my thesis I kept thinking about different ways that would draw people to the building I was imagining, so that there would be more interaction with these animals. Challenge was to



One of the most important missions of Animal Refuge Centers and Sanctuaries, beyond caring for the animals, is educating the public. The ultimate goal of many sanctuaries is to change the way that humans think of, and treat, non-human animals.

Architecture for Human and Non-Human?

اگر بشر دست از کشتن حیوانات بردارد، آدم هم نخواهد کشت. / صادق هدایت

What productive and mutually beneficial relationships are in place or could be designed between nonhuman animal life and urban subjects, buildings, infrastructures, social systems? (organseverywhere.com)



حیوانات در خیابان خوشبخت نیستند

There is no doubt that human civilization has had a negative impact on biodiversity. Overfishing and hunting, the destruction of habitats. Urban sprawl is one of the main reasons.

"The world is a dangerous place, not because of those who do evil, but because of those who look on and do nothing."
— Albert Einstein

Life of an animal at a caring place vs. life of an animal on streets

HISTORY OF ANIMAL WELFARE

Brief timeline of animal welfare shows how close they were to us in ancient times and it was not until the 19th century that some people stepped up for their welfare and talked about how they also feel pain and deserve to be treated humanely.

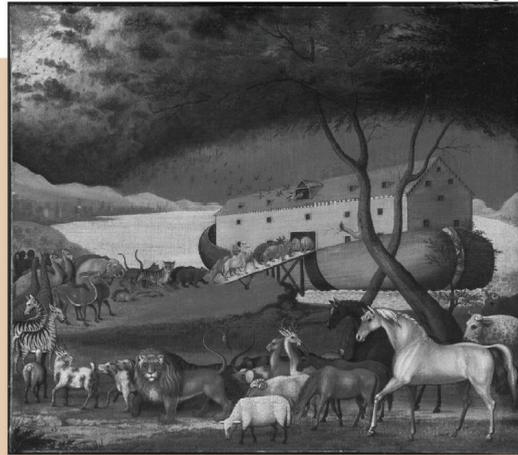


Fig.11

Noah's Ark: represented a vessel of safety in the midst of danger.

Indus Valley Civilization: ancestors were believed to return in animal form; therefore animals must be treated with respect.

Fig.14



In Islam: As signs and worshippers of God, animals are worthy of great respect. Interaction with them is addressed in the Hadith—the sayings of the Prophet Muhammad—in which Muhammad compares acts of cruelty toward animals with cruel acts toward humans

Fig.12

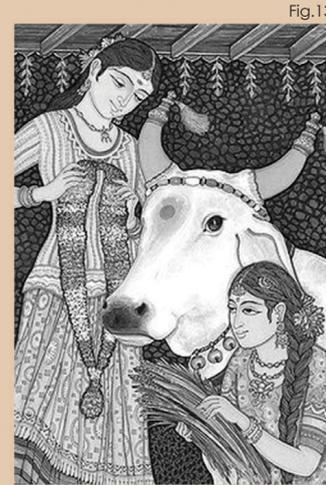
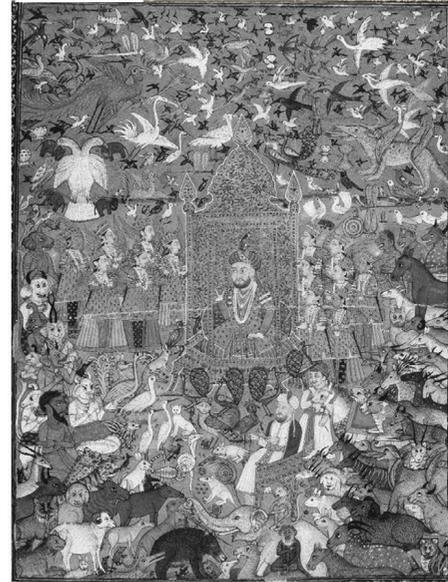


Fig.13

Hinduism: treats all living beings from animals down to insects and tiny creatures with great respect as aspects of God, having souls of their own, going through the same process of births and deaths as human beings.

Christianity: Many Christian philosophers and socio-political figures have stated that individuals should follow the example of Jesus and treat animals in a way that expresses both compassion as well demonstrates the respectful stewardship of humanity over the environment.



"Early legislation which formed the impetus for assessing animal welfare and the subsequent development of animal welfare science include the Ireland Parliament (Thomas Wentworth) 'An Act against Plowing by the Tayle, and pulling the Wooll off living Sheep', 1635, and the Massachusetts Colony (Nathaniel Ward) 'Off the Bruite Creatures' Liberty 92 and 93 in the 'Massachusetts Body of Liberties' of 38].1641]" (Beirne 21)



Fig.16

"Five Freedoms: Significant progress in animal welfare did not take place until the late 20th century.[40] In 1965, the UK government commissioned an investigation—led by Professor Roger Brambell—into the welfare of intensively farmed animals, partly in response to concerns raised in Ruth Harrison's 1964 book, *Animal Machines*. On the basis of Professor Brambell's report, the UK government set up the Farm Animal Welfare Advisory Committee in 1967, which became the Farm Animal Welfare Council in 1979. The committee's first guidelines recommended that animals require the freedoms to 'stand up, lie down, turn around, groom themselves and stretch their limbs.' The guidelines have since been elaborated upon to become known as the Five Freedoms.[41]" (Eadie 24)

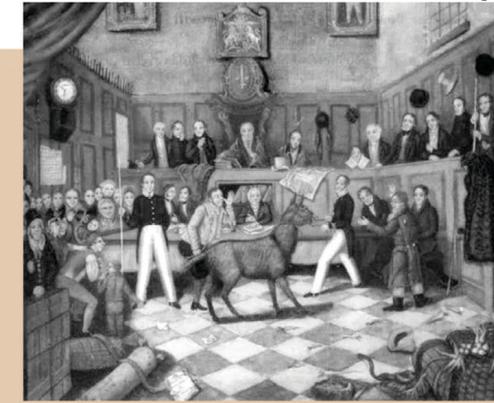


Fig.17

"SPCA: Since 1822, when Irish MP Richard Martin brought the 'Cruel Treatment of Cattle Act 1822' through Parliament offering protection from cruelty to cattle, horses, and sheep, the welfare approach has had human morality and humane behaviour as its central concerns. Martin was among the founders of the world's first animal welfare organization, the Society for the Prevention of Cruelty to Animals, or SPCA, in 1824. In 1840, Queen Victoria gave the society her blessing, and it became the RSPCA. The society used members' donations to employ a growing network of inspectors, whose job was to identify abusers, gather evidence, and report them to the authorities." (ipfs.io)

Fig.18

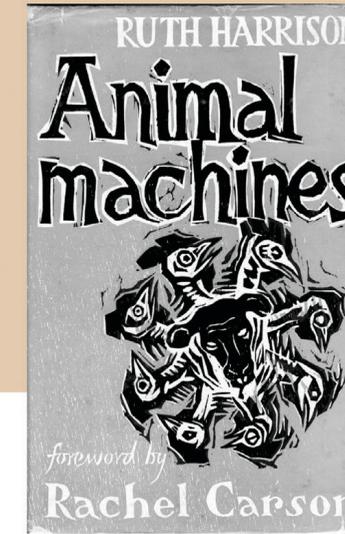


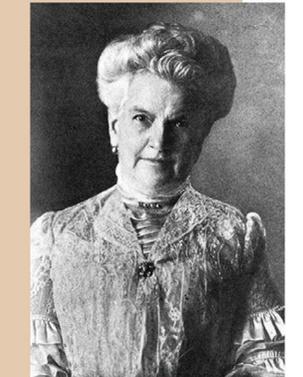
Fig.19



"A number of animal welfare organisations are campaigning to achieve a Universal Declaration on Animal Welfare (UDAW) at the United Nations. In principle, the Universal Declaration would call on the United Nations to recognise animals as sentient beings, capable of experiencing pain and suffering, and to recognise that animal welfare is an issue of importance as part of the social development of nations worldwide. The campaign to achieve the UDAW is being co-ordinated by World Animal Protection, with a core working group including Compassion in World Farming, the RSPCA, and the Humane Society International (the international branch of HSUS).[43][42] T "

(humane.org)

Fig.20



Women's SPCA of Pennsylvania had established the first official United States animal shelter

ANIMALS FOR ARCHITECTURE

These drawings were done as a recto & verso frontispiece for a paper with the title "The Beast in Architecture: Animals as inspiration for Architects". Writing this paper let me expand my knowledge on where animals stand in architecture and the design world.



Animals for architecture in author's mind | Recto

Since the early humans, animals in various ways have inspired Art and Architecture. Whether symbolic or literal, all around the world traces of animal influences can be found in literature, painting, architecture, etc. From cave paintings by primitive humans to complicated biomimicry building designs, one cannot ignore their importance in art history. The scientific impact happens when art and architecture ideas come into contact with ideas of biological life. Symbolic presence can be found through the use of social or physical characteristics of an animal.

Either approach is usually how they are mentioned in different architectural treatises. Rarely can be found a theory on architecture serving animals, especially in older books. Many theoreticians view all living creatures as animals. So I as an animal will also touch on the subject of architecture also for non-human animals in this part.

"Animals, who exhibit life in highly concentrated and diverse forms, have the power to completely alter our way of thinking about ourselves, both the form of ourselves and the form we make, live in, and respond to" (Catherine Ingraham 15). This direct use of animals in treatises can be even found in the oldest treatise existing today. "If one wishes a more accurate understanding of all this, he need only consider and observe the natures of birds, fishes, and land animals, and he will thus come to reflect upon distinctions of temperament. One form of mixture is proper to birds, another to fishes, and a far different form to land animals" (Vitruvius 19). This peaks during the Renaissance period and continues to influence artists until today.

"This work was strictly voluntary, but any animal who absented himself from it would have his rations reduced by half" (George Orwell 77). As mentioned before symbolic presence of animals in art and architecture dates back to thousands of years ago but the most unique manifestation is where personification happens and buildings, statues and ornaments take animal like characteristics or animals become human like. In *Monster in the Machine*, Zakyia Hanafi talks about books on metamorphosis, attributed to John Trithemius: "In metamorphosis VI one learns how to transform various human faces into monstrous animals" by use of a darkened room an series of mirrors with different angles. Books and articles on this matter are vast so in this paper I will try to focus more on the examples, which take physical presence or those that have to do with architecture (73).

ARCHITECTURE FOR ANIMALS



Setting the animals free in author's mind | Verso

Today there are few intellectuals who study the science of animal welfare and consider art and architecture for them in their service. Places like animal shelters are the best examples for this. Also in animal farms there has been huge progress and continues to be. Temple Grandin, an animal scientist, argues that slaughterhouses should at least provide a calming space for animals before they are being killed. She designed curved corrals that are thought to have stress reducing effects on cows that are going to be slaughtered.

It is said that in the drawing of Vitruvian Man, it has been attempted to link the man to the nature. The carefully studied proportions of the perfect man and his relation to microcosm and macrocosm are all evidence of importance and humans and how there are thought to be the center of universe. Although human beings have done the greatest damage during the short time of their existence, I also believe that our species have also done amazing changes during this time. But the important point is that we should not forget that to some level we are responsible for the lives of other creatures with all the differences we have and are making in the world and in everyone's lives.

In the book "Animal Farm" George Orwell uses animals as human metaphors to explain the unjust situation in human world. One of the most famous sentences in the book is: "All animals are equal, but some animals are more equal than others" (106). Although the book is about human beings and our societies, I think that we can expand this to all living beings and let ourselves think more responsibly about all living beings.

PRECEDENTS

As mentioned before there are not many examples in architecture where the main design has revolved around needs of animals. One might think places such as zoos or stables are good precedents for this type of project but the reality is that such programs are mainly for humans. For example zoo is a place where animals are on display for humans. Living conditions in a zoo cage is usually not even close to what animals need. There are many problems from the size of the cages to the climate, etc.

South Los Angeles Animal Care Center & Community Center / RA-DA



Fig. 21

"This is a project that challenges all preconceptions of the animal shelter as a building type. It creates a welcoming environment with the visitor in mind and engages the community in a positive and exciting way. These are the ultimate goals of the building, and in achieving these, we help our client achieve their goal to reduce euthanasia and increase adoptions" (Archdaily).

The kennels are oriented in a manner that minimizes the number of kennels facing each other in an effort to mitigate noise levels and discourage contagious barking. Instead, all kennels are facing greenery clad walls or landscaped mini-parks that provide welcomed breaks in the kennels.

Thoughts

In this project there is great separation between cats and dogs. It's very thoughtful to have dog kennels not facing each other where there is not enough space between rows of kennels. It's also very nice for the dogs to face nature.

The problem is that the dogs don't have direct access to the interiors which is needed at least in extreme weather conditions. Cats are too isolated and just a few cages have view to the exterior.



Fig. 22



Fig. 22

PROGRAM

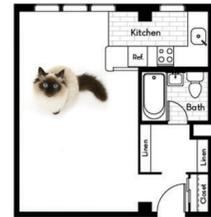
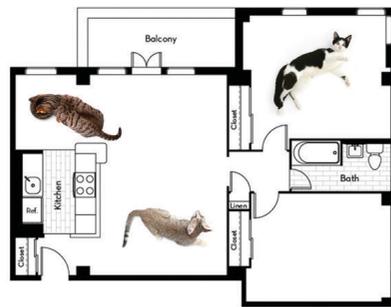
An animal shelter is the physical nucleus of a community animal care and control program, and should be constructed, maintained and operated so that it is attractive and convenient to the community. Above all, an animal shelter must be a place of security and comfort for the animals sheltered there. Therefore, the most important rooms in the program are first, the housing and after that any room that services the animals directly such as the medical rooms.

There are 3 types of housing: Isolation (first room after intake to treat any illnesses and such), quarantine (for animals with infections diseases or major medical conditions), and lastly the long term stay housings which consists of two types, the single rooms and the group rooms. Depending on the conditions of the mother the nursery room can happen either in isolation or the long term rooms.

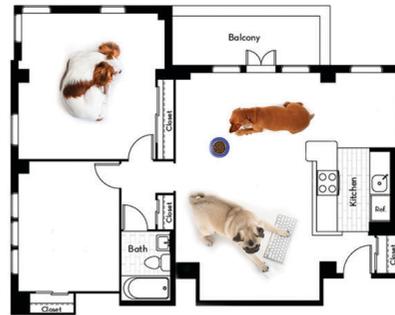
In addition to the required rooms for animals and rooms servicing them, there is an education room and a cat cafe included, that support their wellbeing by teaching their visitors and inviting them to interact. These rooms also act as emergency disaster rooms in extreme situations where there is a lot of intake.

Death is sad fact that cannot be ignored in a place like this with so many living beings. Initially I had included an euthanasia room because although this is a program for a no-kill shelter but in some situations euthanasia is unavoidable. But later I removed the room as a separate program because such procedures can take place in one of the medical rooms. Later in the process I added a crematorium with a cemetery next to it. The cemetery and the crematorium is for the people who are dealing with the death of their pet.

Single & Multi Animal Rooms |



Restricting visual, auditory or olfactory contact between different species |



Program Collage

Program Collage

Animal Rooms |



animals with non-infectious medical conditions



Isolation for animals with infectious conditions



Young Animals



Nursery for Moms



Areas to accommodate a disaster or large scale legal case



Comfortable Long Term Care

Animal Service Rooms |



Crematorium



Surgery Room



Treatment Room



Food Prepration



Laundry



Grooming

Outdoor Spaces |



Play Grounds



Training

Non-Animal Spaces |



Meeting Room



Reception



Vet's Office



Staff Room

Animals and People |



Cafe: A space like a cat or dog cafe to attract more people to the shelter and raise money for the homeless animals.



Education Center: A space for school student groups to interact and learn more about companion animals



Introduction Room: A small room for the animal and human to get to know each other and spend some time.

Street Animals Landscaping |



Outdoor landscaping to house feral cats and dogs who need a safe place. Possibly with food and water containers in various places.

FACTS AND STATISTICS

Currently no government institution or animal organization is responsible for tabulating national statistics for the animal protection movement. These are national estimates according to ASPCA (The American Society for the Prevention of Cruelty to Animals (ASPCA) was the first humane society to be established in North America and is, today, one of the largest in the world.)

Facts about U.S. Animal Shelters in year 2017:

“Approximately 6.5 million companion animals enter U.S. animal shelters nationwide every year. Of those, approximately 3.3 million are dogs and 3.2 million are cats. We estimate that the number of dogs and cats entering U.S. shelters annually has declined from approximately 7.2 million in 2011. The biggest decline was in dogs (from 3.9 million to 3.3 million). Each year, approximately 1.5 million shelter animals are euthanized (670,000 dogs and 860,000 cats). The number of dogs and cats euthanized in U.S. shelters annually has declined from approximately 2.6 million in 2011. This decline can be partially explained by an increase in the percentage of animals adopted and an increase in the number of stray animals successfully returned to their owners. Approximately 3.2 million shelter animals are adopted each year (1.6 million dogs and 1.6 million cats). About 710,000 animals who enter shelters as strays are returned to their owners. Of those, 620,000 are dogs and only 90,000 are cats” (Aspca.com).

Facts about Pet Ownership in the U.S.:

“It’s estimated that 78 million dogs and 85.8 million cats are owned in the United States. Approximately 44% of all households in the United States have a dog, and 35% have a cat. (Source: American Pet Products Association 2015-2016 (APPA)) Approximately 40% of dog owners and 46% of cat owners learned about their pet through word of mouth. (Source: APPA) According to the APPA, these are the most common sources from which primary methods cats and dogs are obtained as pets (Note: this information was based on a multiple response question, which results in the total % exceeding 100% individually for cats and dogs. In addition, the ‘other’ category includes all source categories that were reported by <10% of both dog and cat owners):

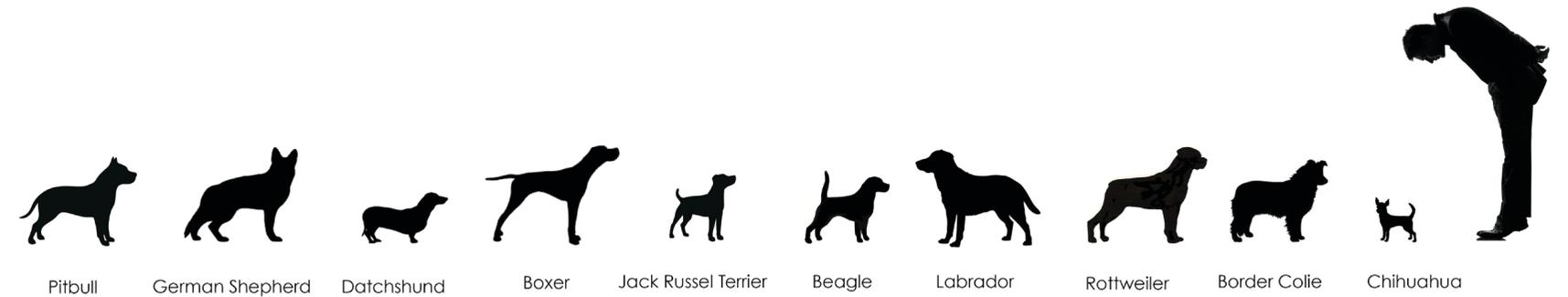
	Dogs	Cats
Animal Shelter/Humane Society	23%	31%
Friends/Relatives	20%	28%
Breeder	34%	3%
Stray	6%	27%
Private Party	12%	6%
Other	32%	39%

APPA reports that 34% of dogs are purchased from breeders, while 23% of dogs and 31% of cats are obtained from an animal shelter or humane society. Around 27% of cats are acquired as strays, down from 35% in 2012. (Source: APPA) According to the ASPCA’s National Rehoming Survey, pet problems are the most common reason that owners rehome their pet, accounting for 47% of rehomed dogs and 42% of rehomed cats. Pet problems were defined as problematic behaviors, aggressive behaviors, grew larger than expected, or health problems owner couldn’t handle” (Aspca.com).

Species and Breeds

Around 95-98% of shelter animals are cats and dogs. Rabbits, Guinea Pigs and hamsters are next. (Aspca.com)

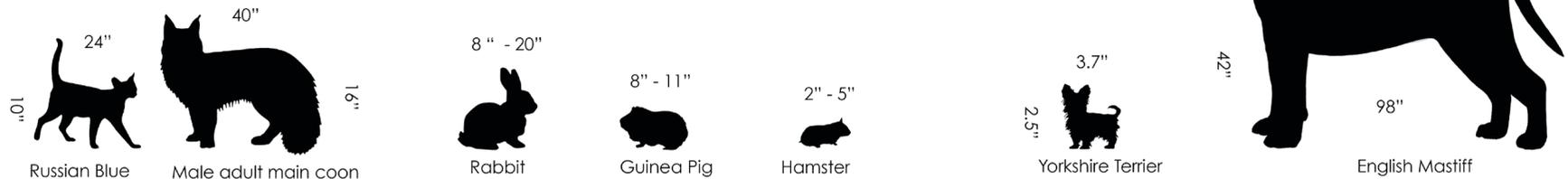
99% of cats in shelters are mixed breeds. 75% of dogs in shelters are not purebred. The rest (25%) are mostly Pitbull, German Sheperd, Datchshund, Boxer, Jack Russel Terrier, Beagle, Labrador, Rottweiler, Border Colie and Chihuahua (Aspca.com).



Cats average about 25–23 cm (10–9 in) in height and 46 cm (18 in) in head/body length (males being larger than females), with tails averaging 30 cm (12 in) in length.

96% of animals in shelters are cats and dogs. Rabbits, Guinea pigs and hamsters have the highest rate after them.

Dogs are highly variable in height and weight



Elements of Single Animal Housing

For all animals, functional parameters should be met: sufficient floor space and height to allow the animal to assume all normal postures and engage in normal behaviors.



All animals should be provided with appropriate places for concealment which comfortably allow them to avoid visual contact with people or other animals.

>9 sq ft

30"
28"

Minimum area of 9 sq ft and preferably 11 sqft is required to address an average sized cat. At least 28" by 30" of clear floor space: (e.g. excluding space occupied by bed, food and water dishes and litter boxes)

>30"

>30"

High enough to allow the cat to stand on their hind legs and fully extend their front legs without touching the roof of the enclosure

>15"

Litter Resting Area Food

Double compartment cages meet animals' needs by providing distinct separation between elimination areas and feeding/resting areas.

>36" (In order to accommodate a carrier or hiding box)

>50"

Dog kennels should be high enough for humans to enter, but the separating wall between kennels can be shorter (high enough so when the dog is standing it won't be able to look into the next room)

>60"
>40"

Sufficient size and height to permit human entry for cleaning and interaction, and sitting in a chair to foster quiet interaction. Double compartment housing (ideally separated by a guillotine door) is critical to allow safe, efficient cleaning and care.

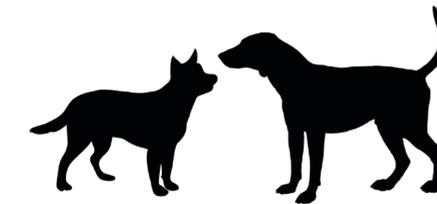
Elements of Group Housing

Group housing has been utilized to address some of the deficiencies associated with traditional individual housing. It is easier to provide animals behavioral choices, such as jumping, running, and hiding in a group housed setting.

>18 sq ft per cat

- Double doors at entry/exit points
- No more than 10-8 cats
- There should be at least as many hiding areas and elevated resting surfaces (at least 12" wide) for the number of animals plus one

Dogs in double rooms rather than group



- Double runs or rooms separated by a guillotine and/or full size door
- Ample resting places and toys for each dog

Separation between different species; specially between dogs and other species since they are usually noisy they should be housed far from cats and other species.

Animals should be able see out but have some opportunity to avoid visual contact with other animals.

The separation between food, urination and defecation and resting areas should be maximized for all animals.

It is better that the cats are not restricted to floor level cages since this can cause stress compared to elevated cages.

It is better that the dogs have protected indoor-outdoor access..

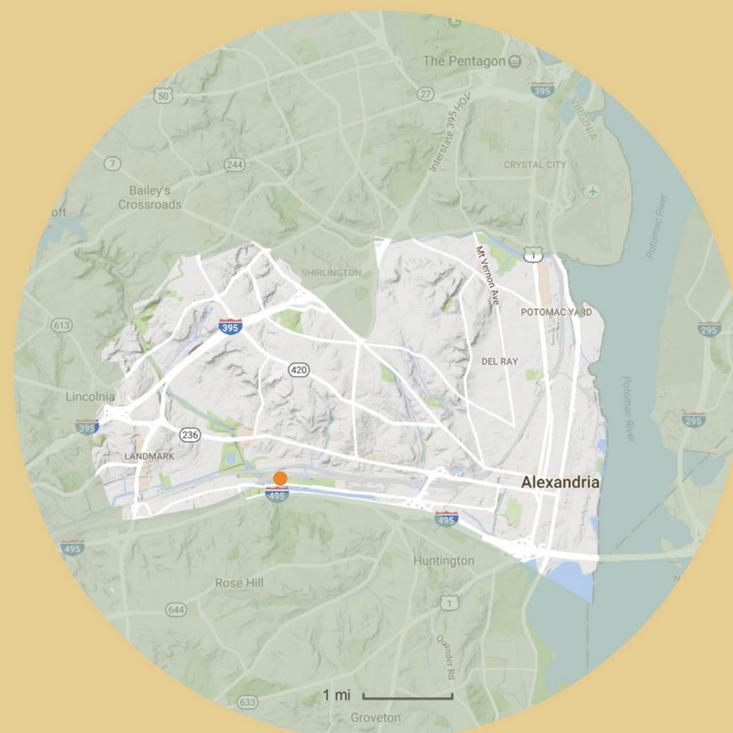
SITE LOCATION

Alexandria is a home to people with many pets. The community in this city is one of the most pet friendly among US cities. Being close to Washington D.C. and other populated cities of Northern Virginia also makes Alexandria a perfect city for a shelter.

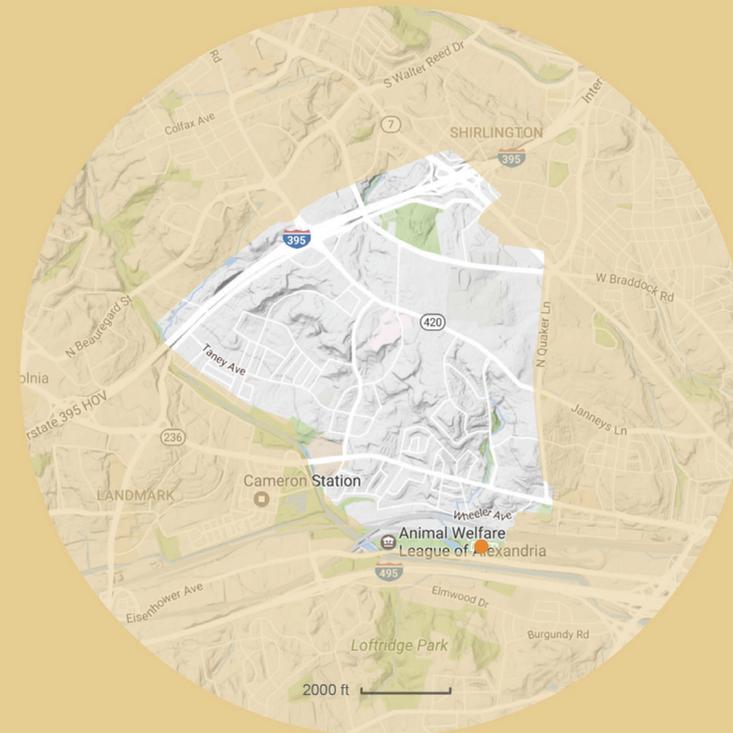
There were many important traits I was looking for the site to have, such as being close enough to residential areas. Not too close where the shelter would create problems for the neighborhood but also not too far for people to make a quick visit. Additionally, it needed to be in a very natural site because of the nature of the project where the goal is to serve animals.



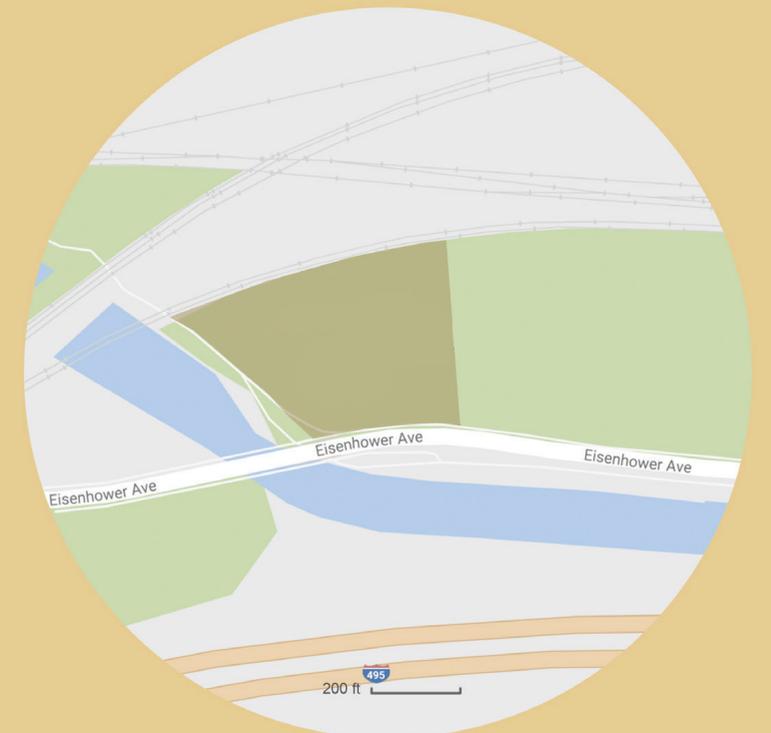
Virginia
Official animals of Virginia



City of Alexandria



Seminary Hill Neighborhood

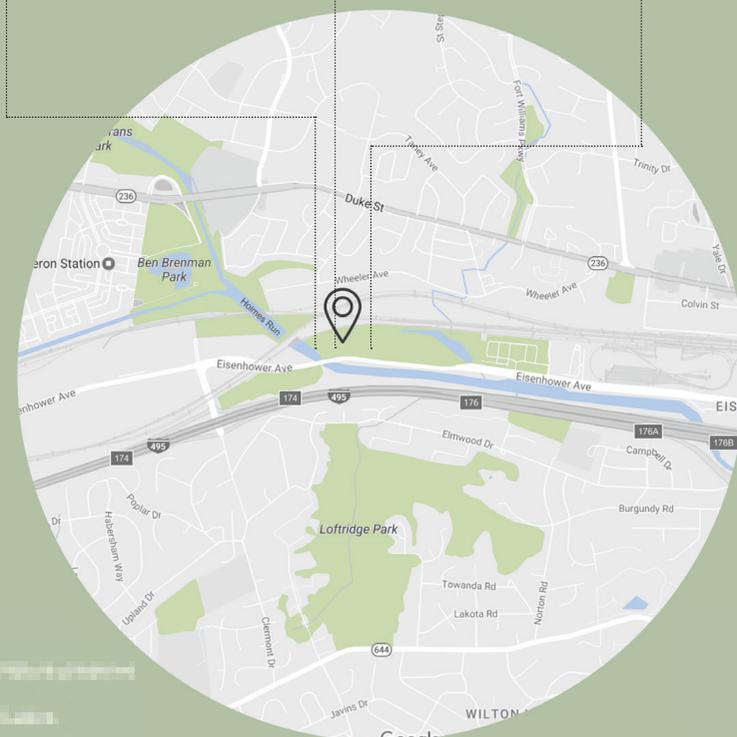


Project Area

SITE CONTEXT



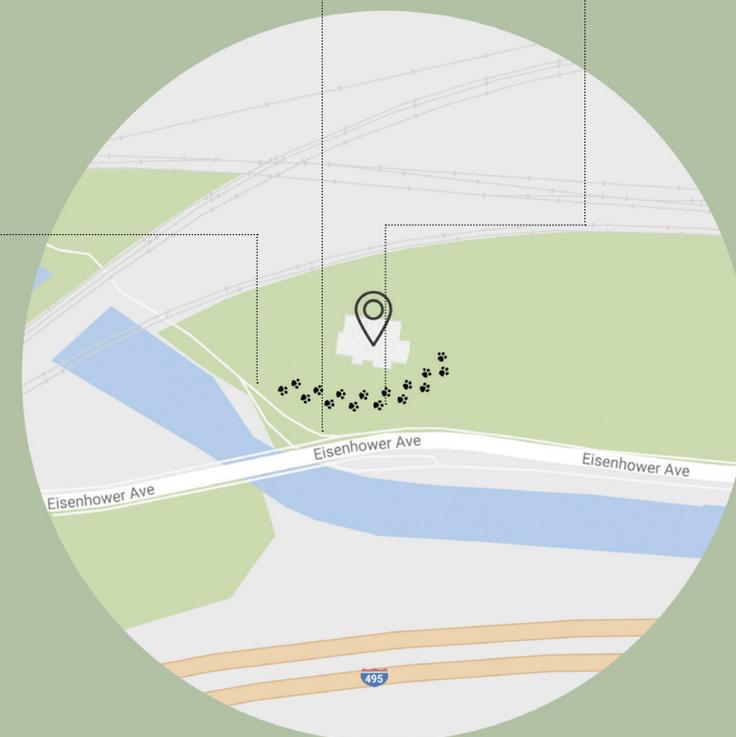
Easy Access to site from Eisenhower Avenue. There are also multiple exits from 495 which makes driving to the shelter very convenient.



This area is full of parks and nature preserves. It's also right next to the river which makes the site even more attractive for people and suitable for animals.



One of the very important features of the site is that the Holmes Run trail passes 2 sides of it. This makes inviting people to interact even more.



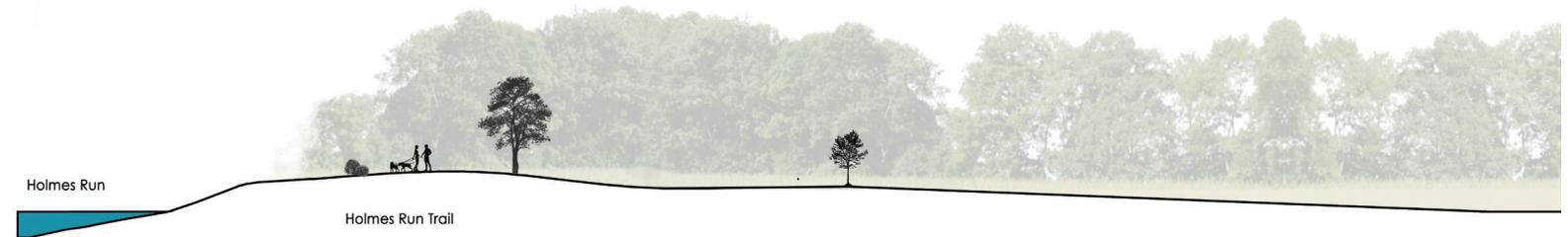
Since this is a very natural site there are many species living there. On top are some animal views in different point throughout the site.



We usually tend to forget that we are not living alone in the city. There are countless species even in small areas. In the site collage I have depicted some of the most common animals that one might find when exploring this area.

In this collage I also tried to show what happens around the site. On the right side we have the Cameron Run park which is a popular destination for the young. This is also very positive for the shelter because more kids will visit and maybe learn about the shelter animals. On the left side there is a recycling center which was very important to me since one of the thoughts is to help environment and to enhance the health of our cities.

East/West Site Section



North/South Site Section



LANDSCAPING TACTICS

Since there is a beautiful nature surrounding the site there will be many species visiting this area:

Dogs, with their owners

Cats, shelter cats are usually brought in boxes but hopefully some feral and community cats will reside here so they can be TNRed (trap, neutered or spayed and released)

Other wildlife mammals such as, squirrels, raccoons, possums, foxes, etc.

Birds

To keep peace in the site there should be some places for the animals to hide, climb and rest. Close set planting specially in areas near dog housing would really help with buffering the noise. Tall plants are ideal for cats and squirrels to climb and scape from predators. Medium dense planting will allow all species to hide from eyes of visitors also keeps them warm during winter and it's a nice shading for summer time. Having lots of short soft planting would benefit all animals since it's gentle on their paws.

Making use of different plants and textures to repel or attract certain species and again to keep peace on the site. This helps with the appearance of the site since there won't be walls and fences. Here are some plants that repel or attract cats and dogs:

Cat attracting: Catnip (*Nepeta cataria*), Catgrass, Asters, Scented geraniums (*Pelargoniums*), Blue mist shrub (*Caryopteris*), Sunflowers, Cosmos and Maiden grass (*Miscanthus*)

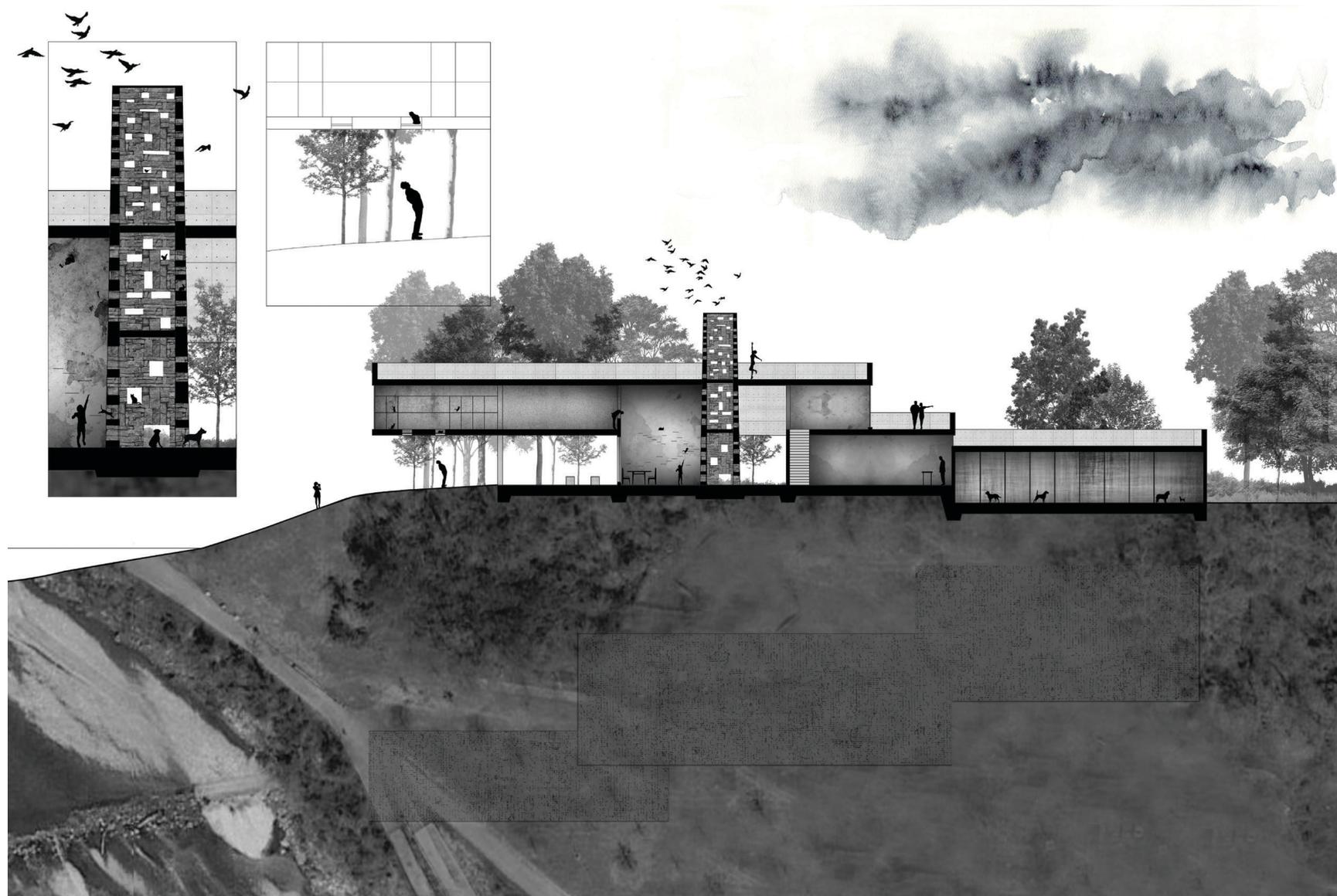
Dog attracting: Forsythia, Echinacea, Buddleja, Lilac, african daisy and purple basil

Cat and dog repelling: scaredy-cat plant (*Coleus canina*), rue, lavender, rosemary, and pennyroyal.



Landscaping Diagram

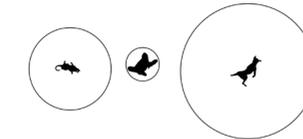
PRELIMINARY DESIGN



Schematic Section

This drawing illustrates the early spatial arrangement on the site and in section. Having three main spaces: Cat, Dog and Human.

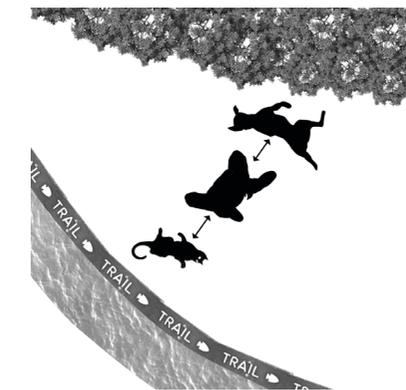
Cats have a shorter flight distance than dogs. (Fight initiation distance (FID) is the distance at which an animal will start to move away from an approaching threat such as a trail user) (Archive.is). This is one of the reasons that it's better to place the cat part where there will be people passing by. It's hard to determine what this distance is exactly, especially in domesticated animals. There are many factors that affect this distance, but in general the more tamed the smaller distance. Humans have developed very short flight distance in most cases. Depending on the predator this distance can change greatly.



Human spaces are placed as the connection of the animal spaces to manage and service them.

The dog part of the building is placed closer to the northern part of the site where there are more trees (as a natural sound buffer) and also less human traffic. Dogs are always sniffing the ground and are known for their earthiness, strength and looking up to humans. Because of these reasons their space is more grounded and heavy.

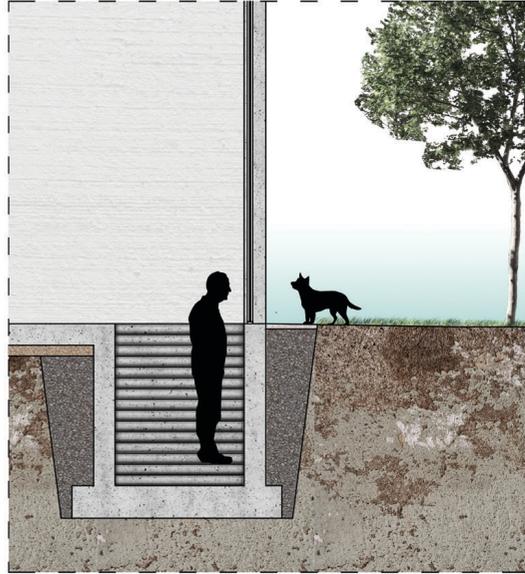
The cat part of the building is closer to trail and the river, where they can have a nice view to bird watch. Cats are known for their flexible body and tree climbing. They like to look over to people and feel strong. Their space is raised and feels light.



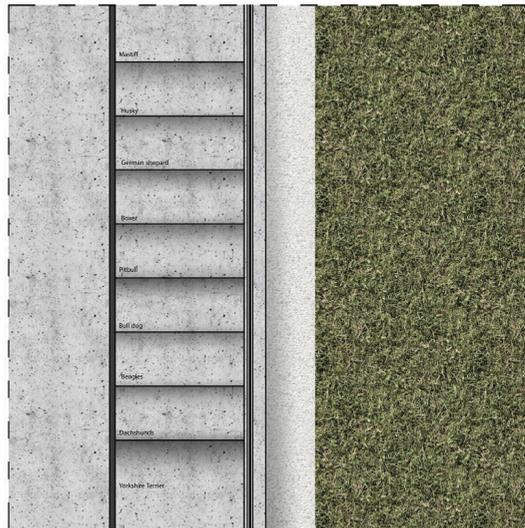
Placement in Site



Placement in Section

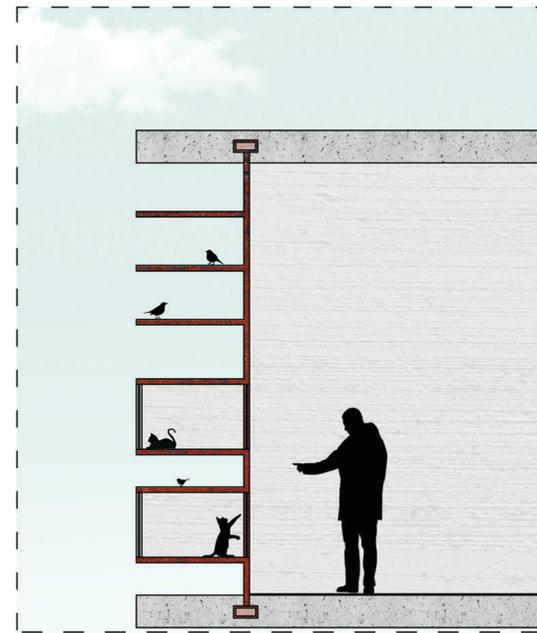


For humans to understand and feel how cats and dogs see the world I created few moments in the building where they can decline to the animal's eye level so that they can experience being an animal!



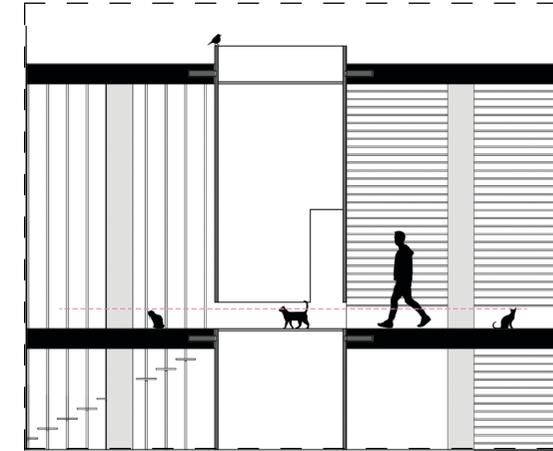
Since this is in the dog part of the building, the main material is concrete to emphasize on the characteristics of a dog as well as serving structural needs of this grounded part.

Dog eye level detail



Cat housing detail

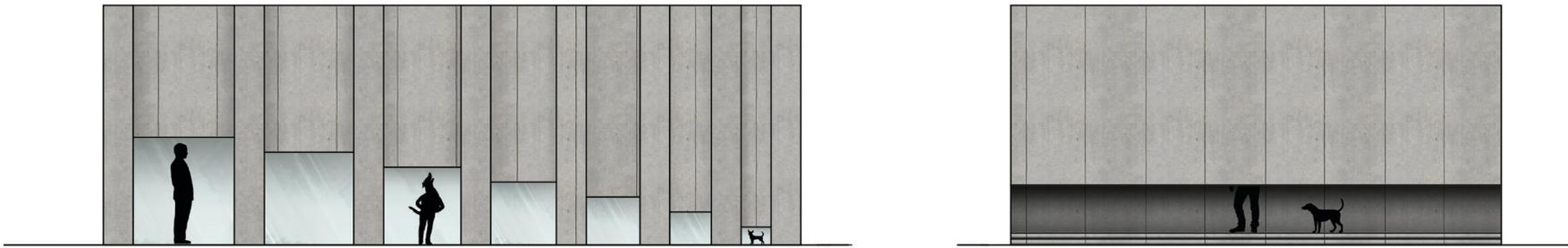
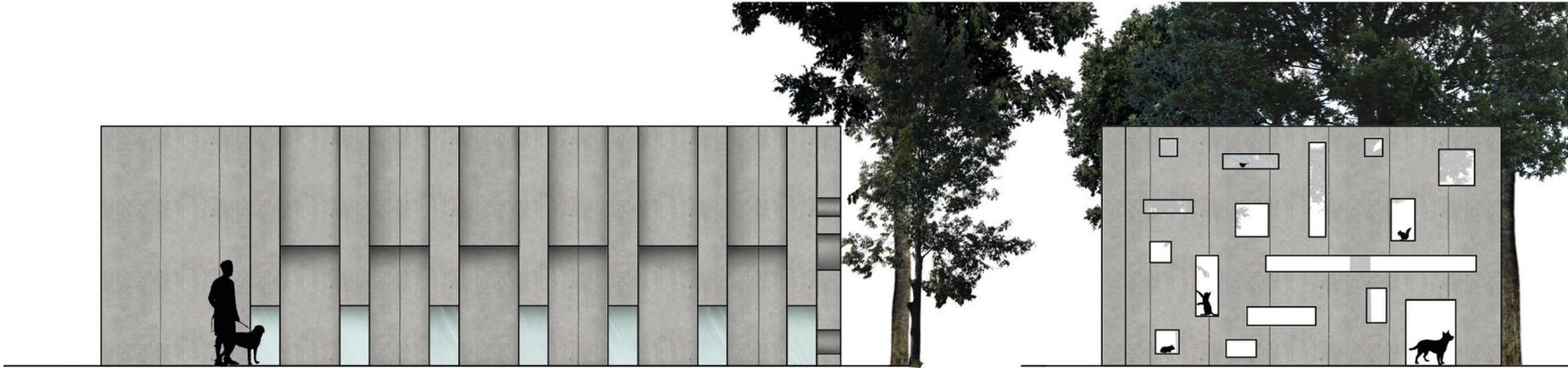
Cats housings are layered in this drawing allowing birds and other creatures to reside on the same structure. Material is mostly steel to emphasize on flexibility and lightness of the cats as well as serving the structure.



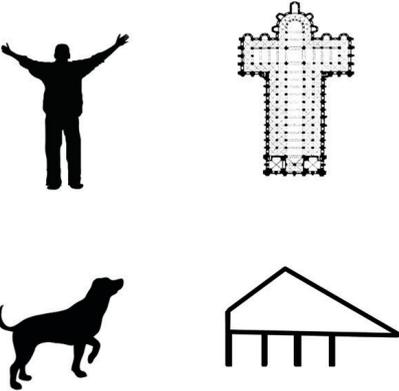
Cat eye level detail

Playing with different textures for the facade. Here human view is almost obstructed to make them view the world as a cat (if they are curious!).

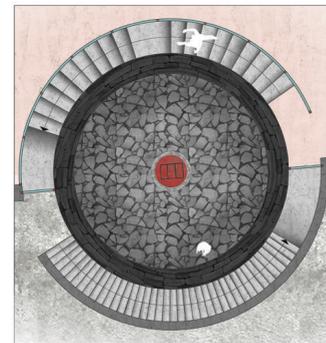
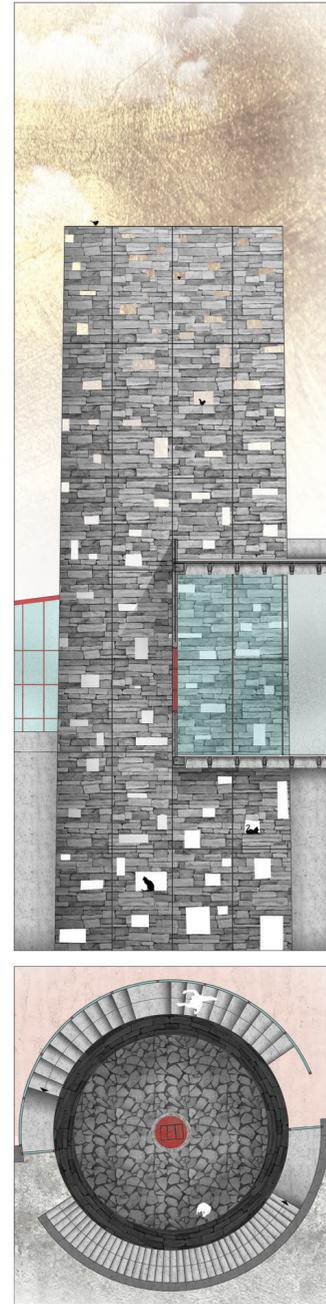
Facade options to make the visitors aware of the different scales of animals with humans.



Concrete wall design



A sacred form for the four legged animals instead of a cross that represents human body

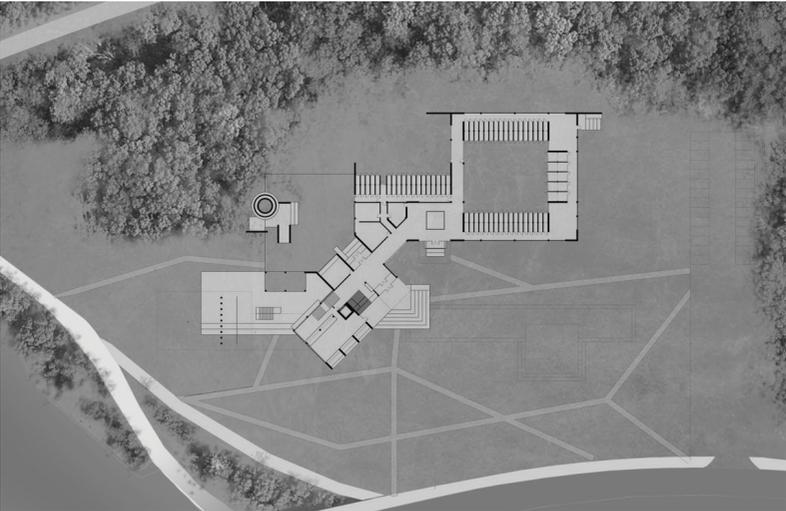


Animal Tower

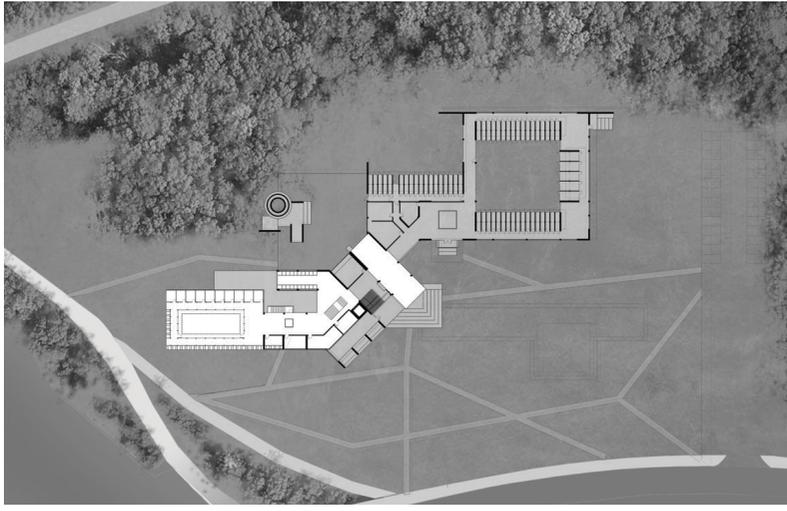
This drawing shows the details of the animal tower and how it connects to a magical room underground where you can play with an animal.

The tower itself represents a unity in all animals, including the human. The scale in the tower changes from its biggest user, the human, all the way to the smallest birds on top. Different animals can pass through, play or reside in it.

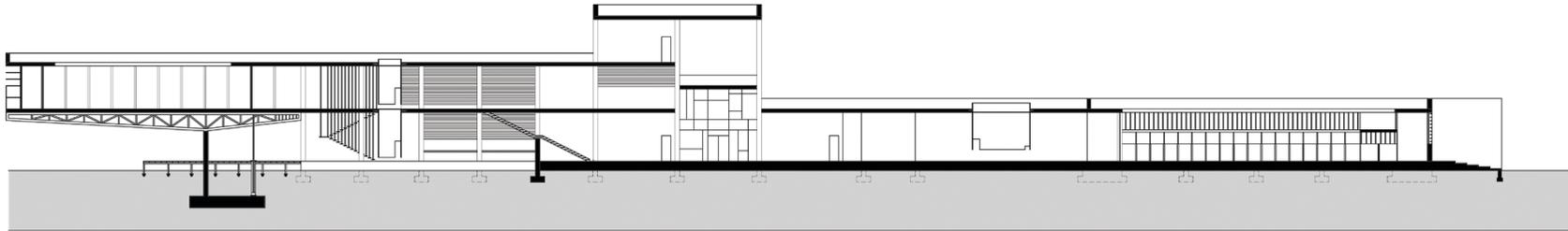
This preliminary design shows the basic arrangement of spaces and how they work together. Main focus is on the animal spaces with them having the best views and placements. The human part is in the middle connecting everything and creating an entrance for visitors. On the back side there is the crematorium almost hidden from the public eye view to keep its sacredness.



First Floor Plan



Second Floor Plan



Section



Final portfolio for Techtonic Tales Course

FINAL DESIGN

The building is like a two headed creature extending its body to the trees, water, sun set and sun rise. Opening in the middle to invite people in. Fluid building in a very green bed letting people explore, interact and reflect.

One of the main changes that the building went through was the shape of each space. In the new design as you go into the animal spaces both the plan and section scale down. Some of the orientations also changed to get better views from or to the building. The project is also more fluid with the existing contour lines. Some elements such as a set of ramps and bridges are added to invite the people passing through.



This deck is one of the moments in the ramps and bridges where people can rest and enjoy the beautiful building. It would also be a very suitable place for those who just buried or cremated their pets to have a peaceful time.



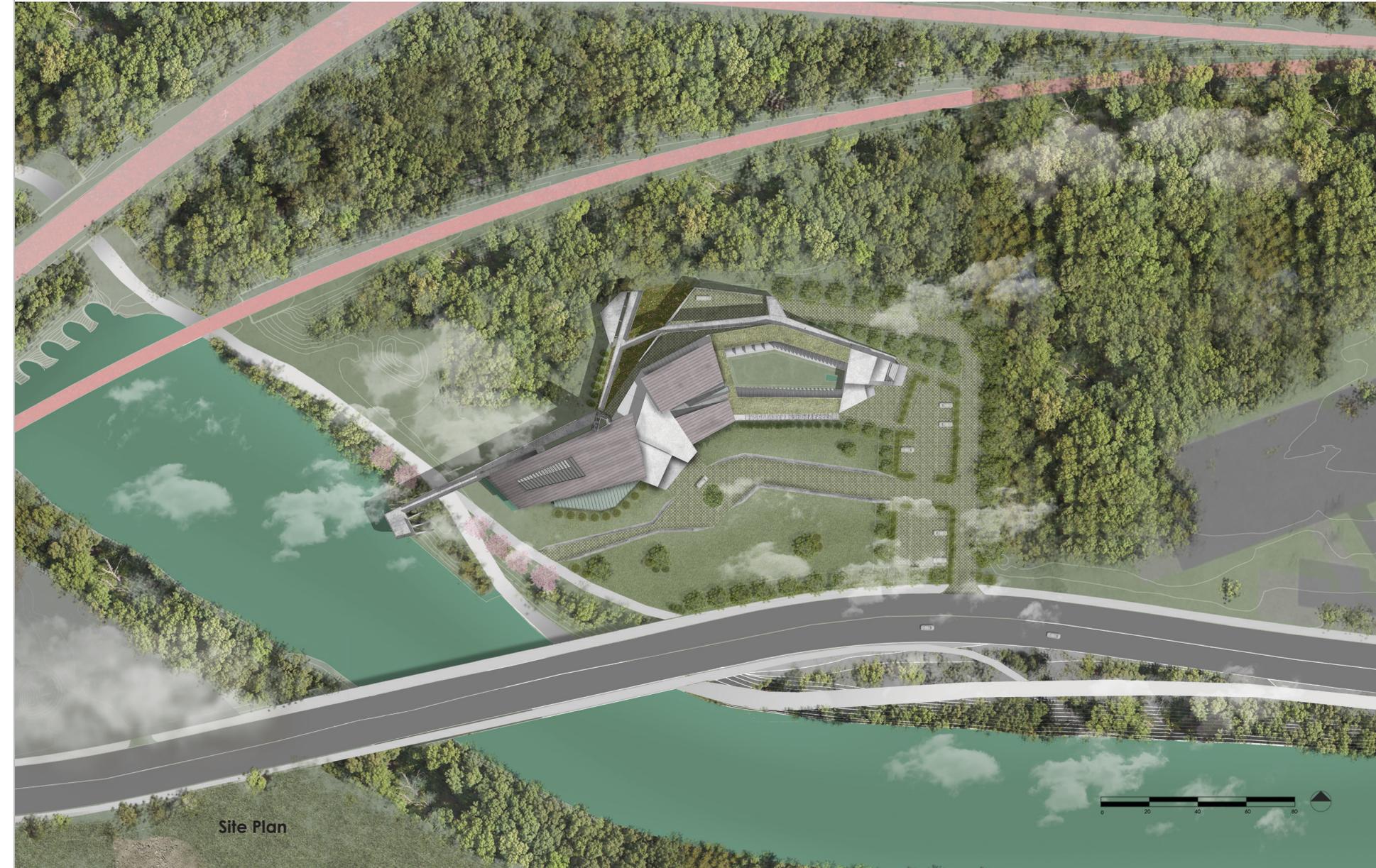
Bridges go through the tower to create a beautiful moment for those passing.



Part of the Bridge is rested on the crematorium wall, making a nice shelter for those underneath also a resting moment for those on it.



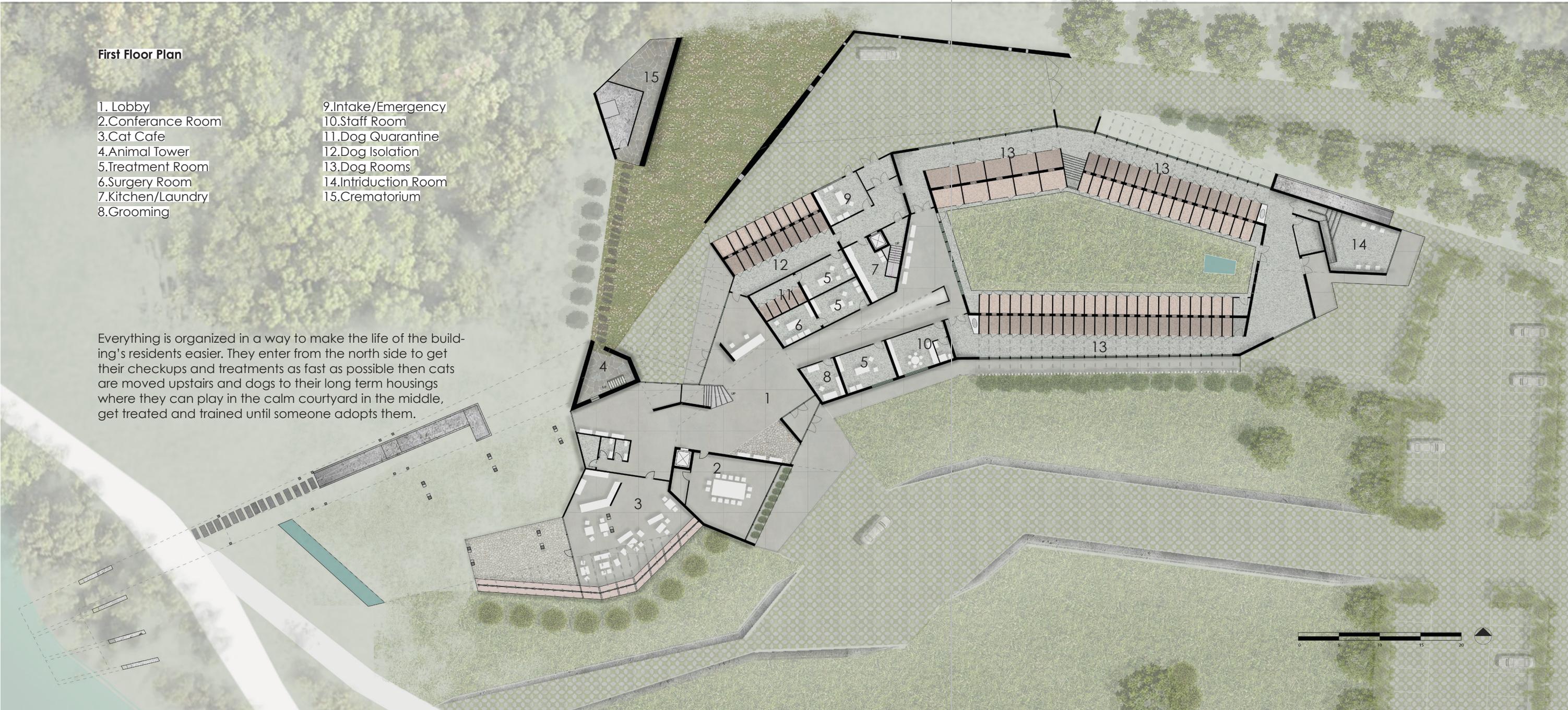
Having cars on the site in unavoidable but to keep the nature and also to slow down the vehicles, grasscrete is used for necessary parts for the cars.



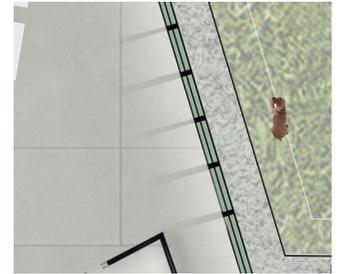
First Floor Plan

- 1. Lobby
- 2. Conference Room
- 3. Cat Cafe
- 4. Animal Tower
- 5. Treatment Room
- 6. Surgery Room
- 7. Kitchen/Laundry
- 8. Grooming
- 9. Intake/Emergency
- 10. Staff Room
- 11. Dog Quarantine
- 12. Dog Isolation
- 13. Dog Rooms
- 14. Introduction Room
- 15. Crematorium

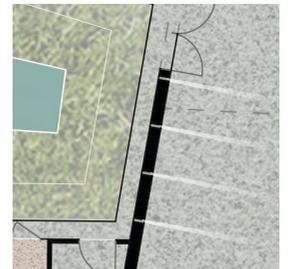
Everything is organized in a way to make the life of the building's residents easier. They enter from the north side to get their checkups and treatments as fast as possible then cats are moved upstairs and dogs to their long term housings where they can play in the calm courtyard in the middle, get treated and trained until someone adopts them.



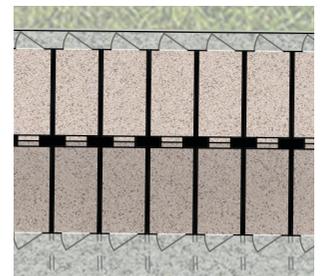
Sunrise wall Celebrating the life of alive shelter dogs



Sunset wall Remembering the life of those dogs that were the subject to cruelty and passed away



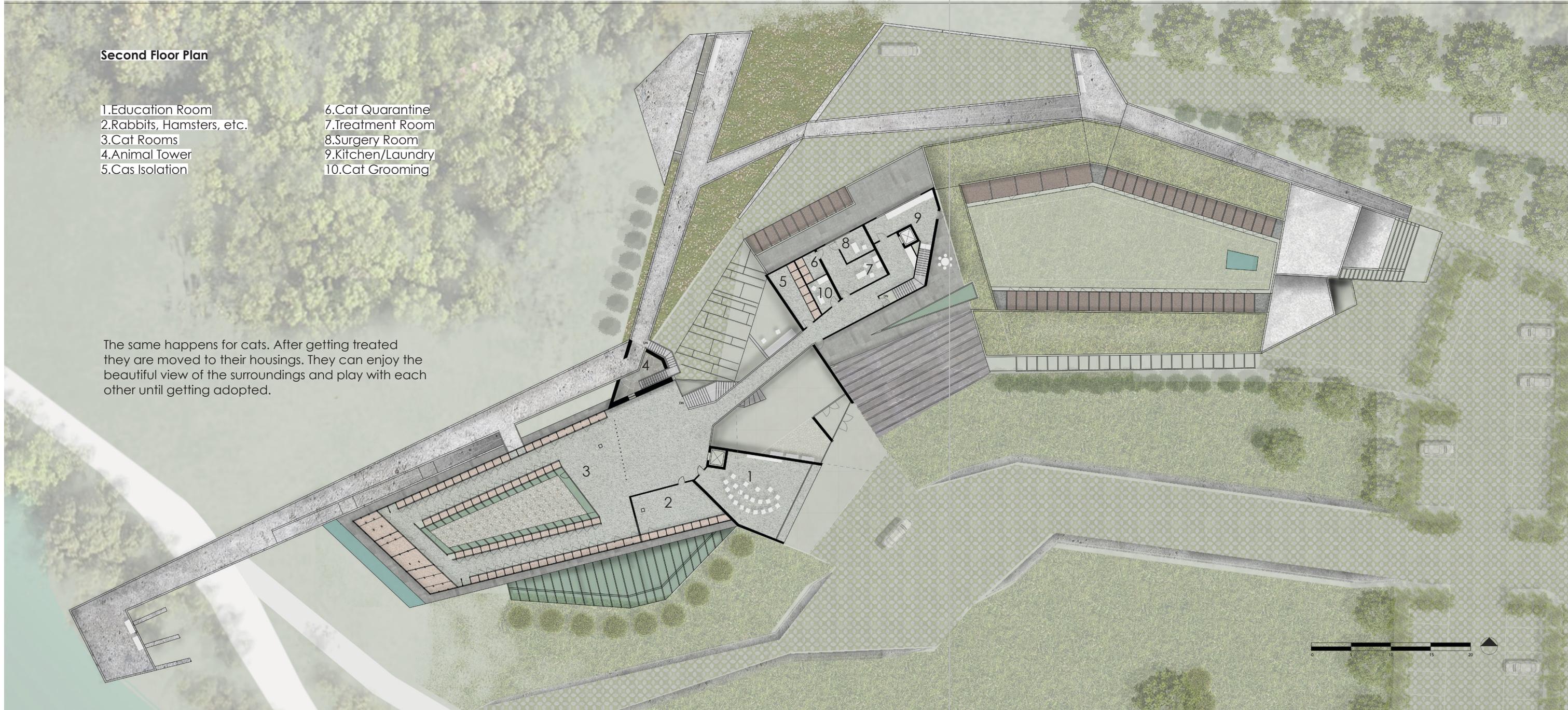
Dog rooms: Epoxy covering for ease of cleaning and sanitation



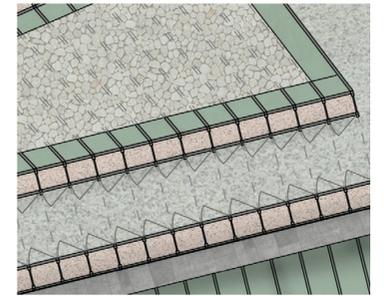
Second Floor Plan

- 1. Education Room
- 2. Rabbits, Hamsters, etc.
- 3. Cat Rooms
- 4. Animal Tower
- 5. Cas Isolation
- 6. Cat Quarantine
- 7. Treatment Room
- 8. Surgery Room
- 9. Kitchen/Laundry
- 10. Cat Grooming

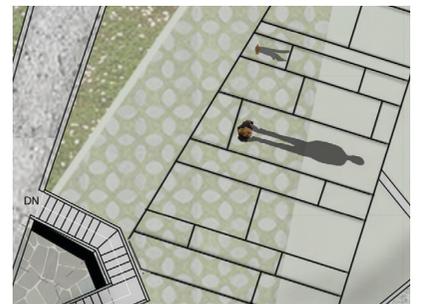
The same happens for cats. After getting treated they are moved to their housings. They can enjoy the beautiful view of the surroundings and play with each other until getting adopted.

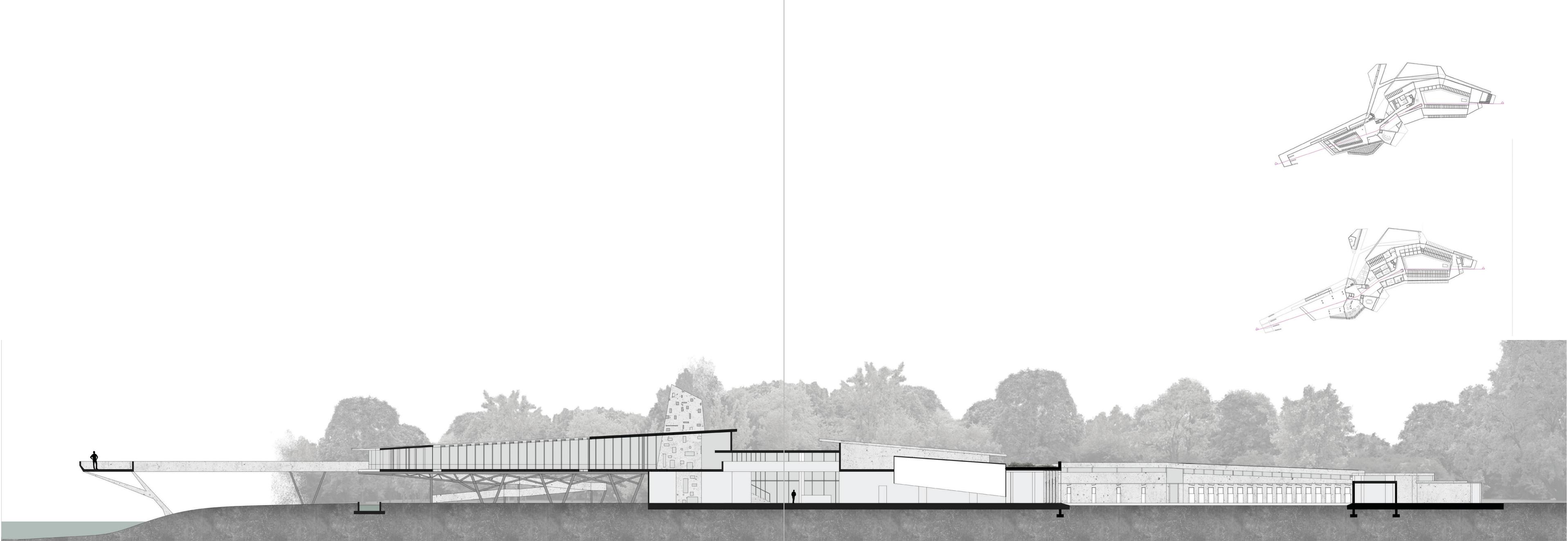


Cat Housing next to glass floor to celebrate the living cats in their housings and remembering those passed away (the glass with the same rhythm represents the housings that could have been there for them)

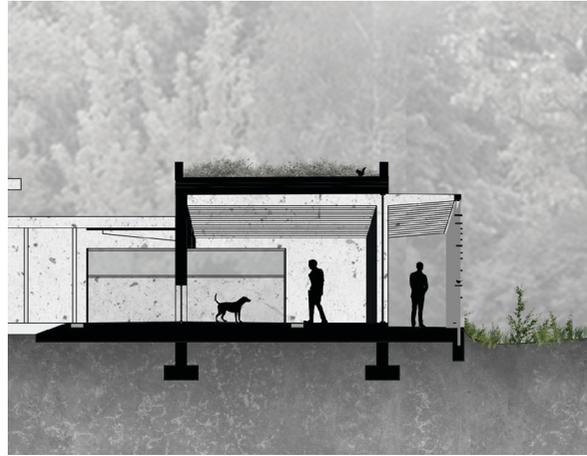


Scale Overhead with different sizes of openings to remind us of all creatures with their different scales.





Longitudinal Section



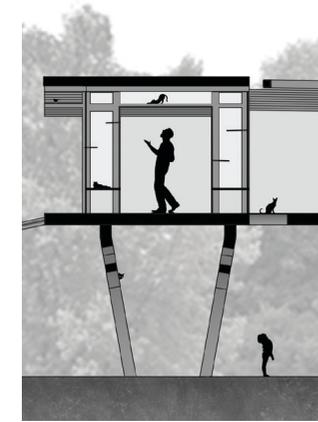
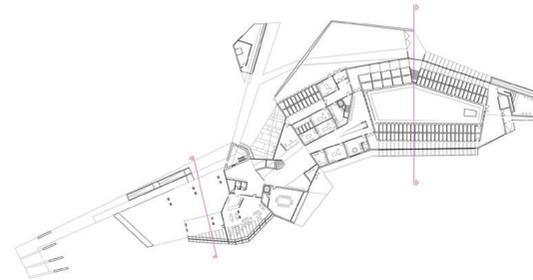
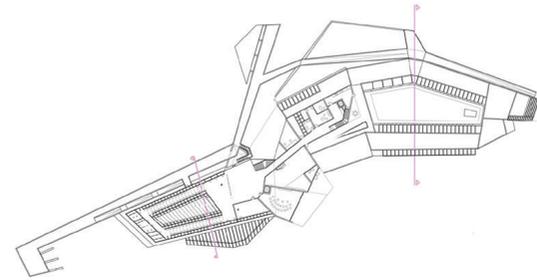
Dog rooms with access to outside and inside.



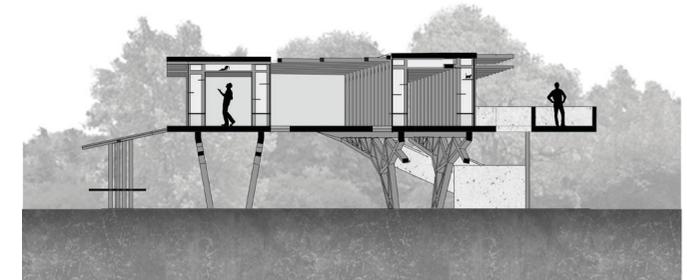
Humans cannot get to landscaping unless they become an animal and climb



Dog Housings Section



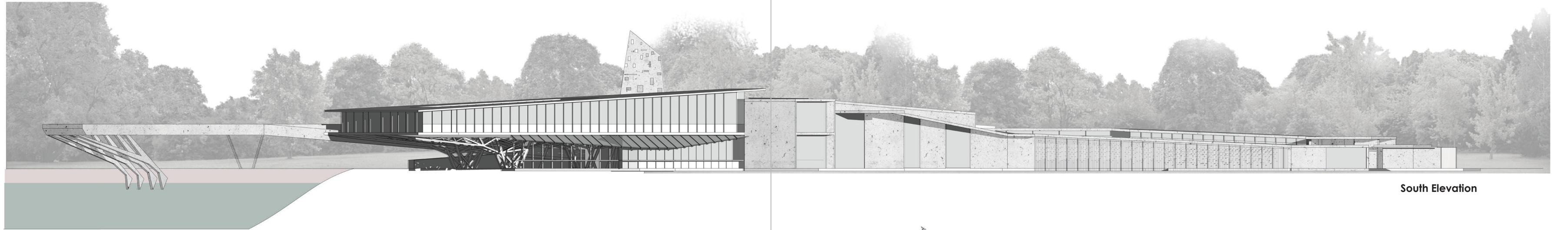
Human feeling imprisoned in animal housings rather than looking at the cats in cages. Single cat housing rather than stacked. Gives cats more space to live. Humans pay more attention to what is on their eye level, so this also gives each cat a fare chance to get adopted.



Cat Housing Section



North Elevation



South Elevation

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Helping one animal might not change the world but it would definitely change that one animal's life.