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OUTSTANDING SCHOLARSHIP EXEMPLAR



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD
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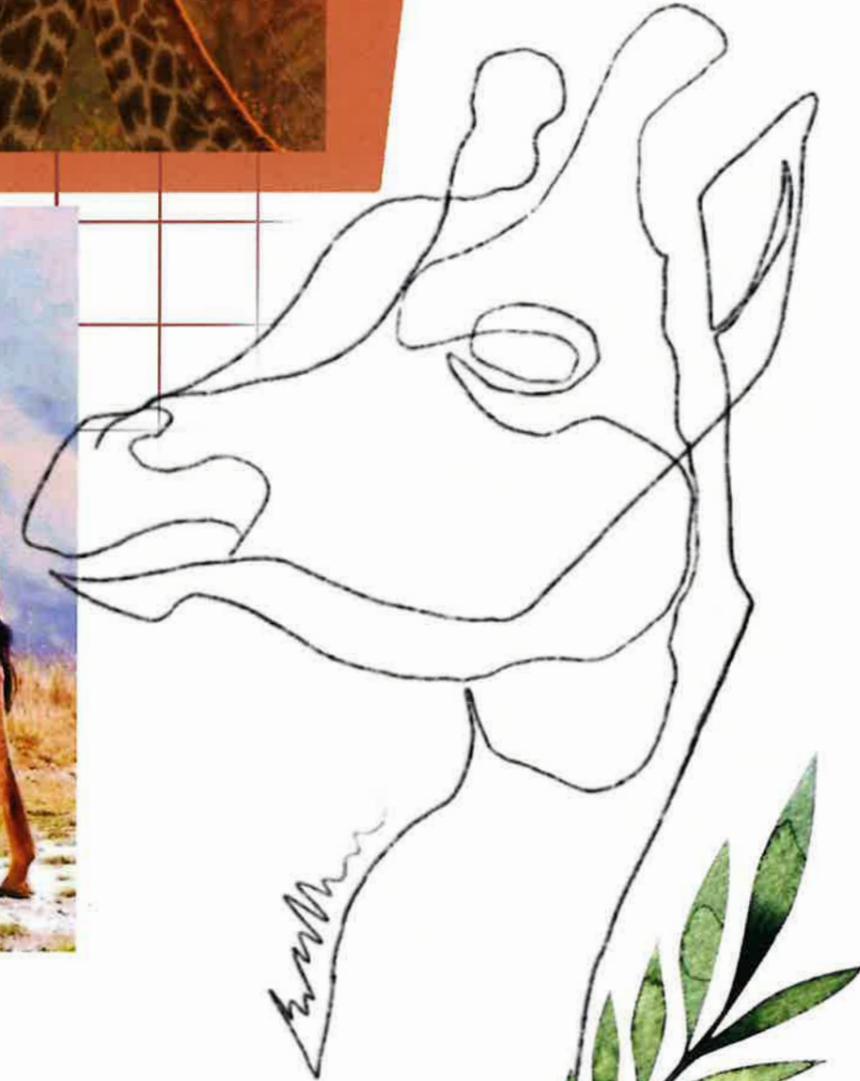
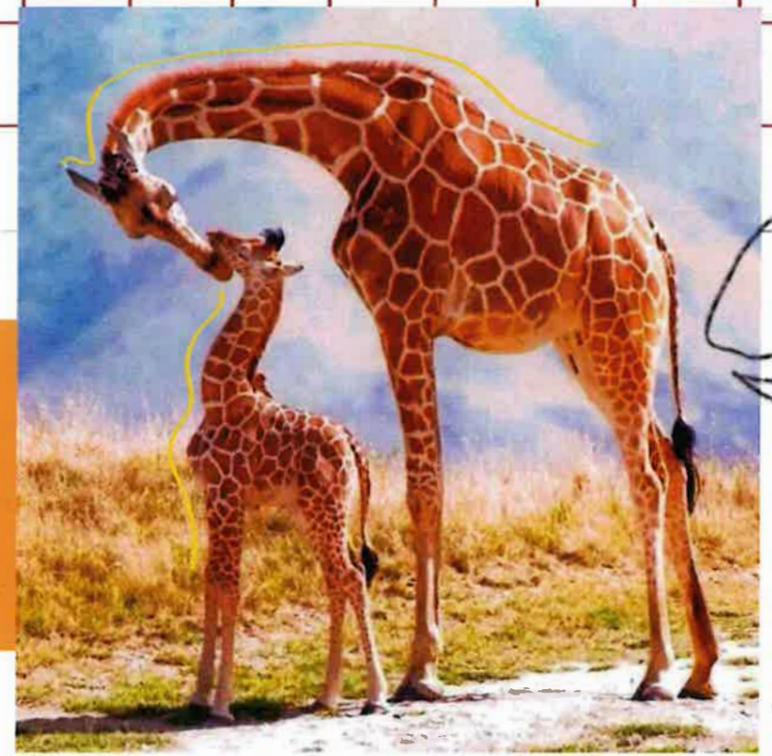
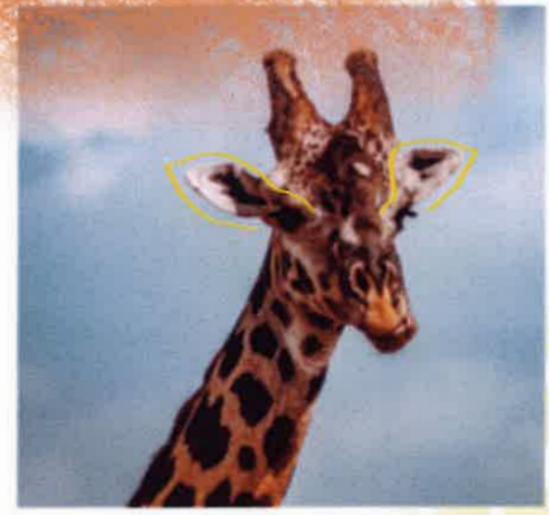
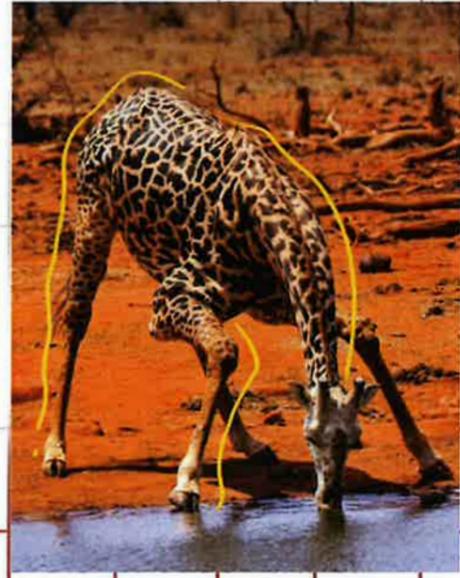
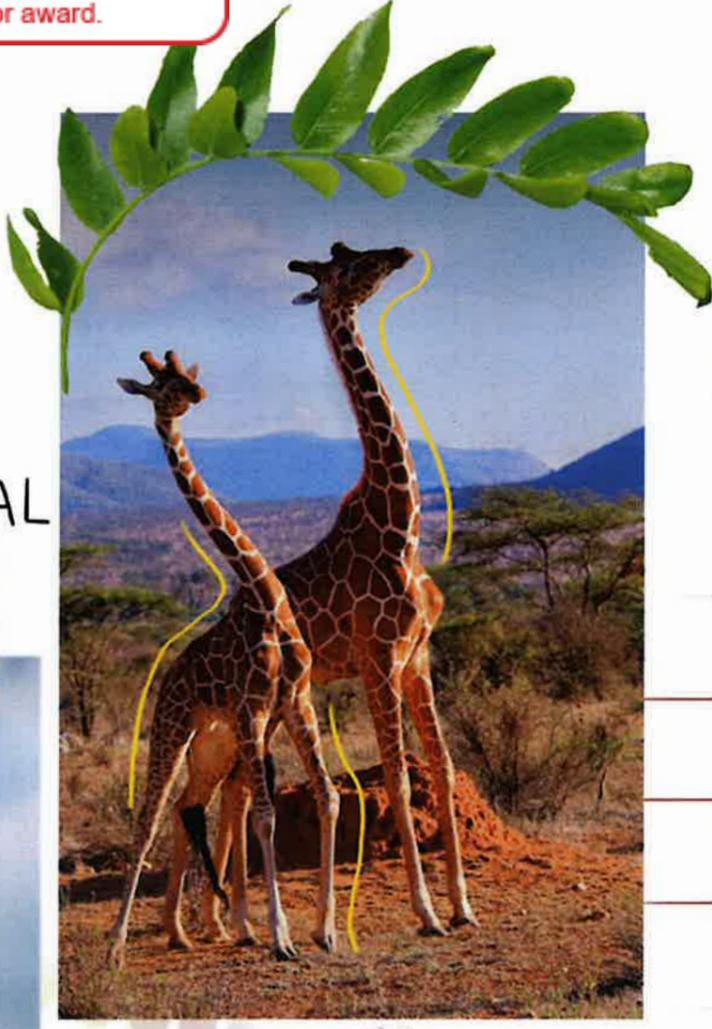
Scholarship 2022

Design and Visual Communication

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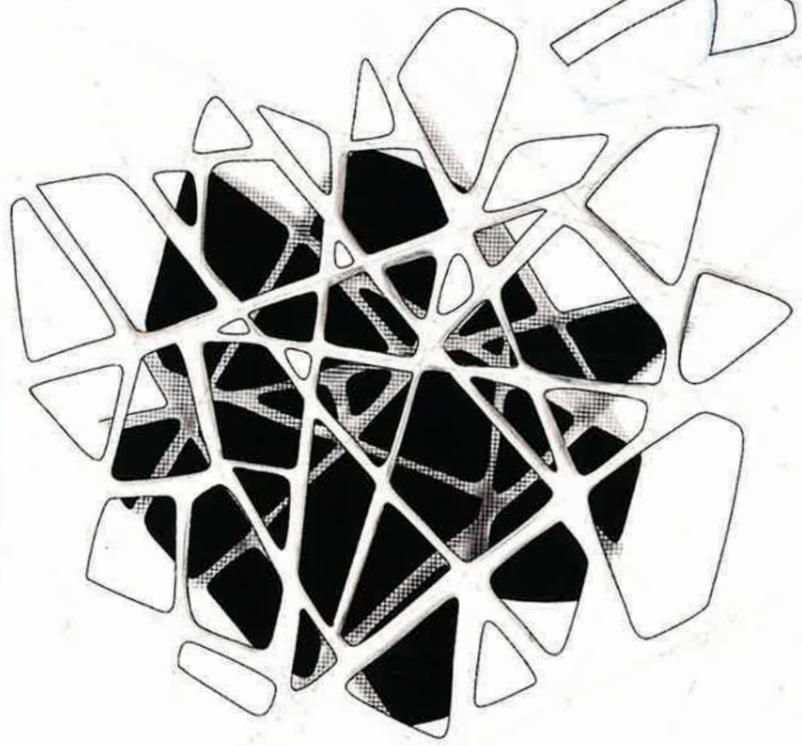
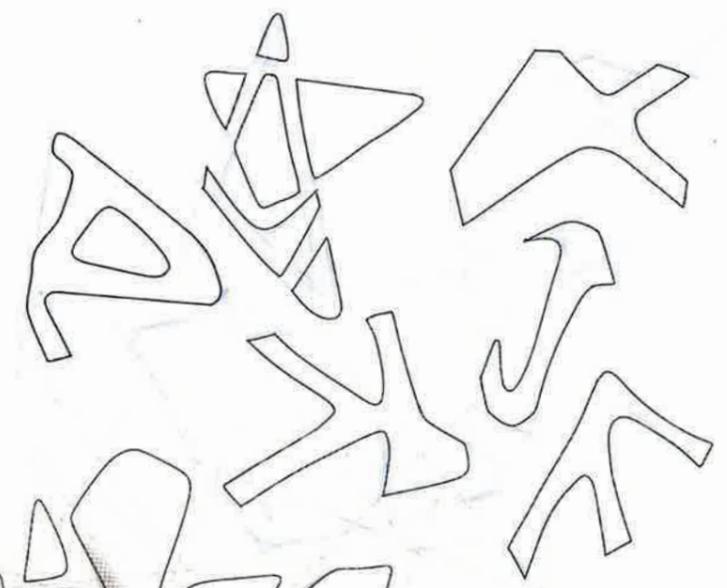
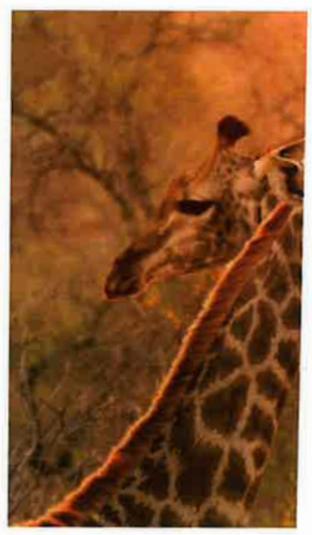
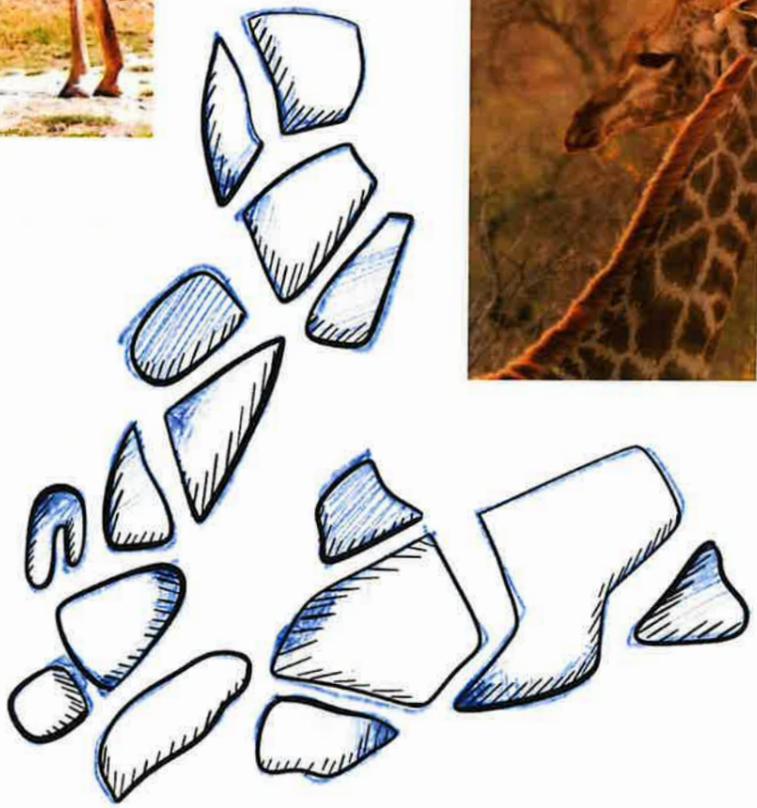
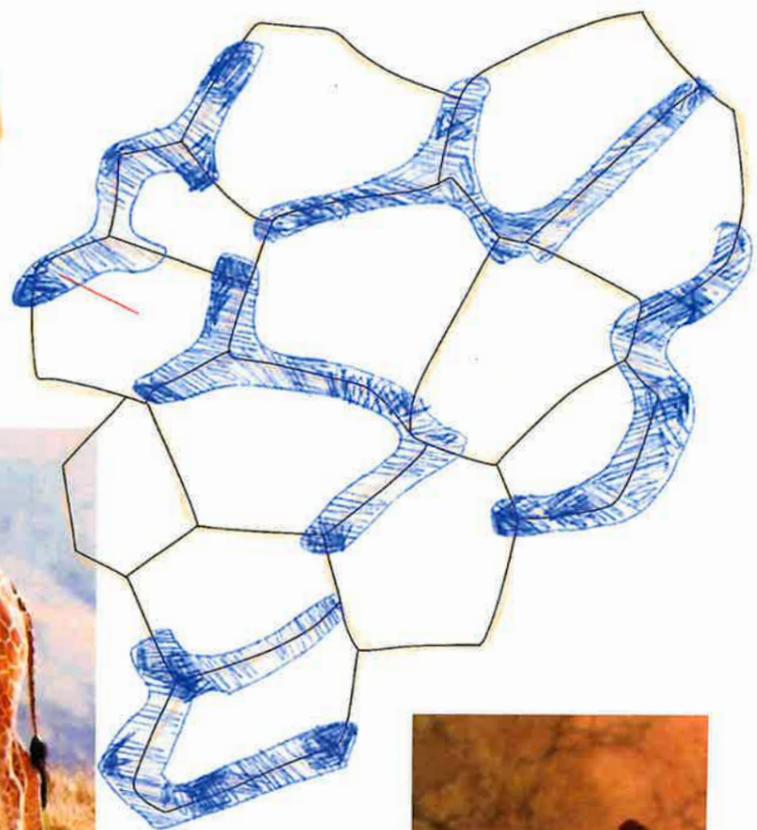
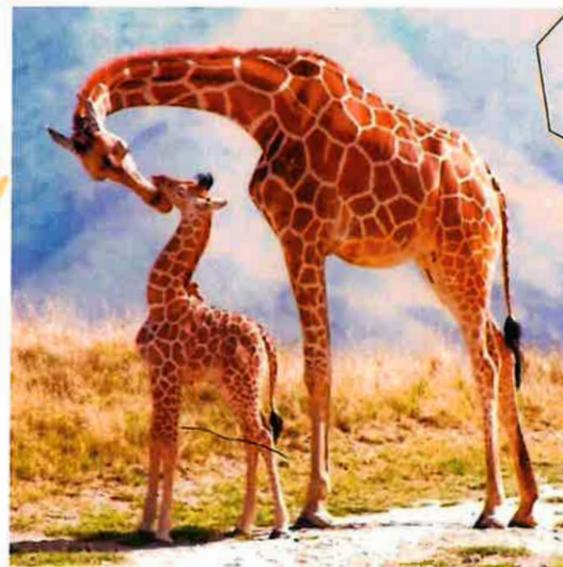
Giraffe

WILD ANIMAL



OBSERVATIONAL DRAWING

PATTERN



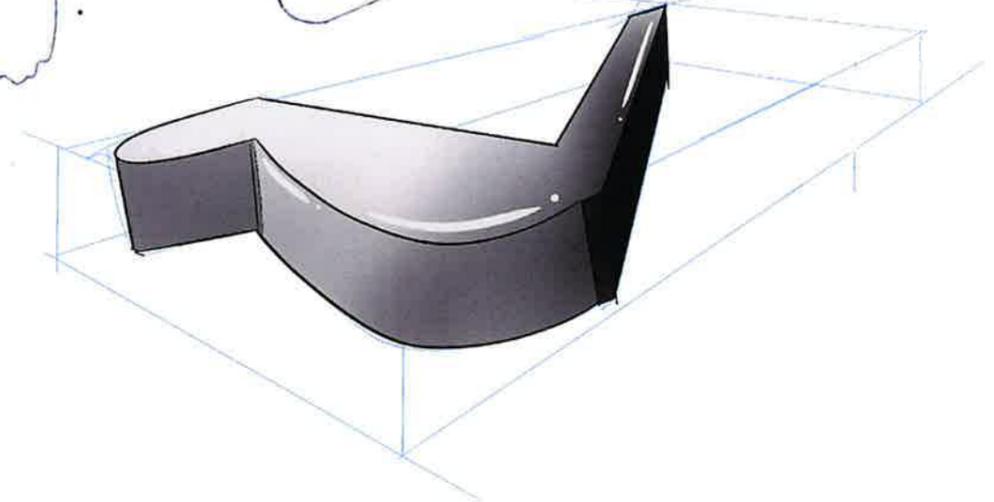
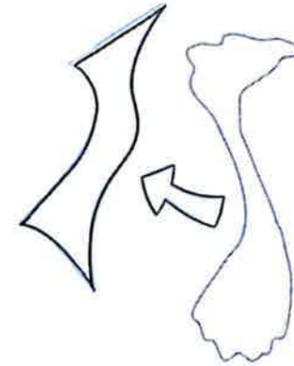
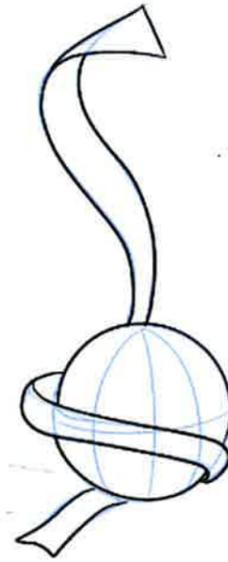
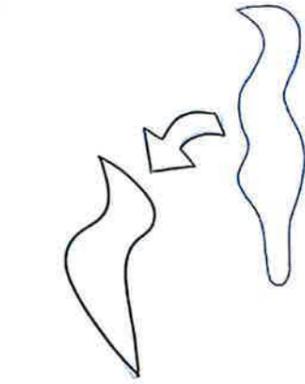
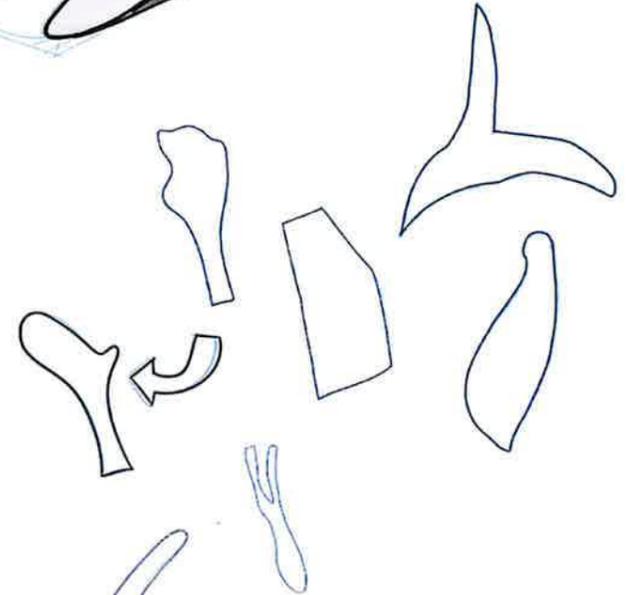
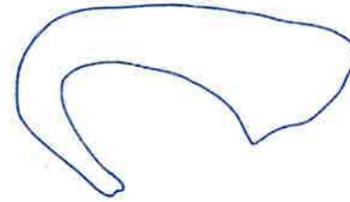
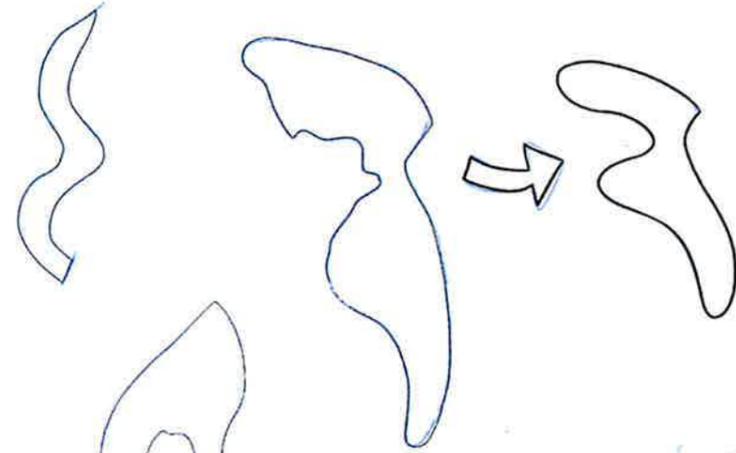
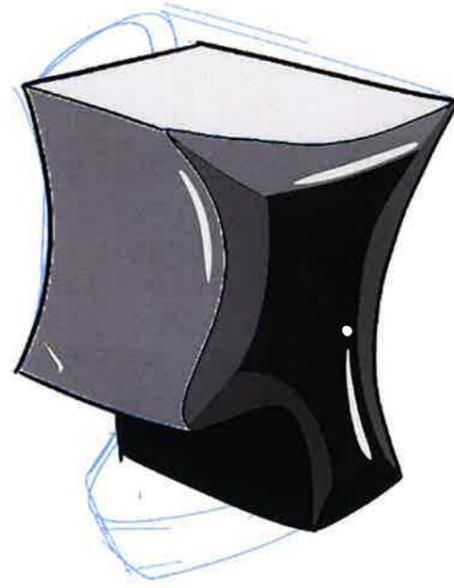
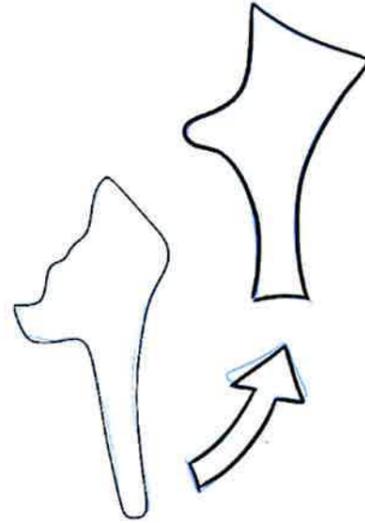
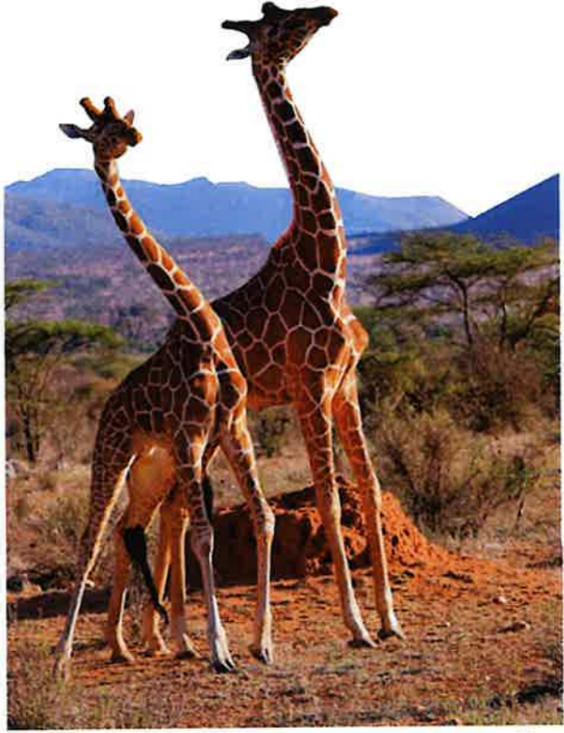
OBSERVATIONAL DRAWING

HEAD & EYES



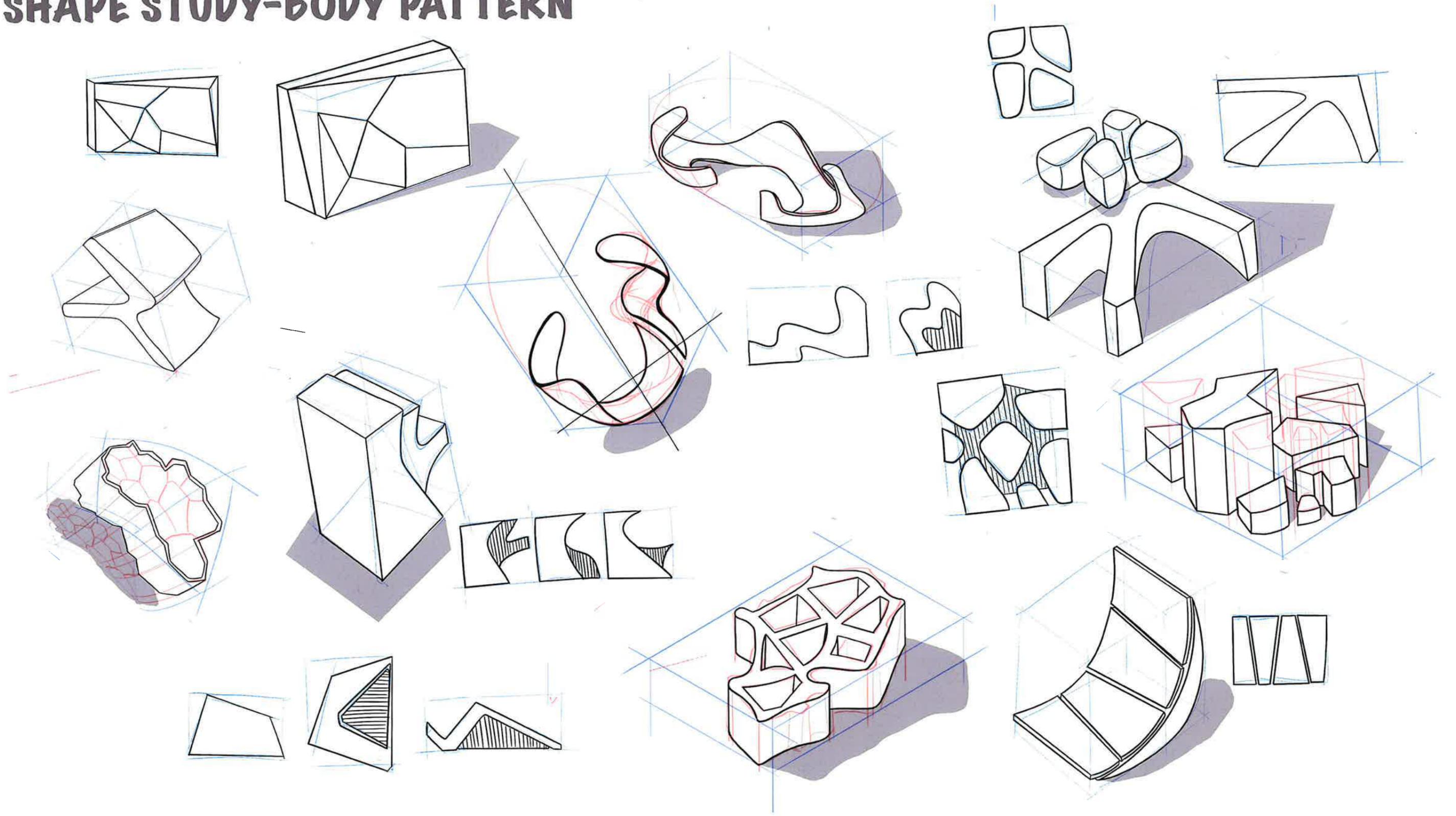
IDEATION

SHAPE STUDY-BODY



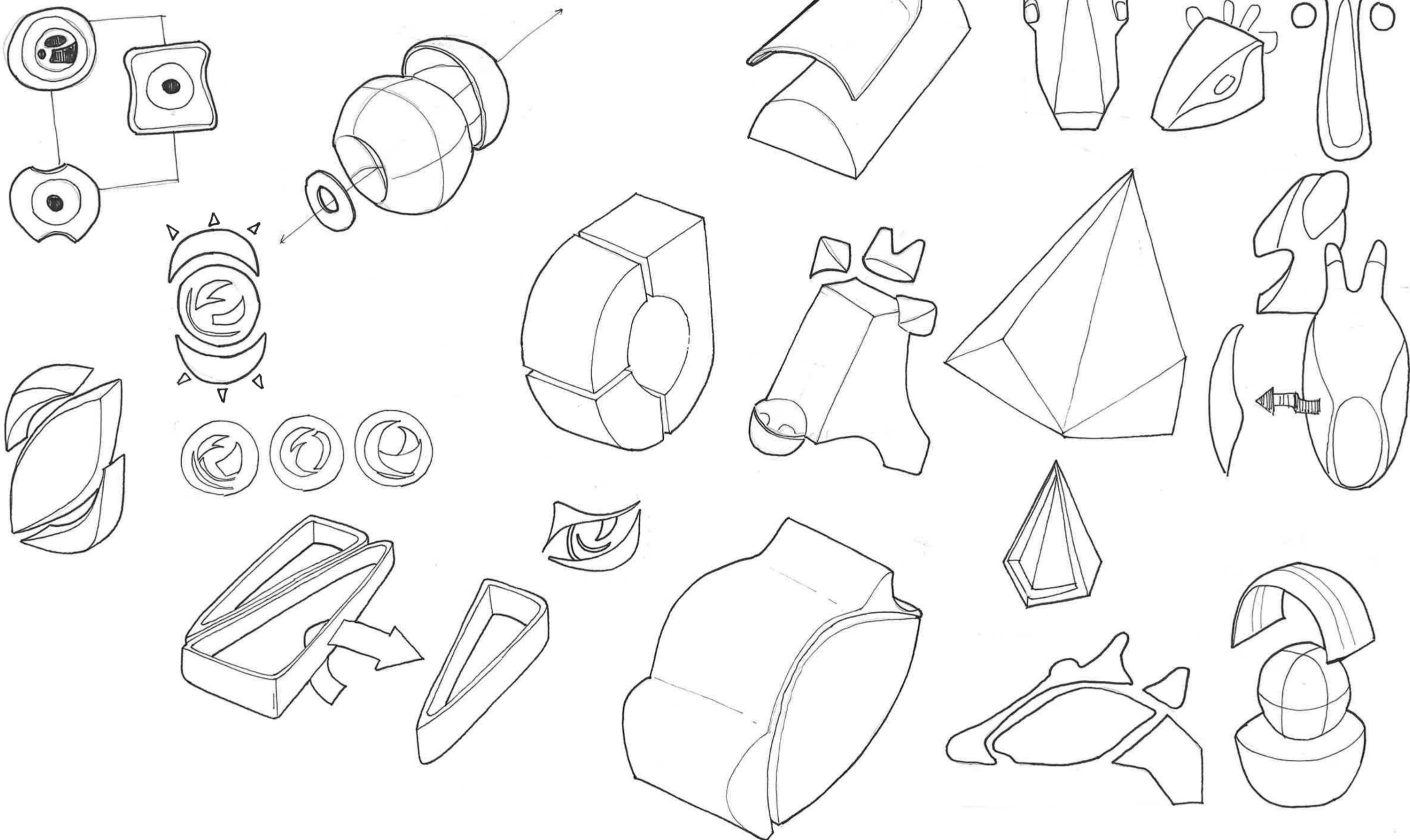
IDEATION 2

SHAPE STUDY-BODY PATTERN



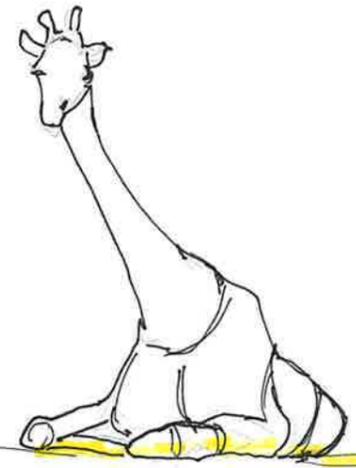
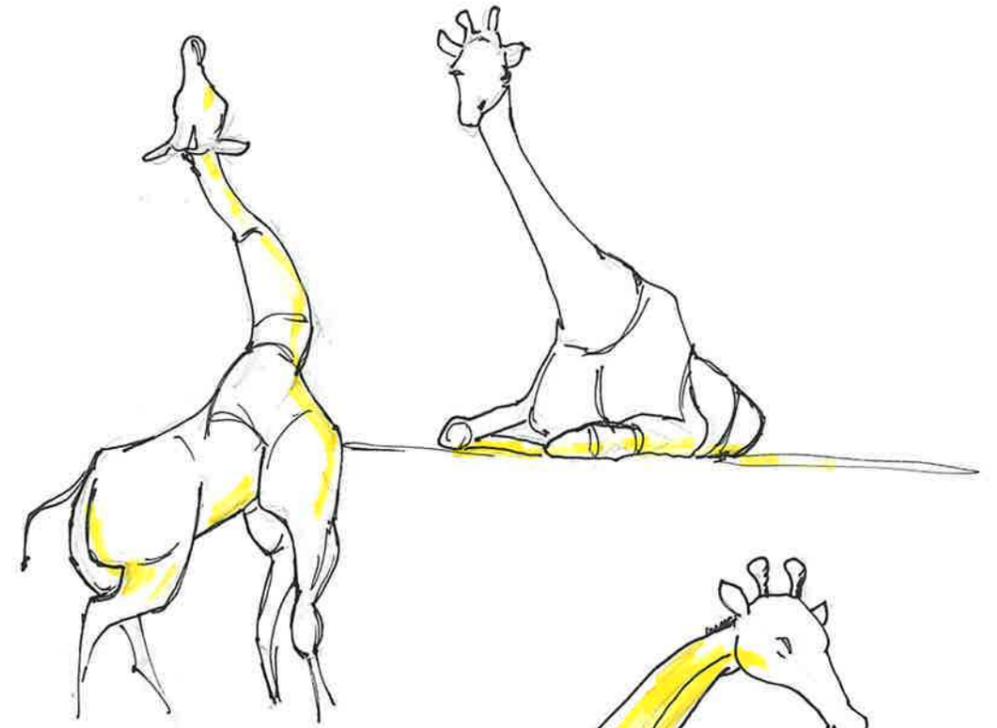
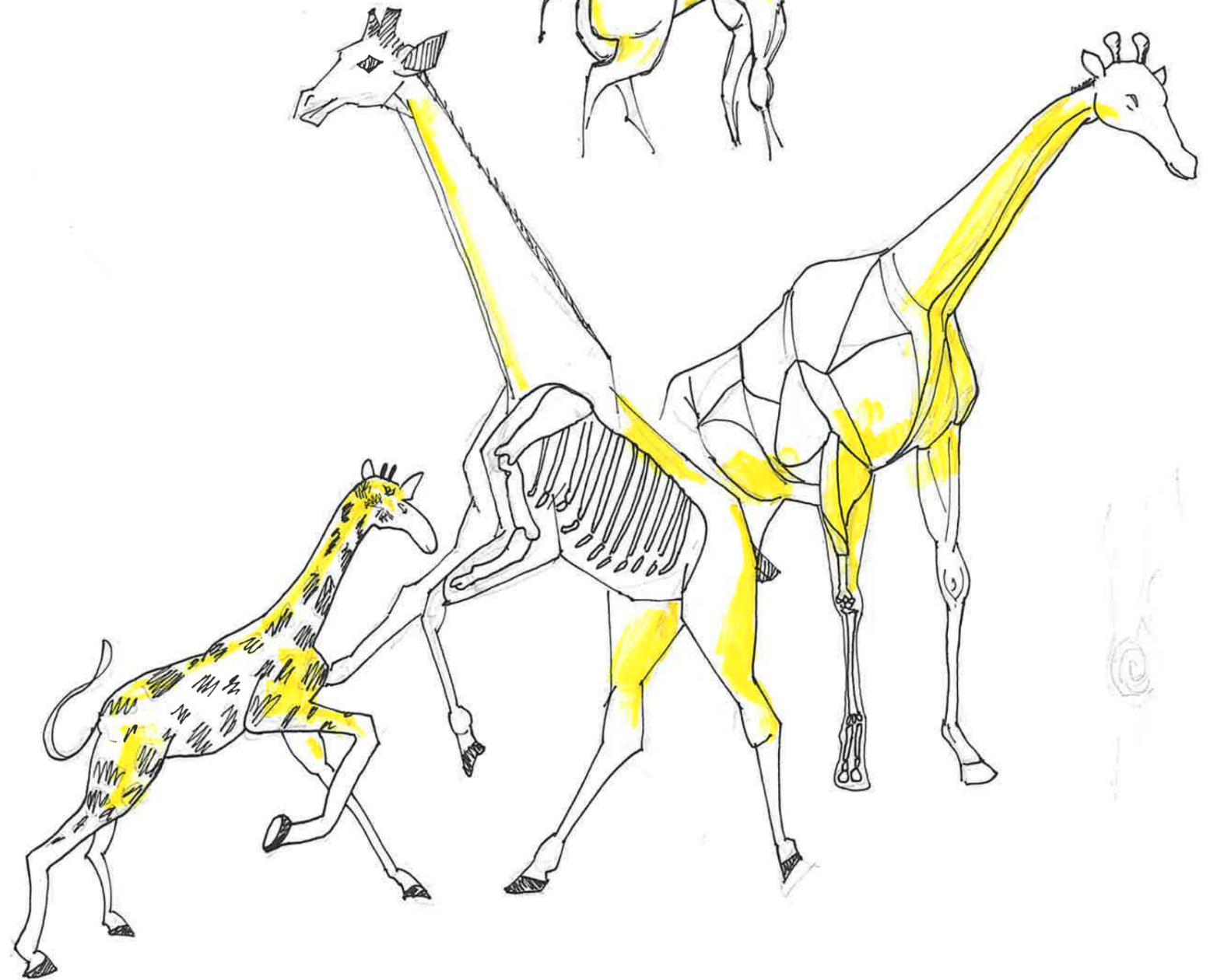
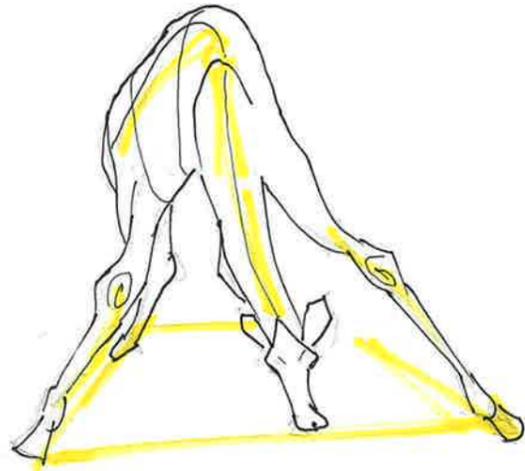
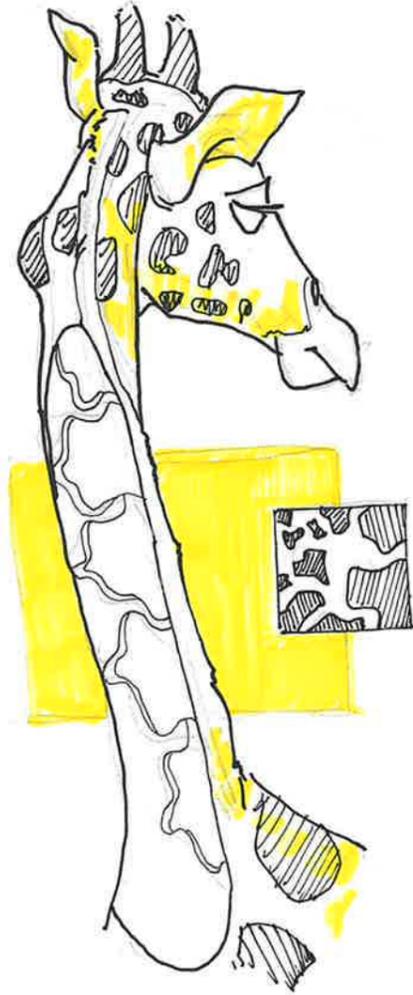
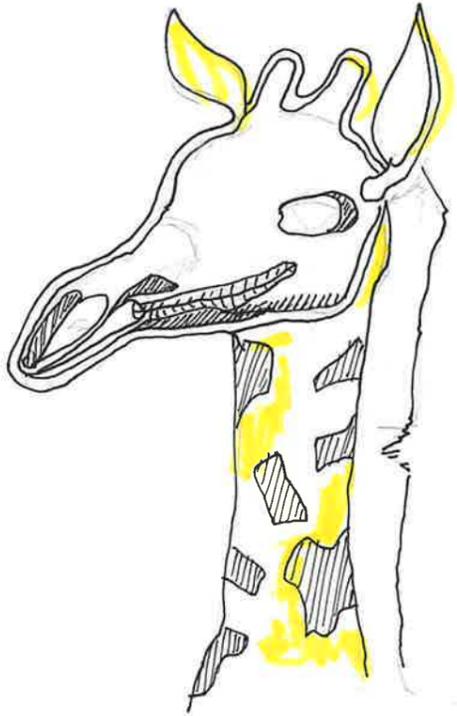
IDEATION 3

DECONSTRUCTION - EYE & FACE



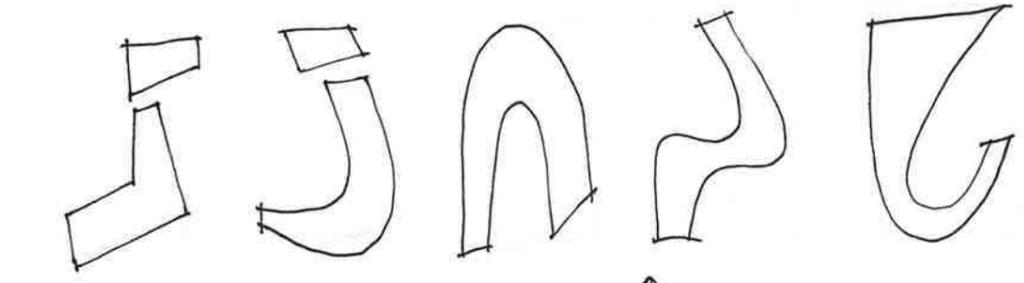
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SUBJECT DESTRUCTION: GIRAFFE ANATOMY

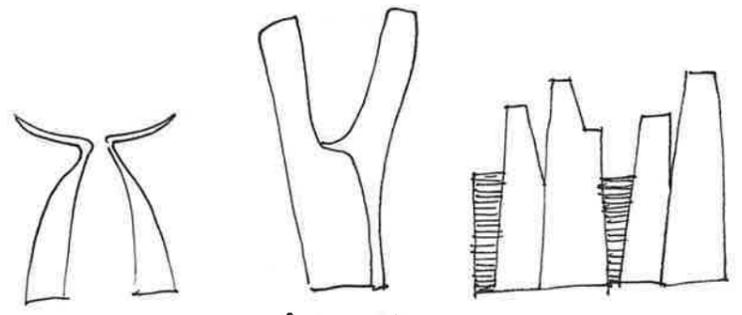
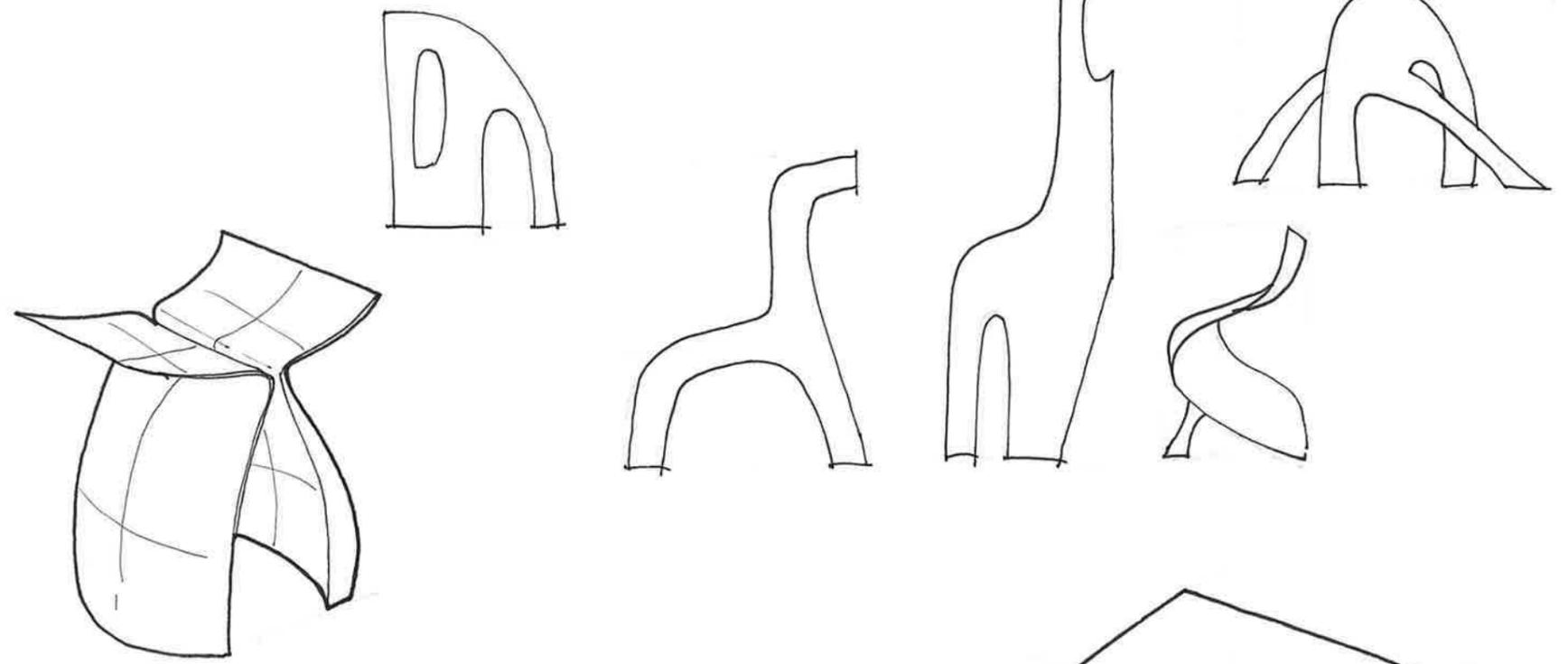
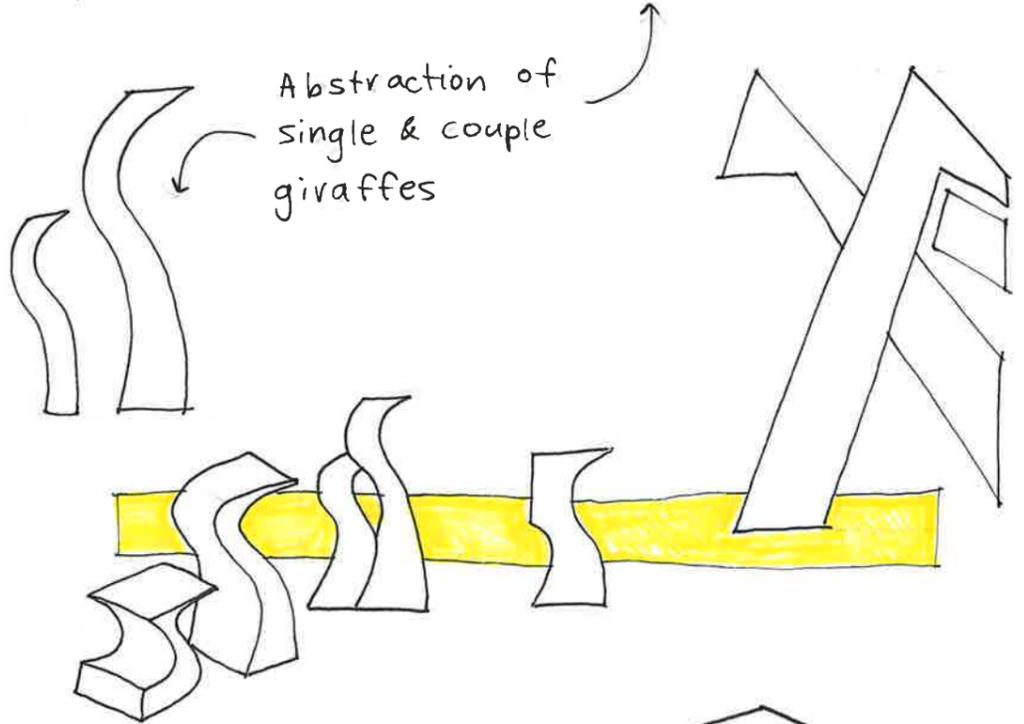


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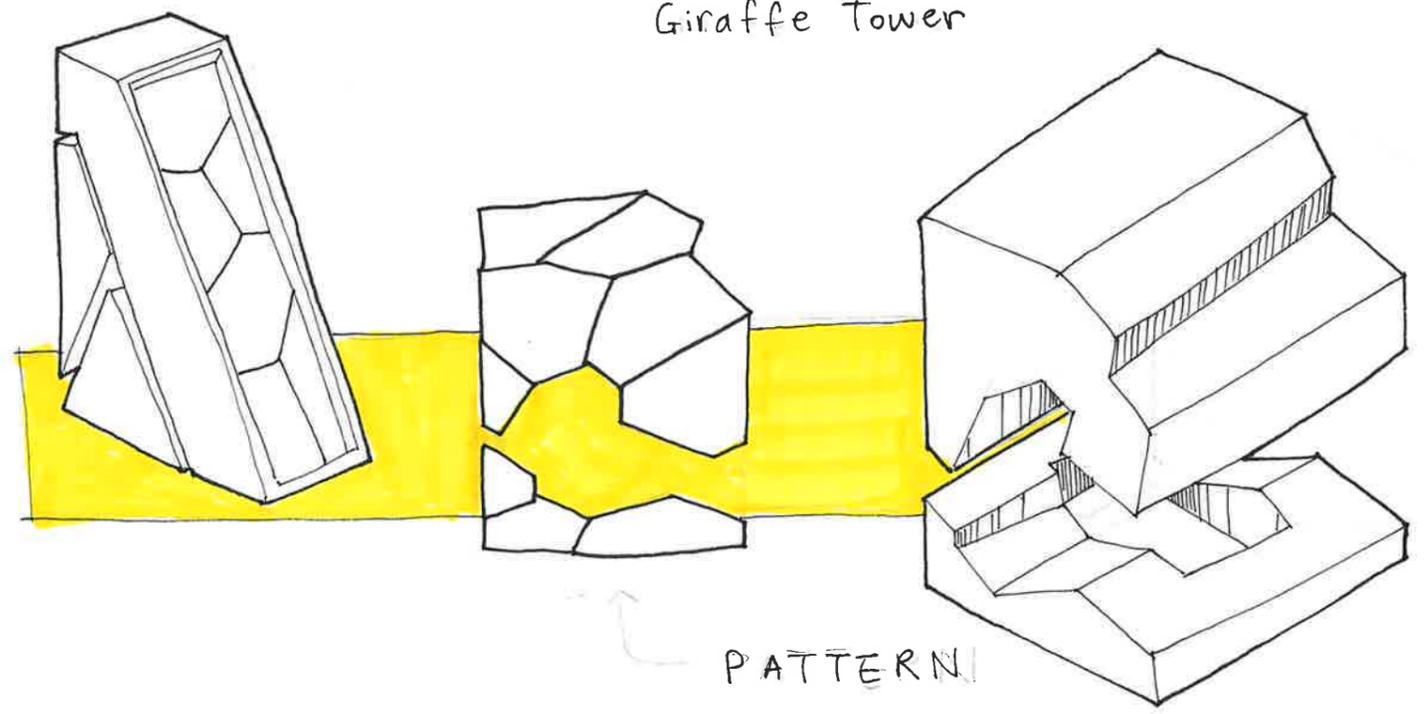
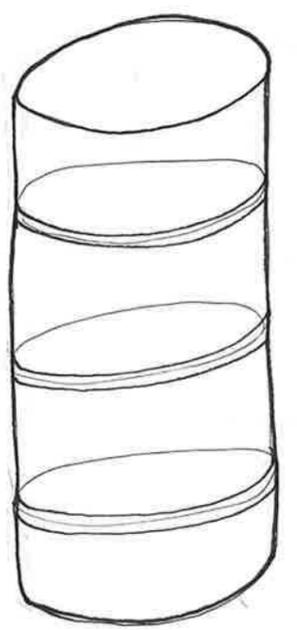
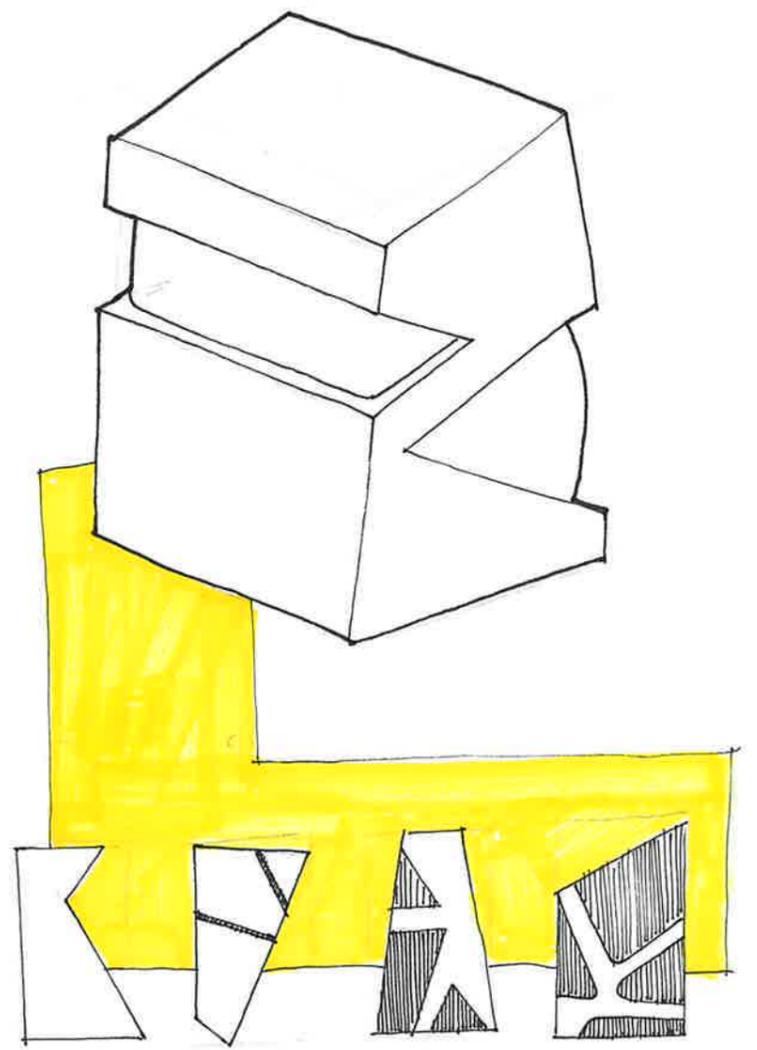
DESTRUCTION - ABSTRACTION



Abstraction of single & couple giraffes

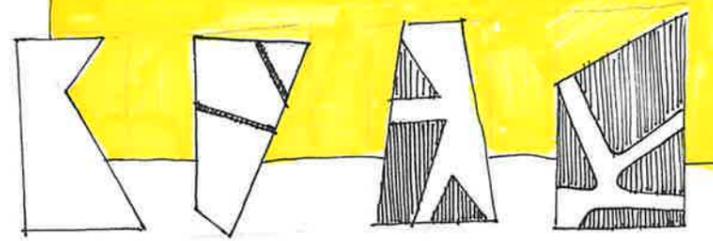


Giraffe Tower



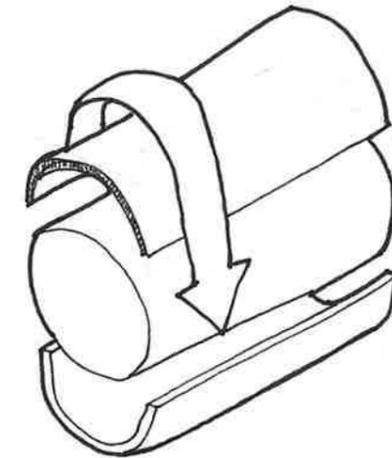
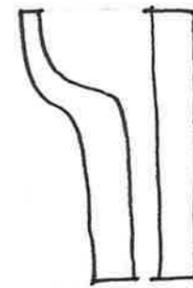
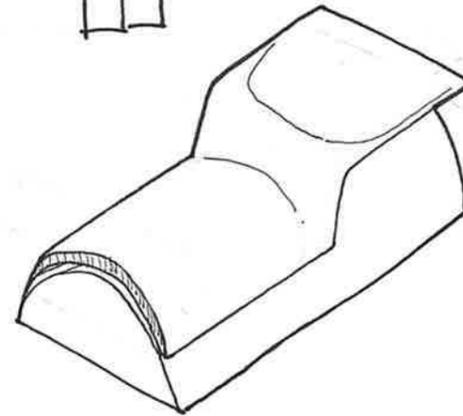
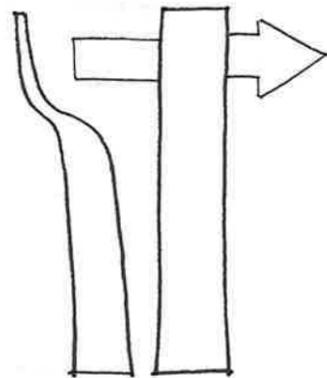
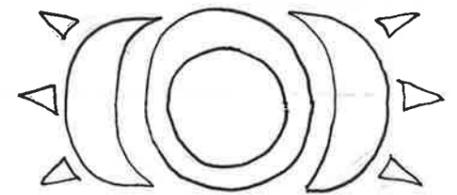
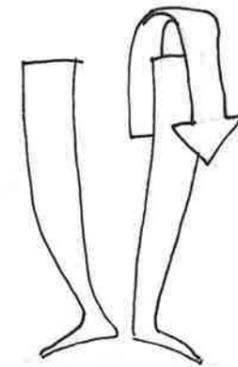
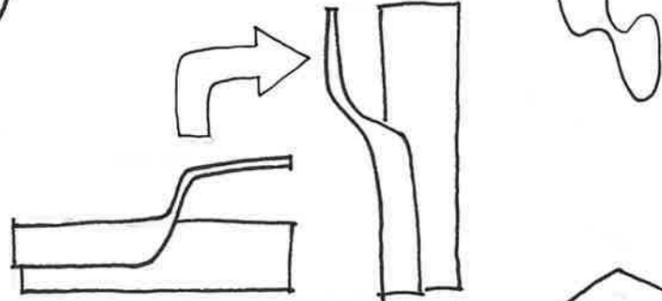
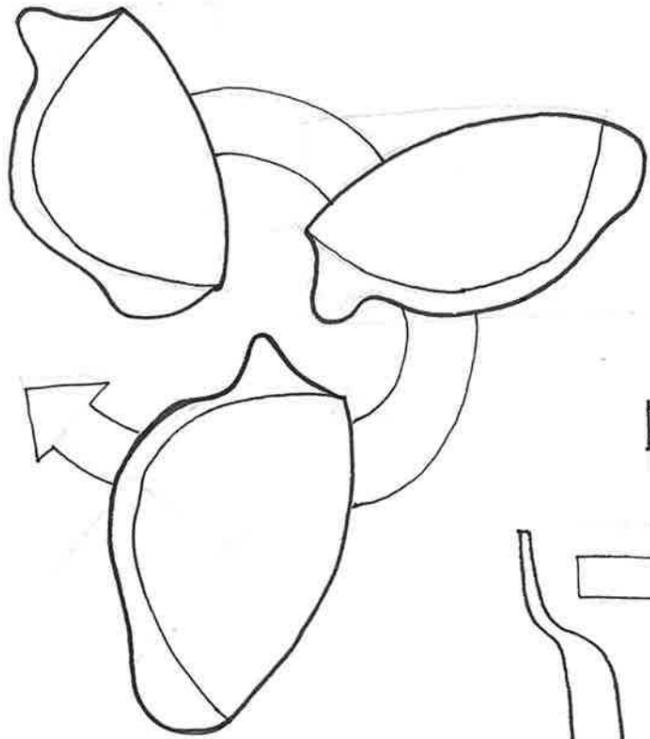
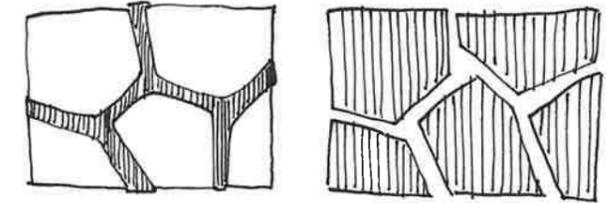
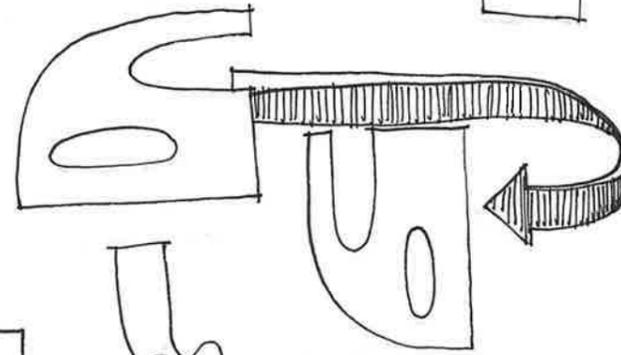
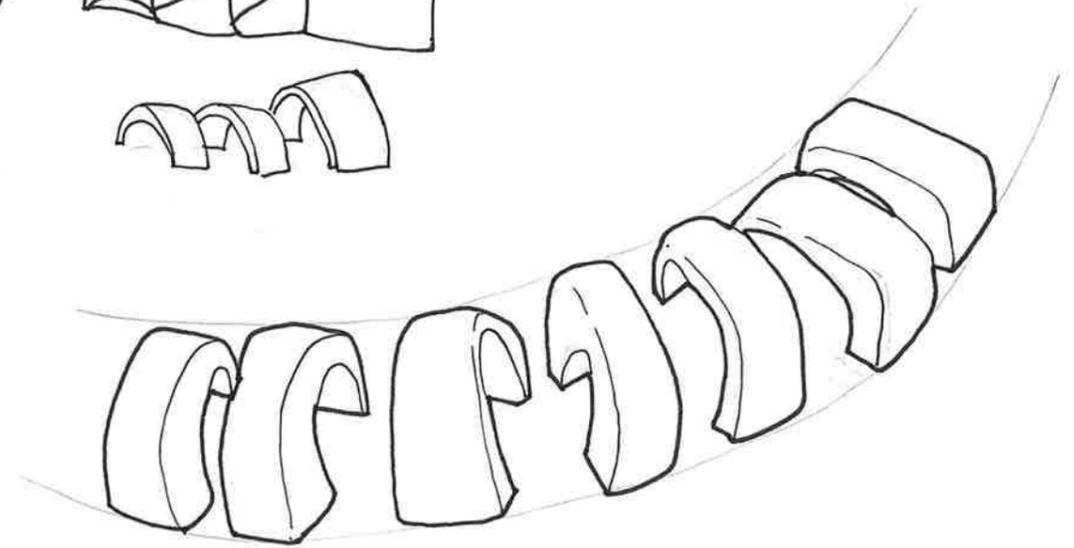
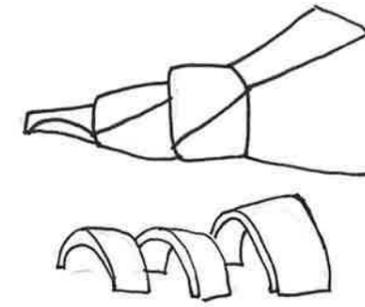
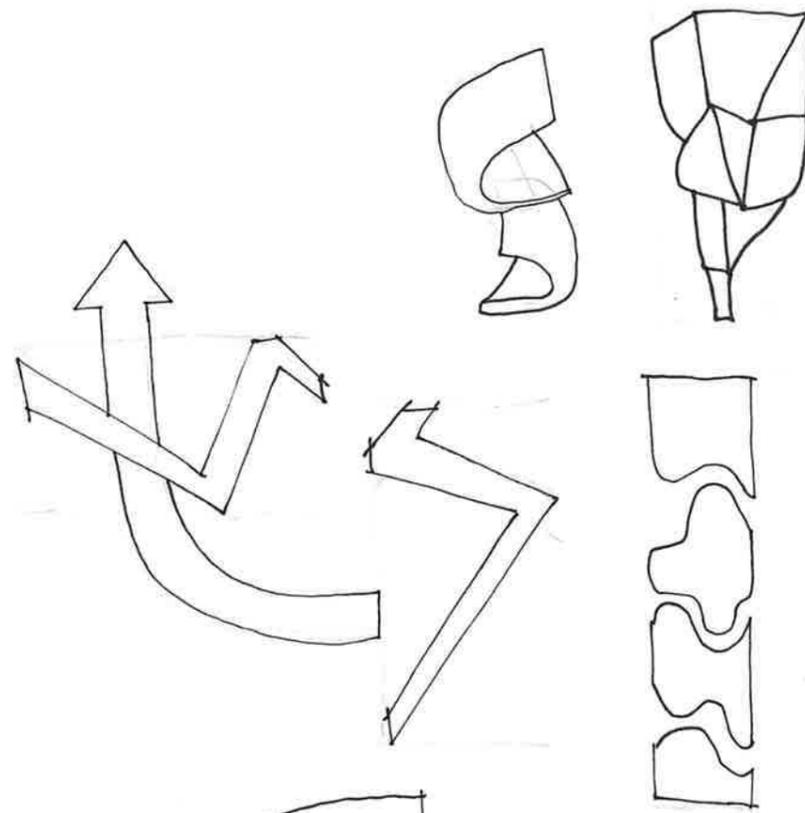
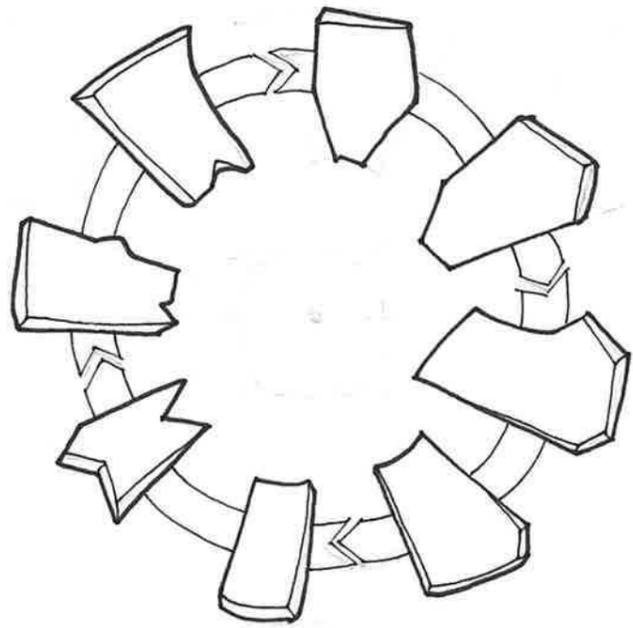
PATTERN!

Analysing individual pieces of pattern:



IDEATION 6

ROTATION · INVERSION



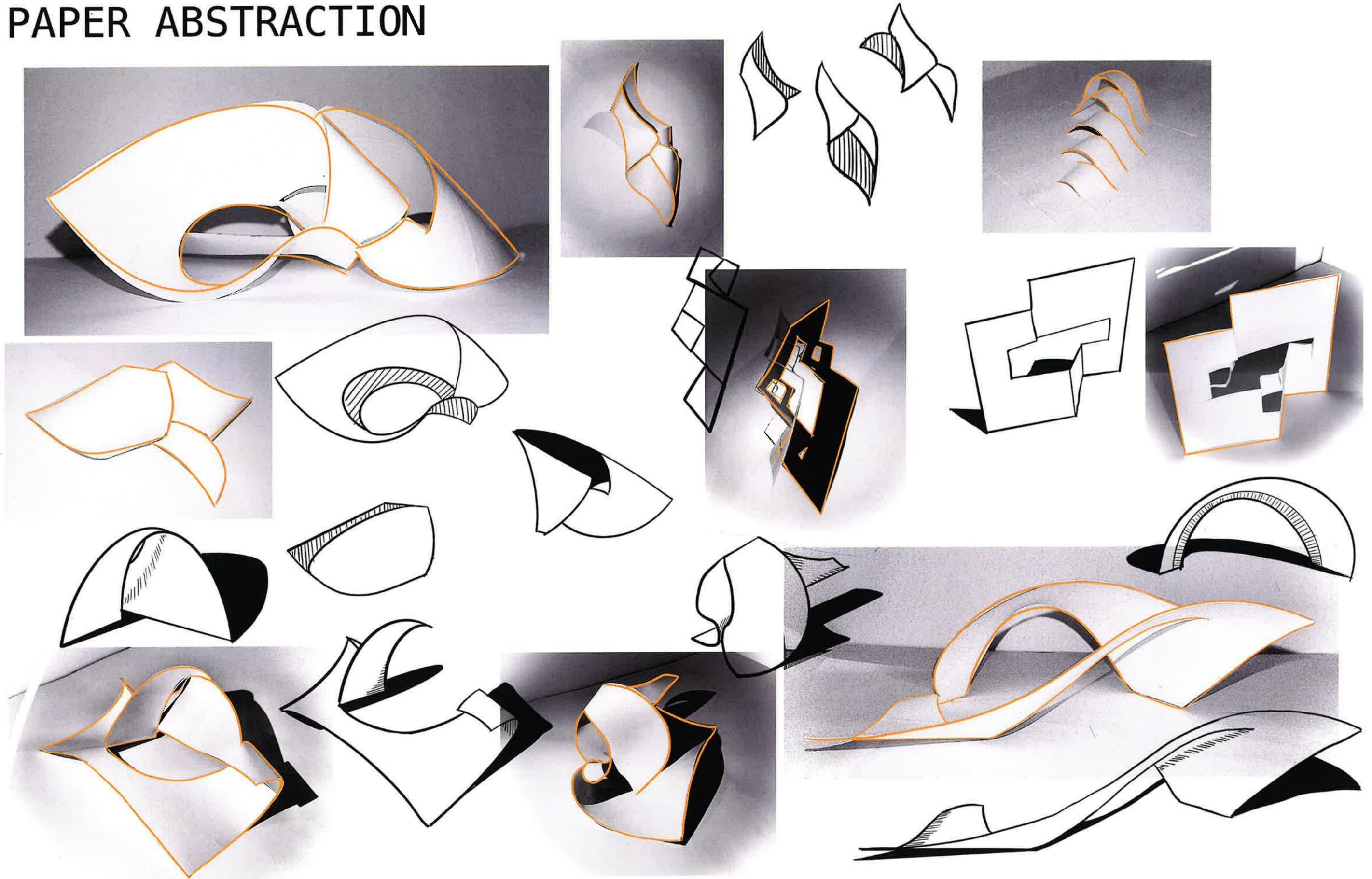
IDEATION 7

TESSELLATION & MIRROR

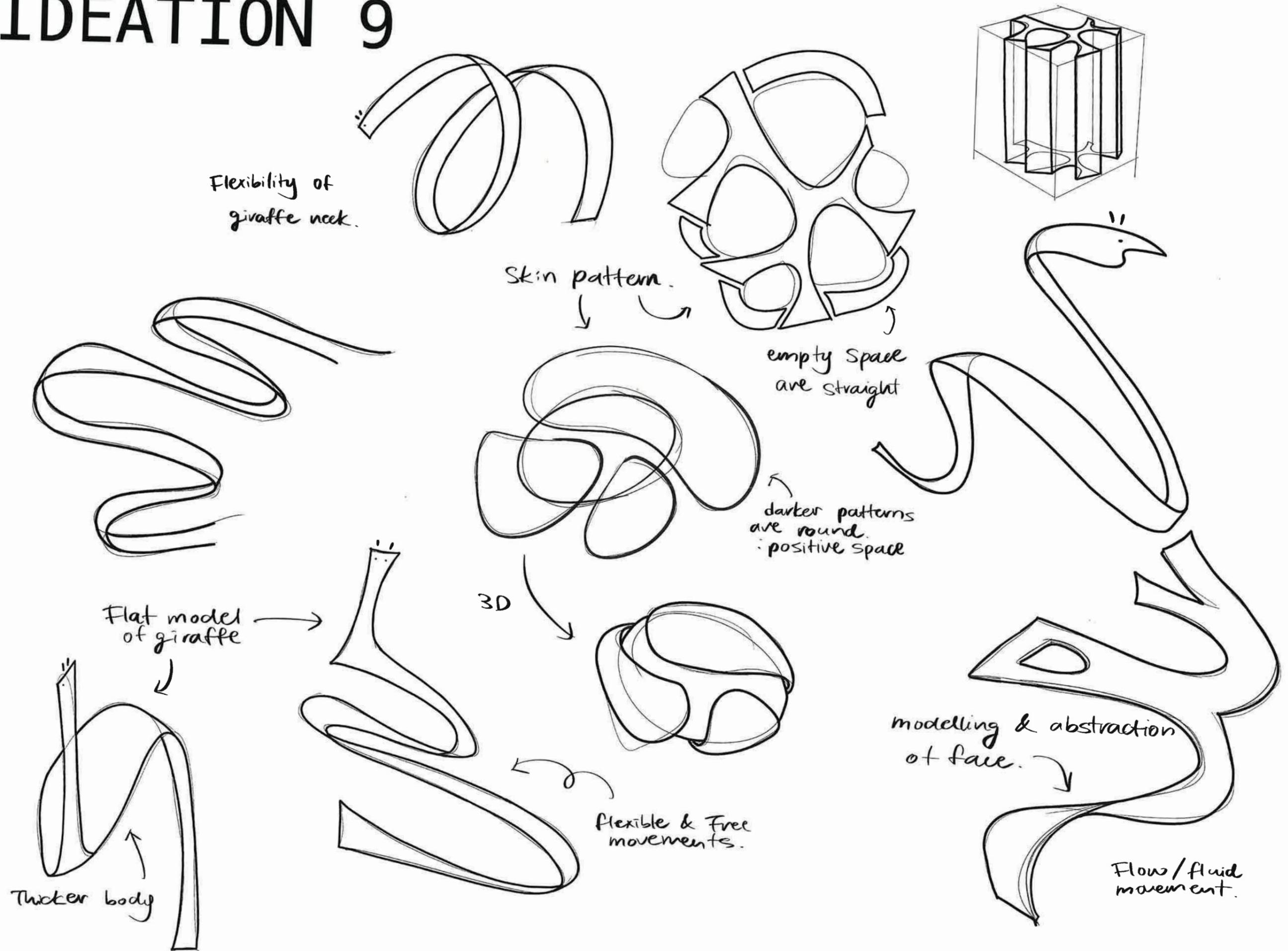


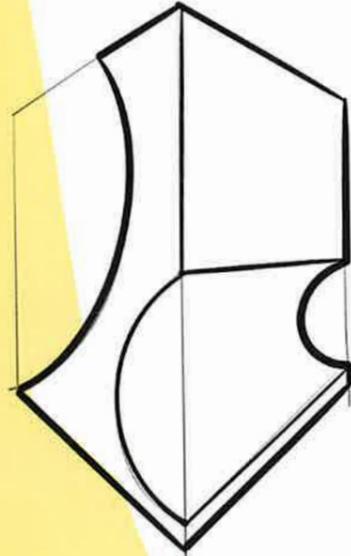
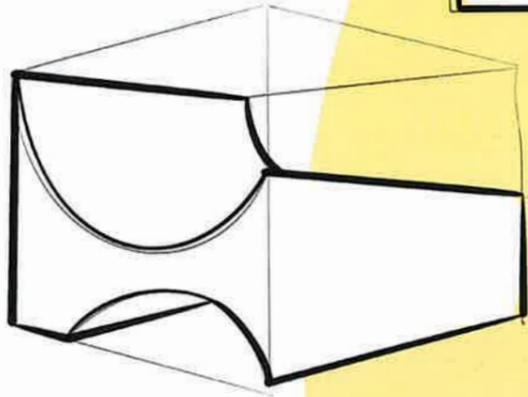
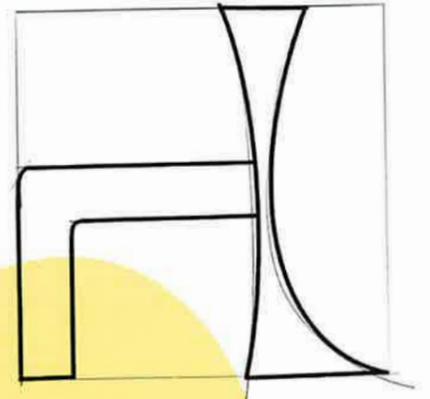
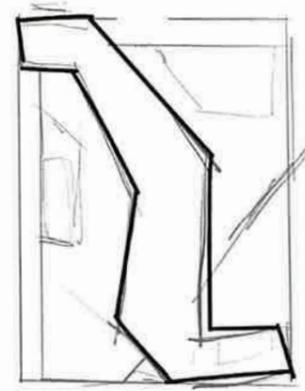
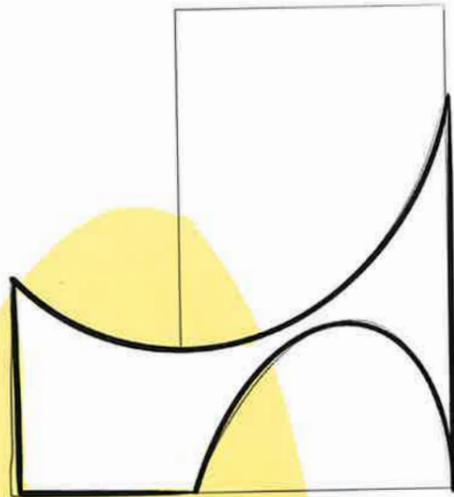
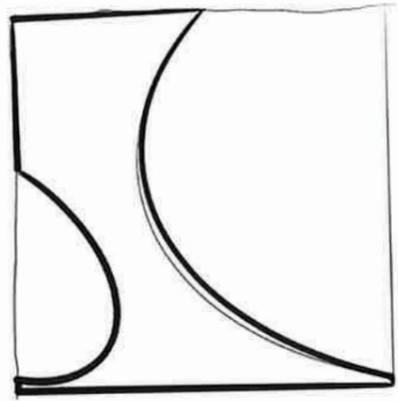
IDEATION 8

PAPER ABSTRACTION

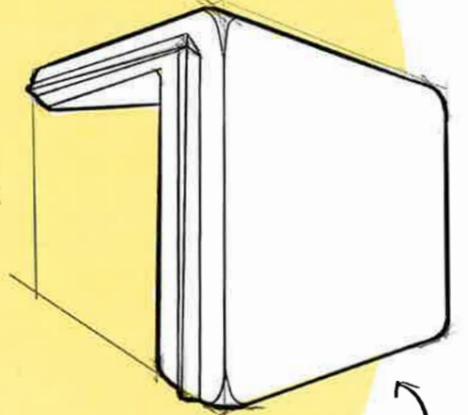


IDEATION 9



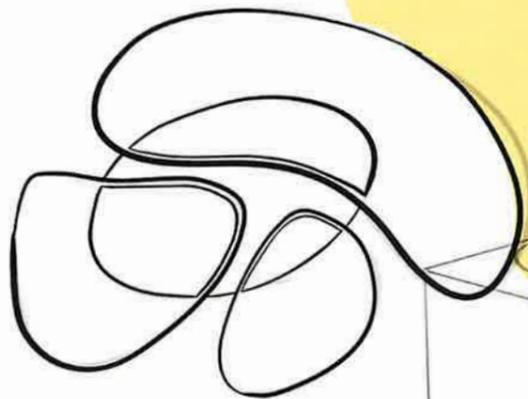


holder

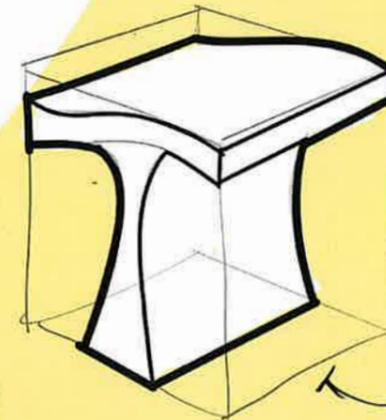
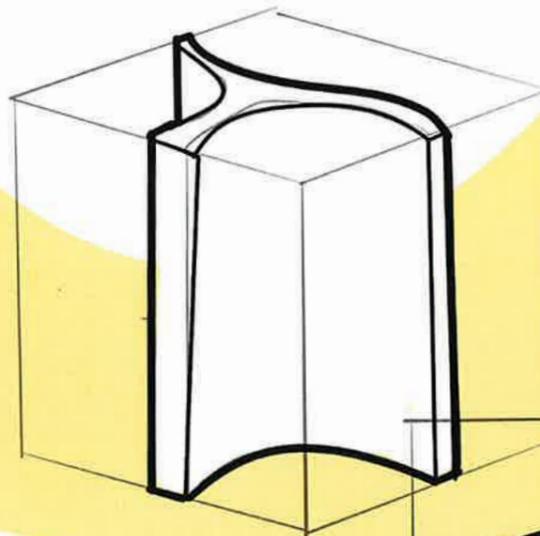
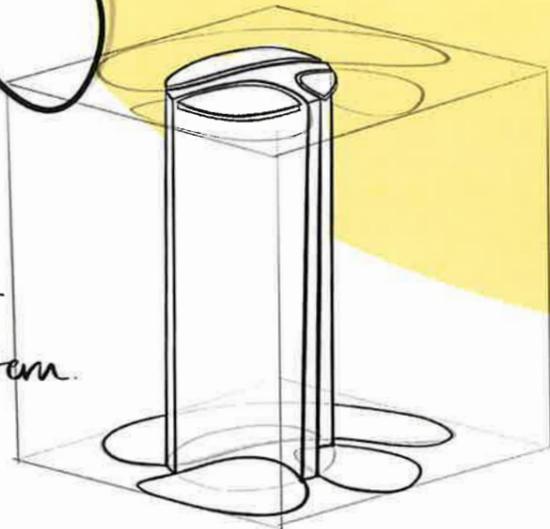


stand

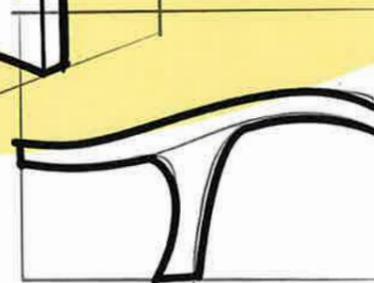
extreme abstraction
of giraffe body



standing model.
↳ cooperate pattern



wavy movement
stand



IDEATION 10

RESEARCH - BREIF ONE

The giraffe is a tall African hoofed mammal belonging to the genus Giraffa. It is the tallest living terrestrial animal and the largest ruminant on Earth. Traditionally, giraffes were thought to be one species, Giraffa camelopardalis, with nine subspecies

Adaptations

Giraffes are well adapted to life in a savannah. They drink water when it is available but can go weeks without it, they rely on morning dew and the water content of their food. Their very long necks are an adaptation to feeding at high levels in the treetops.

Relative product ideas

drink bottle holder

Water dispenser

Colors

A giraffe's coat color can range from light tan to nearly black, depending on what the giraffe eats and where it lives. Giraffe coat colors vary from light tan to practically black. Each giraffe's markings are as individual as human fingerprints.

Predators

Young giraffes are self-sufficient but vulnerable. A young giraffe can even survive early weaning at two or three months. Although few predators attack adults, lions, hyenas, and leopards take their toll on the young. Once it's been born, it only takes a giraffe about half an hour until it can stand up. It can also run after just 10 hours.

The giraffe's height also helps it to keep a sharp lookout for predators across the wide expanse of the African savanna, essentially a tall 'sentinel'.

Relative product ideas

Support stand

Walking stick/crutches

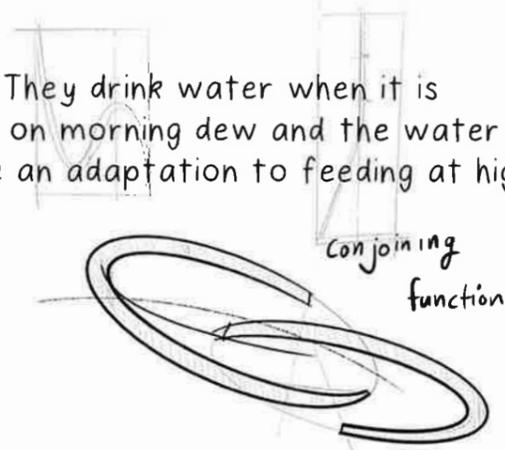
Habits

Giraffes stand up pretty much all the time. They even sleep and give birth standing up. Giraffes don't need much sleep. They have one of the shortest sleep requirements of any mammal. Giraffes don't need much sleep, only between 10 minutes and 2 hours.

Relative product ideas

Light pole

Alarm clock

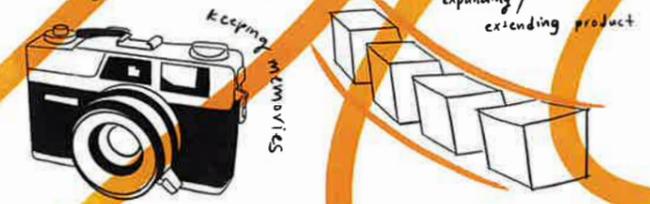


Environment

Most giraffes live in grasslands and open woodlands in East Africa, especially in reserves such as the Serengeti National Park and the Amboseli National Park. Some are also found in the reserves of Southern Africa

Physical characteristics

With the aid of its long neck, a giraffe is able to reach leaves, fruit and flowers high up in Vachellia or Senegalia (formerly Acacia) and other sought after tree species. Their 45 cm long tongue combined with a modified atlas-axis joint that lets the head extend vertically, further increases the height advantage

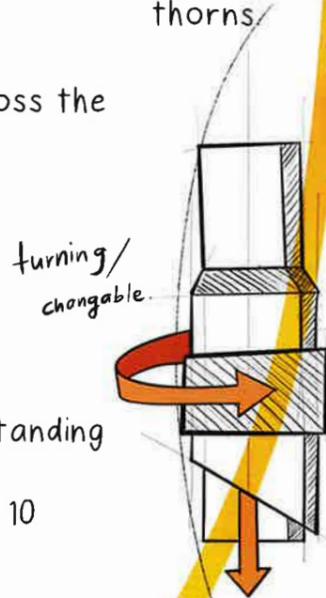


The gait of the giraffe is a pace (both legs on one side move together). In a gallop, it pushes off with the hind legs, and the front legs come down almost together, but no two hooves touch the ground at the same time. The neck flexes so that balance is maintained. Speeds of 50 km (31 miles) per hour can be maintained for several kilometres, but 60 km (37 miles) per hour can be attained over short distances.

Both male and female giraffes have horns already at birth. These ossicones lie flat and are not attached to the skull to avoid injury at birth. They only fuse with the skull later in life.

Food

Giraffes eat new shoots and leaves, mainly from the thorny acacia tree. The tongue and the inside of the mouth are lined with tough tissue that protects against the thorns.



Brief:

As humans, keeping hydrated is one of our most basic needs. Yet, despite centuries of innovation, hydration products have yet to have development, in particular, water dispensing products in New Zealand. It would be expected that, being one of the most environmental friendly countries, with high amounts of natural spring water, there would be a higher demand for improvement in water systems, however when compared to other countries, water dispensers simple, basic, and undeveloped.

RESEARCH

1500BC

: On the walls of the tomb of Egyptian ruler Amenophis II are the first pictures of a water filtration system in use. Again, using sand to filter the water, you can almost imagine these two Egyptians gathered round their 'water cooler' like we do today!



1671

: an Italian physician called Lucas Antonius Portius, who employed a system of three pairs of sand filters with an upward and downward flow filtration system to make water safe again.



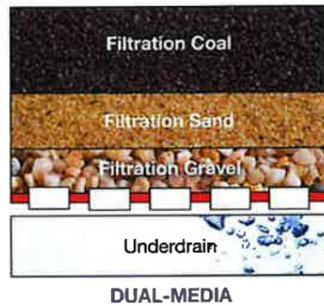
1906 - 1938

: the water cooler we know know was first invented by Halsey Willard Taylor and Luther Haws. The main reason behind the invention was to not only chill but to provide purified water. Contaminated drinking water caused typhoid fever in Haws' father who died as a result; provide a safer drinking water - these original water coolers also used heavy glass bottles, making them difficult to move and transport.



2000BC

: The pursuit of clean drinking water is something that has driven mankind since we stumbled out of our caves with burning sticks in our hands. The first written record of a water purification system is in the Sanskrit medical writings known as the Sus'ruta Samhita which includes such methods as boiling water over a fire, leaving it out in the sun, and filtering it through layers of gravel and sand. A process still used today!



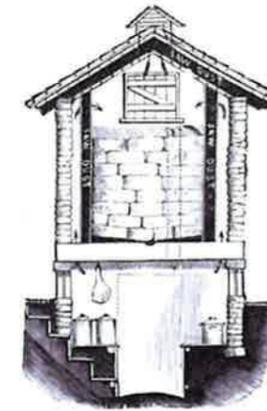
500 - 1500

: In the middle ages most water came from rivers and lakes, which is also where most of the human waste was deposited. This led to constant outbreaks of Typhoid and Cholera, causing uncountable deaths.



1840'S

: rich Victorians started the idea of drinking chilled water as a beverage and came up with the first water cooler in its most basic form. huge blocks of ice were used to chill the contents of the water cooler but this meant that the unit itself was large and extremely heavy which required the use of several men to move it.



1980'S

: With plastics becoming increasingly popular, plastic bottles replaced the original glass ones – making water coolers a lot more accessible due to the ease at which plastic bottles could be transported. They started to spread across the globe



NOW

: Water coolers have evolved along with the times and today are compact, light, energy efficient and come in a variety of models and styles to suit most places. Today, many water coolers or dispensers include a heating element to provide hot water along with chilled water. These dispensers must also adhere to strict regulations, meeting health, sanitation and environmental standards.



Situations

Some offices prefer to have a water dispenser because it provides clients and employees with convenient access to water, without having to take extended breaks or drive to the store.

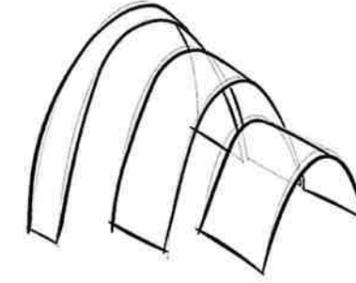
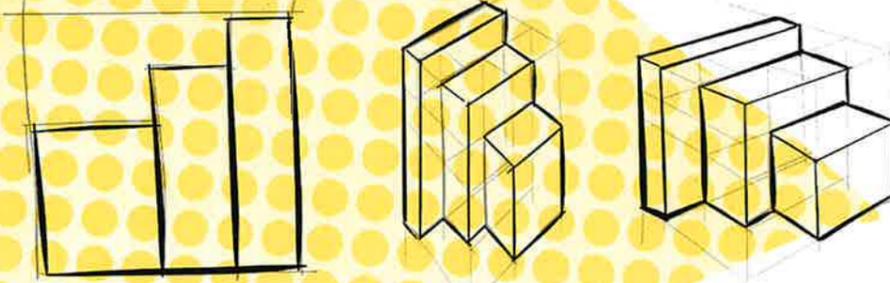
Water dispensers are also commonly used in residential homes that do not have ideal drinking water from the tap, or for people who simply do not like the taste of the tap water. Water dispensers in homes aren't popular in New Zealand compared to other developed countries. At the supermarkets, we can easily see bundles of water(24 pack pure water/spring water) in plastic bottles for less than \$10 which is non-eco-friendly.

I believe water dispensers is one of the developing products in New Zealand which made me decide to design for this product. Water is one of our most basic needs that has been around us for a very long time but yet the water purification products aren't chosen base on more than its function. They are unaesthetic, commonly in whites or bland metals. For costumers they see the functions and capacity which brings their purchase satisfactions down when it comes to the design.

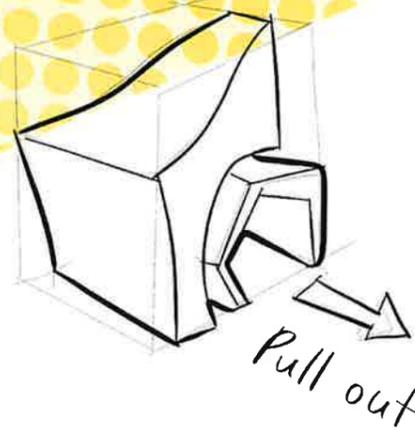
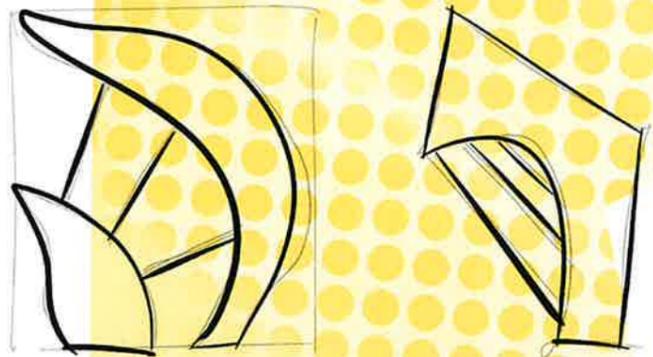
INITIAL IDEAS



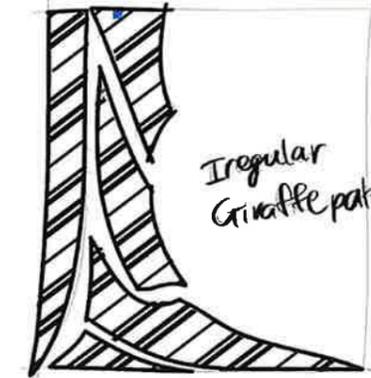
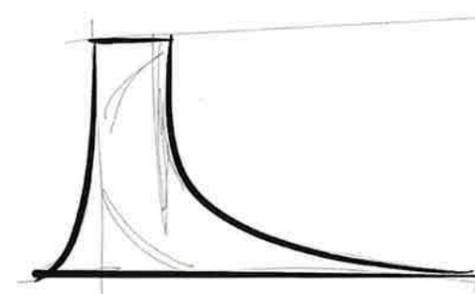
the different height and thickness



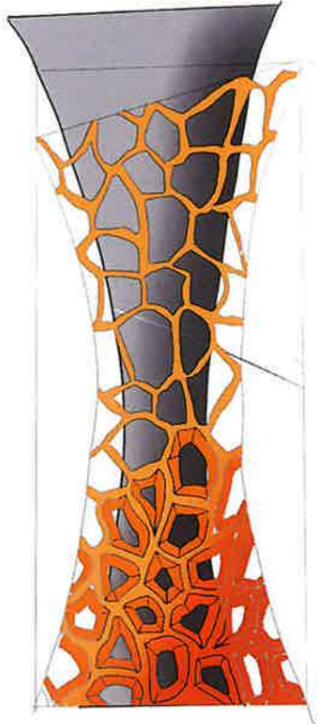
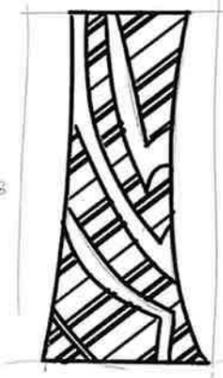
Tower style ↗



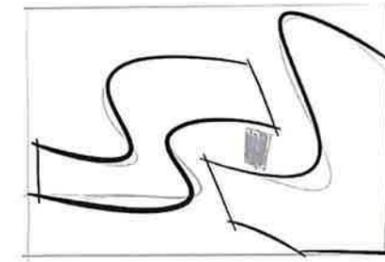
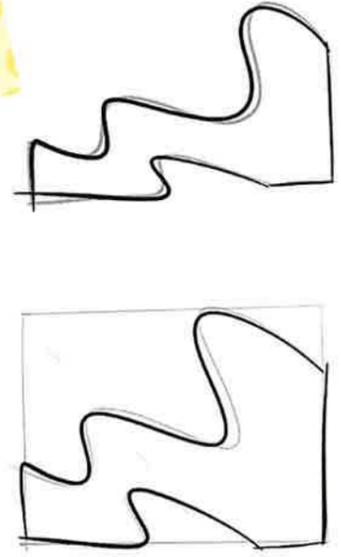
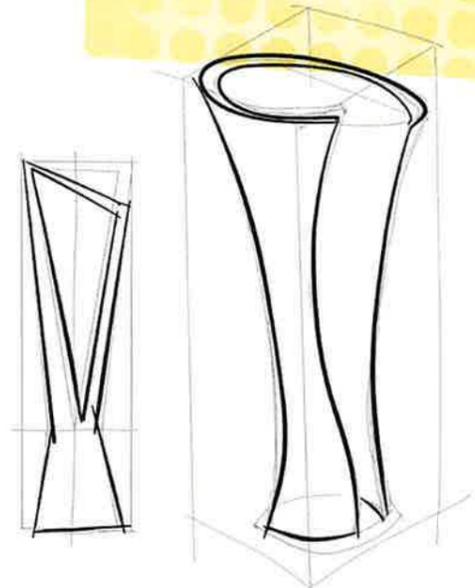
steps for children to use



Irregular Giraffe pattern



Rotation & rearrangement



collaborating the pattern.

gap between...
→ floating, or make it have other purpose.

INITIAL IDEAS

modern design.

what if the back was replaced with a slim design

sticking out button so people even without fingers can use it.

people with disabilities could drink from this

it is quite squarey

the curve an separated front face is appealing

water would be dribbling down.

long plate

abstract design. appropriate for outdoor.

stick type water releaser.

S curve on the side and smooth feeling.

fill up drink bottle

sharpe edges may be dangerous

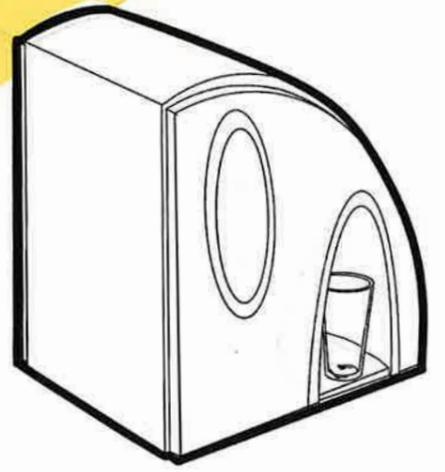
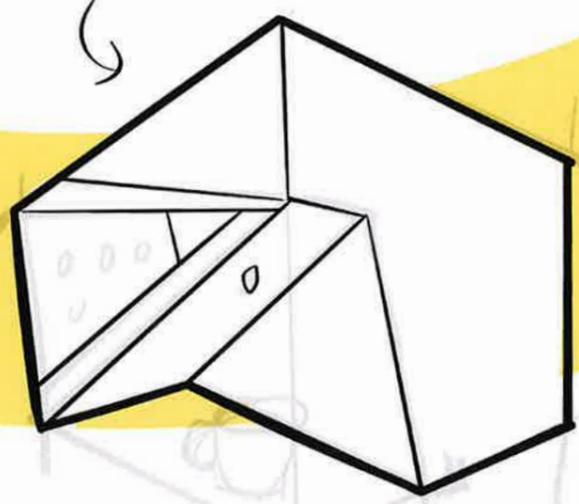
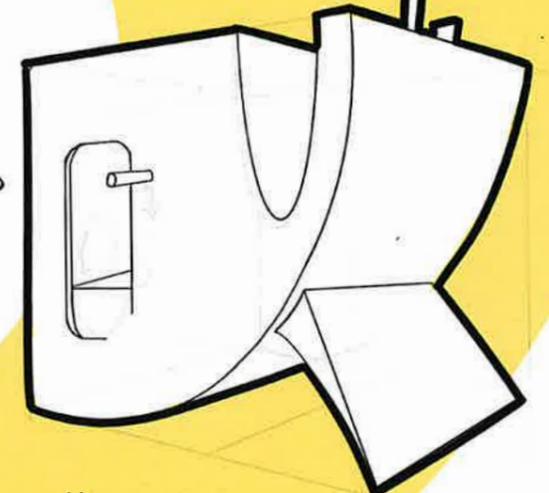
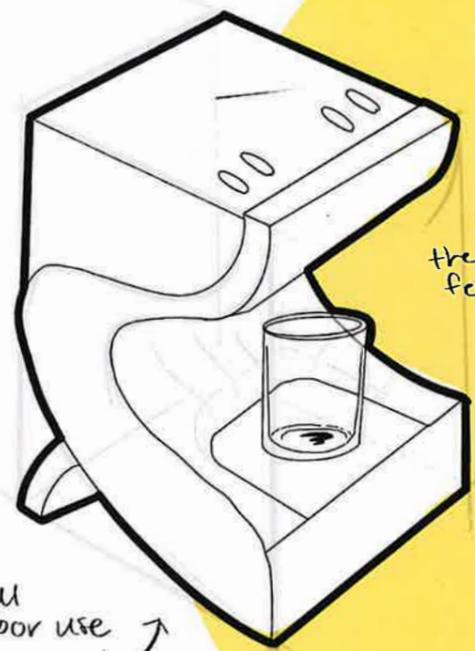
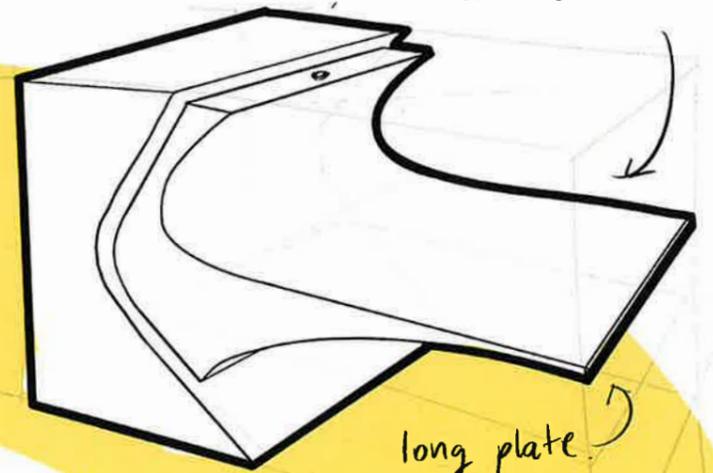
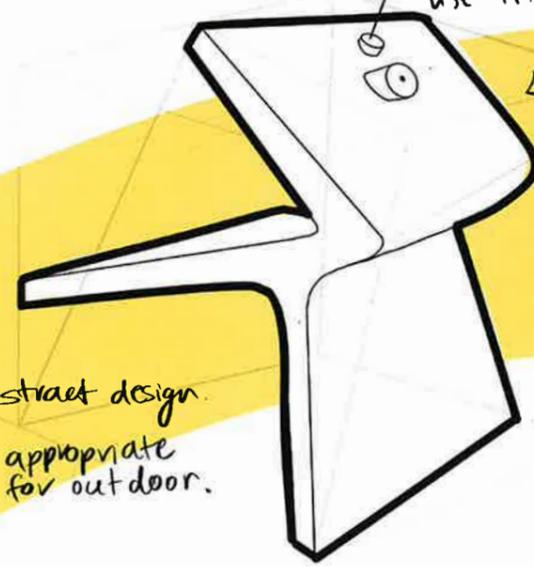
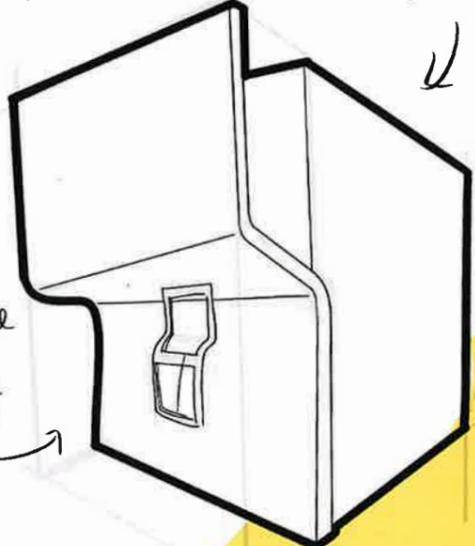
multi purpose... best in parks where variety people meet.

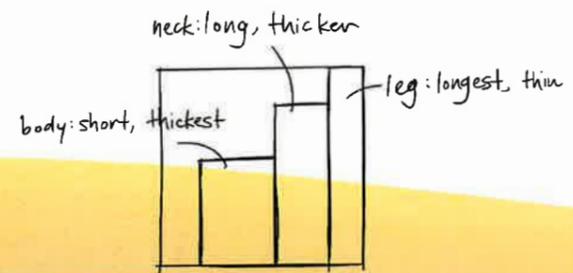
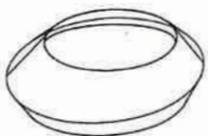
small indoor use

what if it was touch sensitive instead of a turning nod OR push...

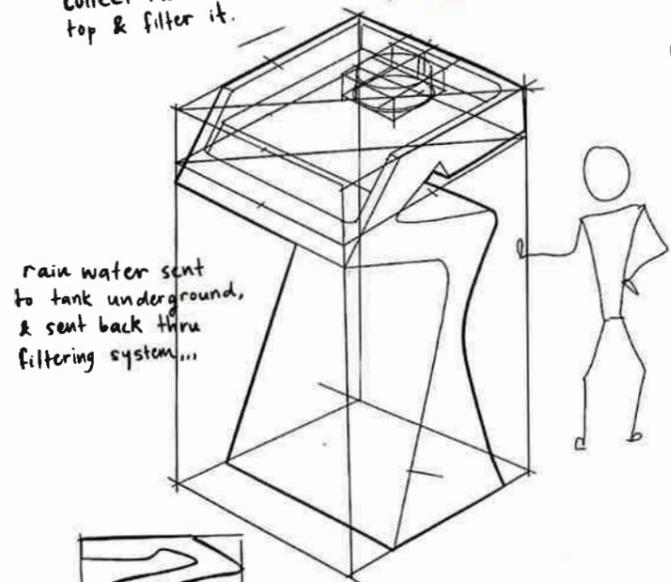
can check the water level

what if a water dispenser displayed how much you drank?

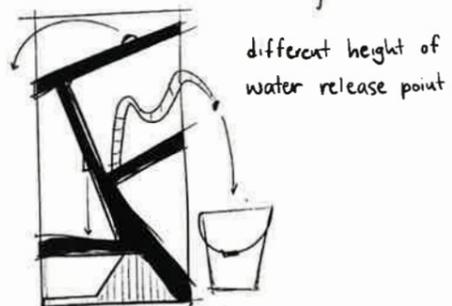




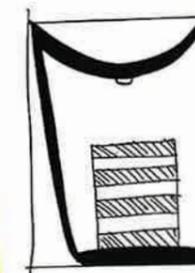
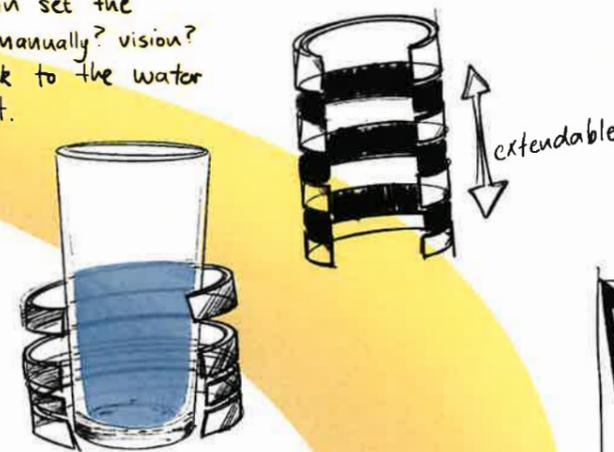
collect rain through the top & filter it.



Giraffe has different width & length of body parts

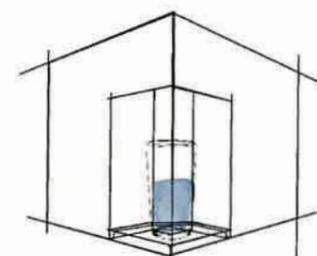
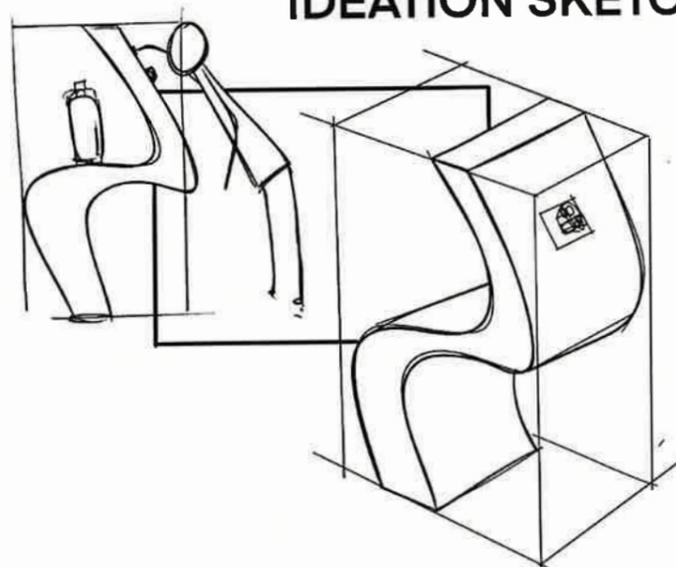
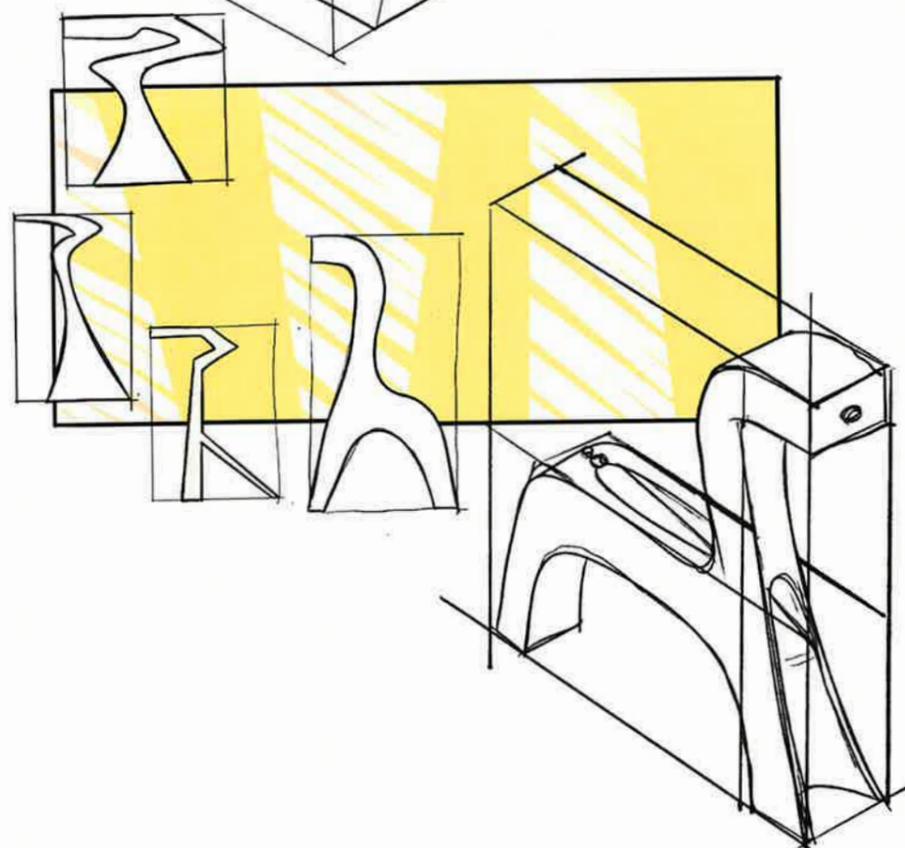


What if you can set the water height manually? vision? extend the neck to the water level you want.

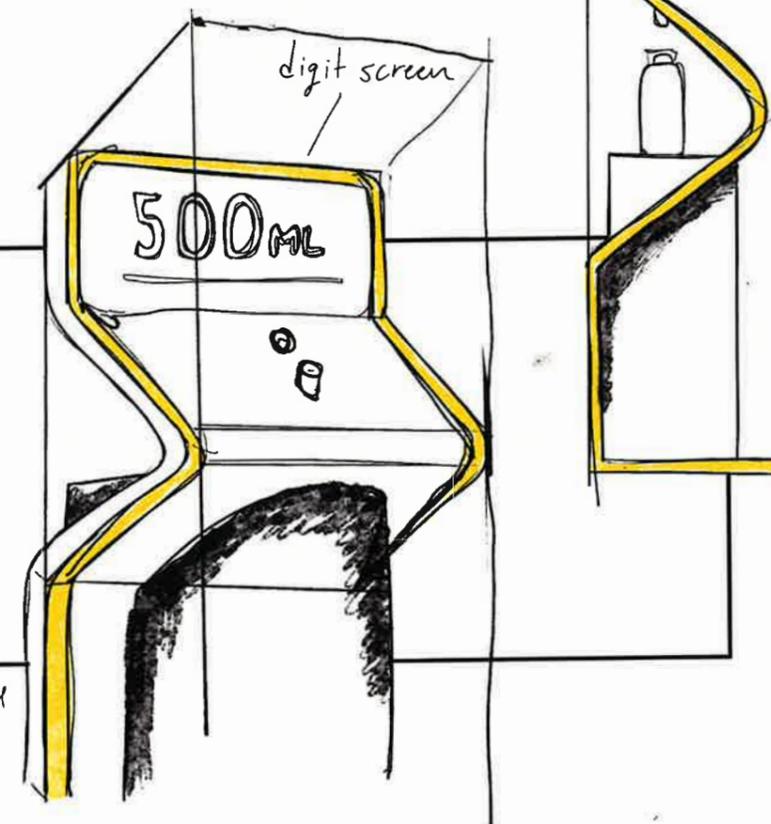
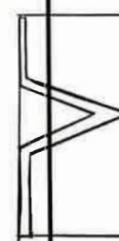
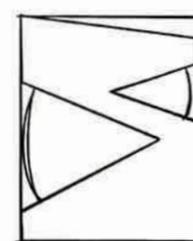
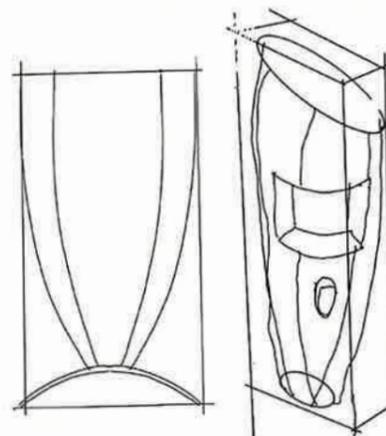
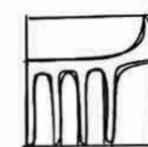


WHAT IF...

IDEATION SKETCHES

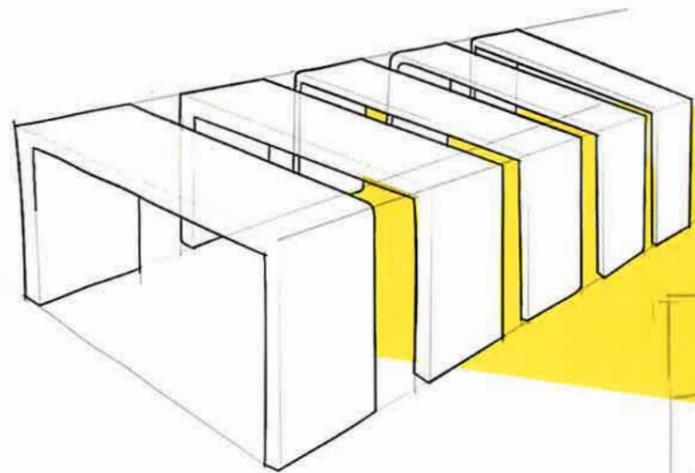


What if the corner was cut out instead of a face...



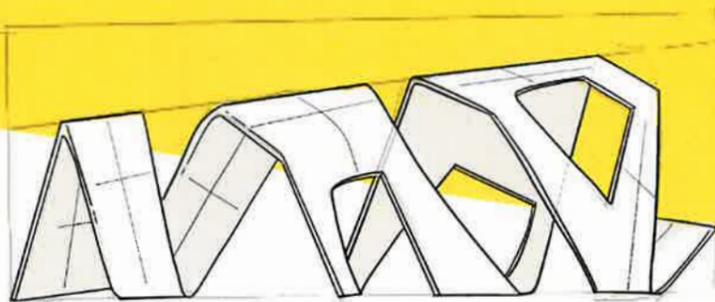
What if it showed how much water we used...

WHAT IF...



What if the water drained in a pattern?

↳ spiral?
↳ the giraffe pattern



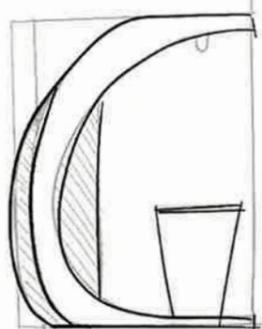
tall like a giraffe

patterns cooperated with the water dispenser.

twisted design

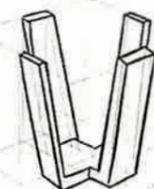
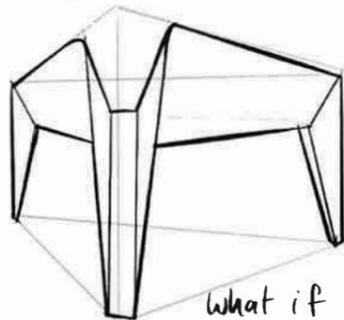
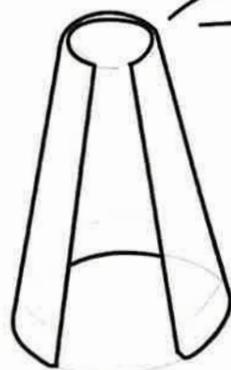
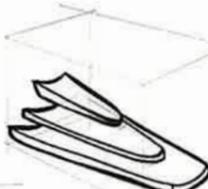
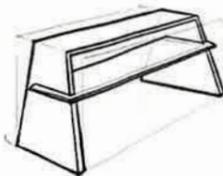
water flows down

What if the water tank was in the middle?



smart water dispenser.
→ vending machine?
↳ can give you different flavours.

What if the wasted water can be used to hydrate the plants too?



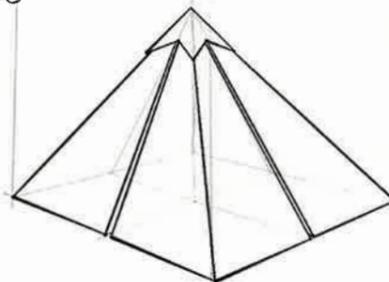
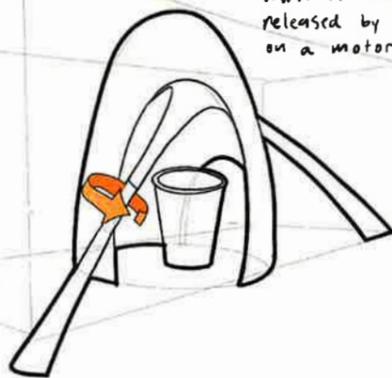
Multi-purpose?

What if 3 people could drink at the same time

What if the water was released by turning it like on a motor bike handle?

what if bigger size?
- public water fountain.

Giraffe has to spread their legs and bend down in an awkward position, to drink water.



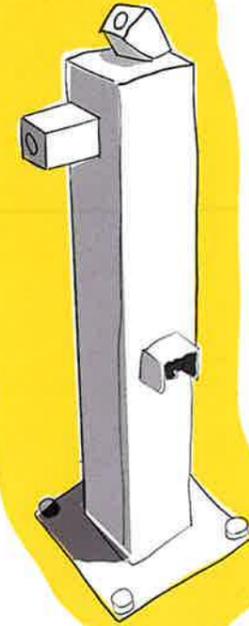
drink bottle

Standit

dogs

BRIEF 2

Design a drinking fountain to be placed in public parks for visitors (children, adults, dogs, etc) which can be used to be hydrated and fill water bottles.



WHY? Why is drinking fountains important?

Making healthier living more accessible for local people in very important and drinking water daily is a healthy choice all of us can make. People love local parks and open spaces and it is important to have enough water fountains in these areas. This can also reduce plastic waste, which is a major social issue and it can also improve health, and make it easier for families to enjoy parks.

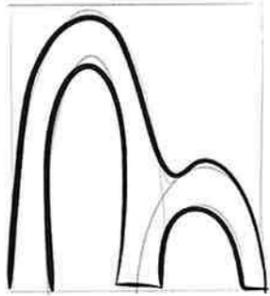
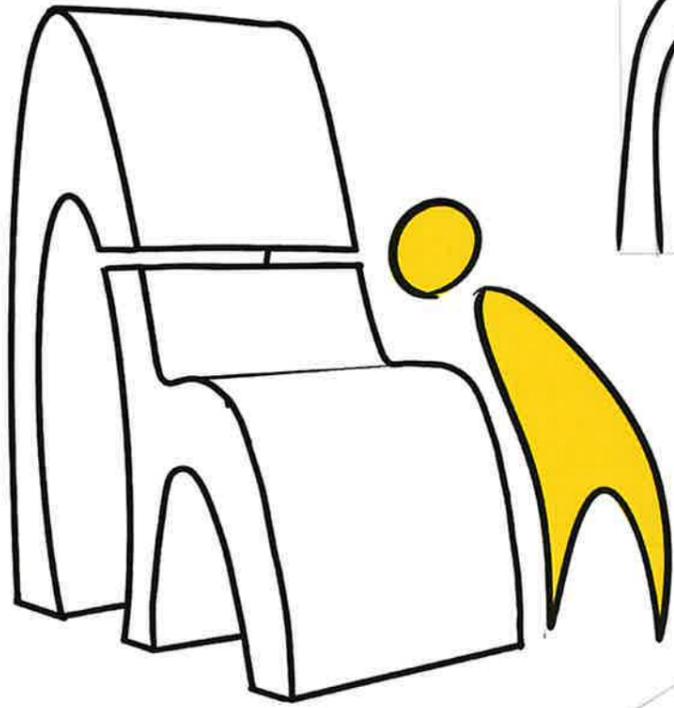
WHY? What is wrong with the drinking fountains?

I would like to consider a drinking fountain for all types of people and living beings. Just like how the tall adult giraffes may only drink once per day due to the challenges posed by needing to bend over, I would like to solve this problem in the current water fountains in parks and public areas.

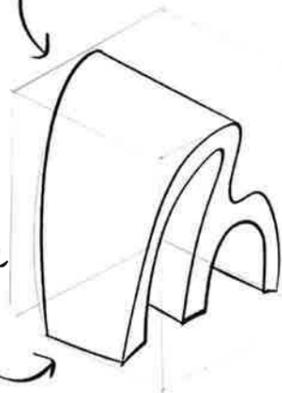
Water fountains built away from the city such as the Palmerston Esplaande can seem unhygienic and not maintained probably because of the natural environment around.



INITIAL IDEAS



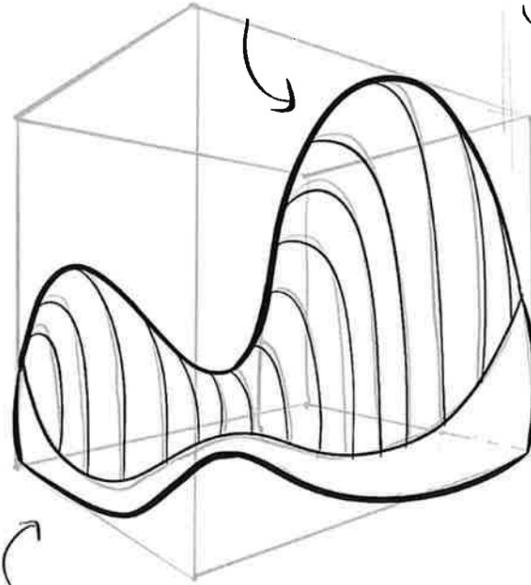
what if wider top.



go inside to drink

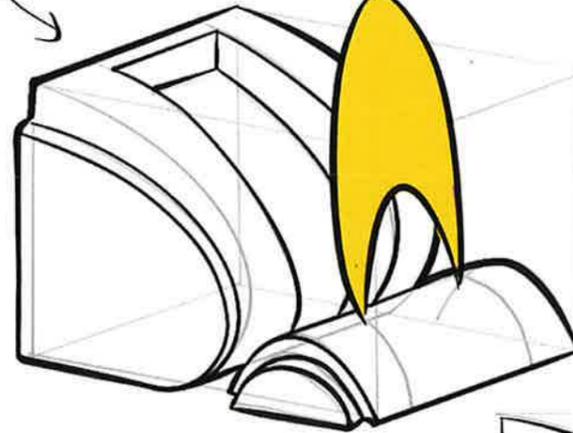
How will it be drinkable?

creates more layer

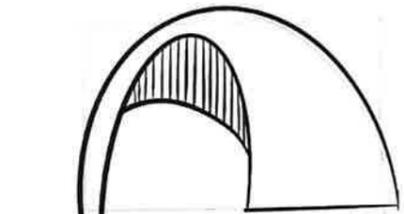
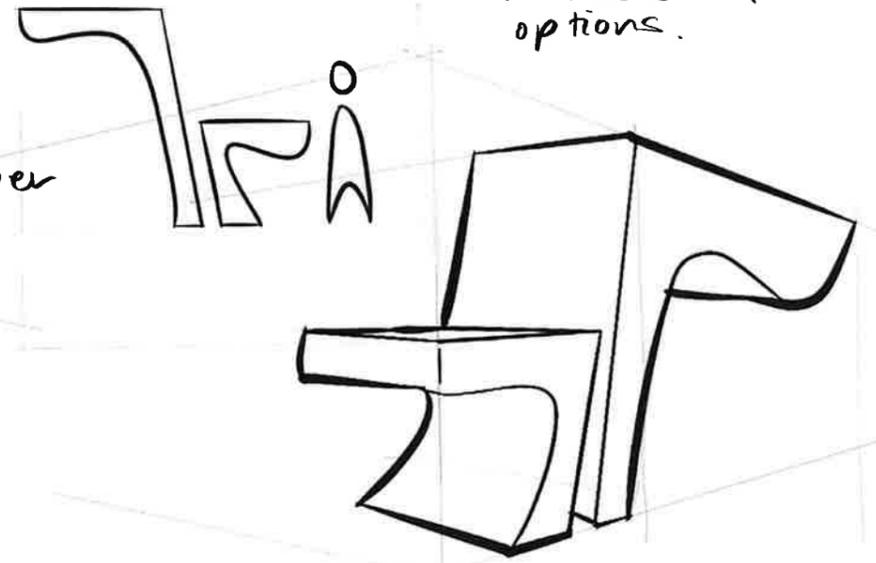


what if in egg shape.

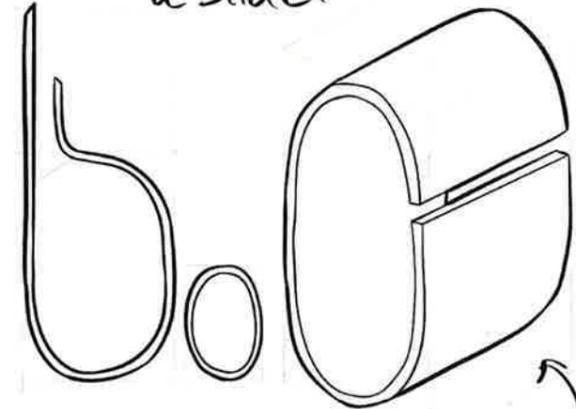
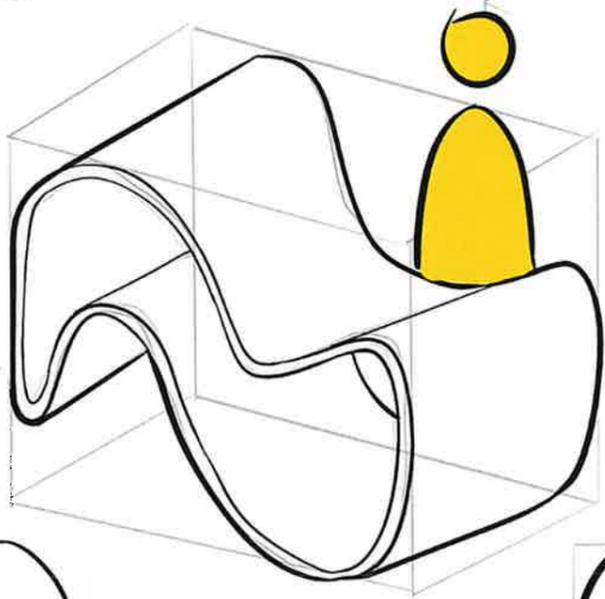
what if there was a stand that can be inflatable



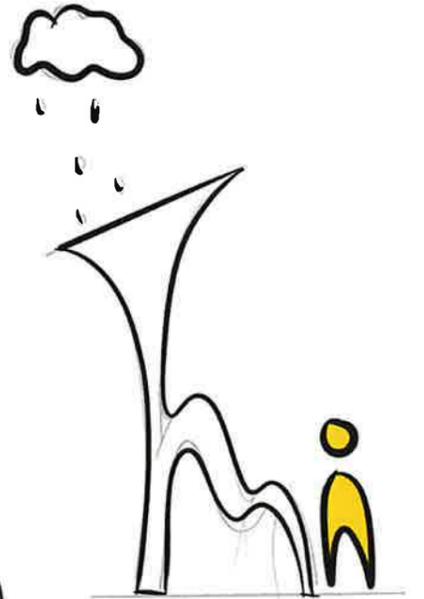
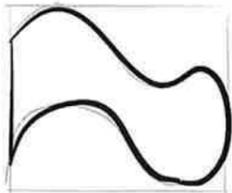
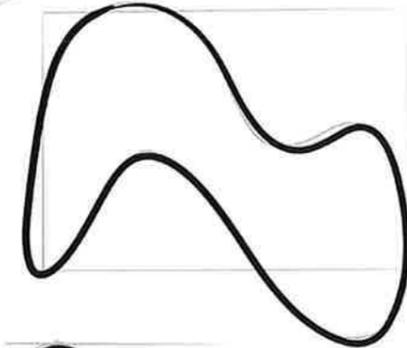
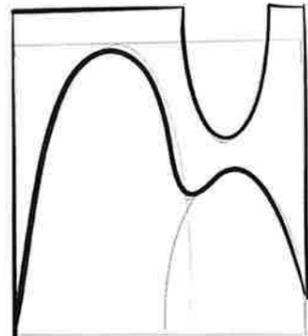
tall & short options.



what if it could be a slide.

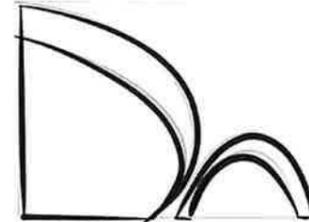


what if people could store things under the fountain?



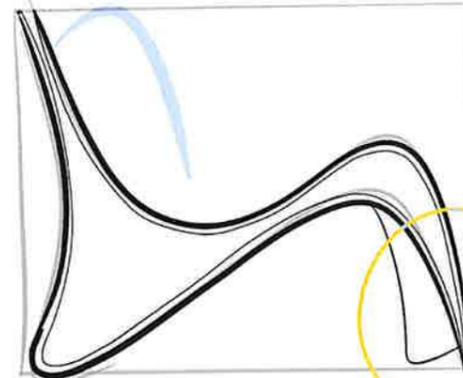
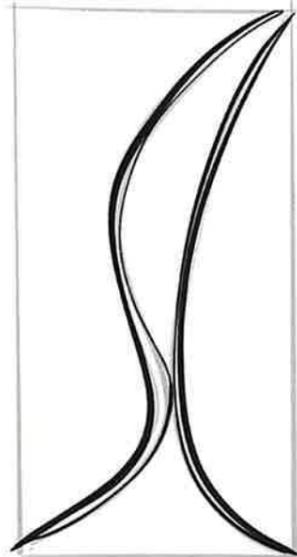
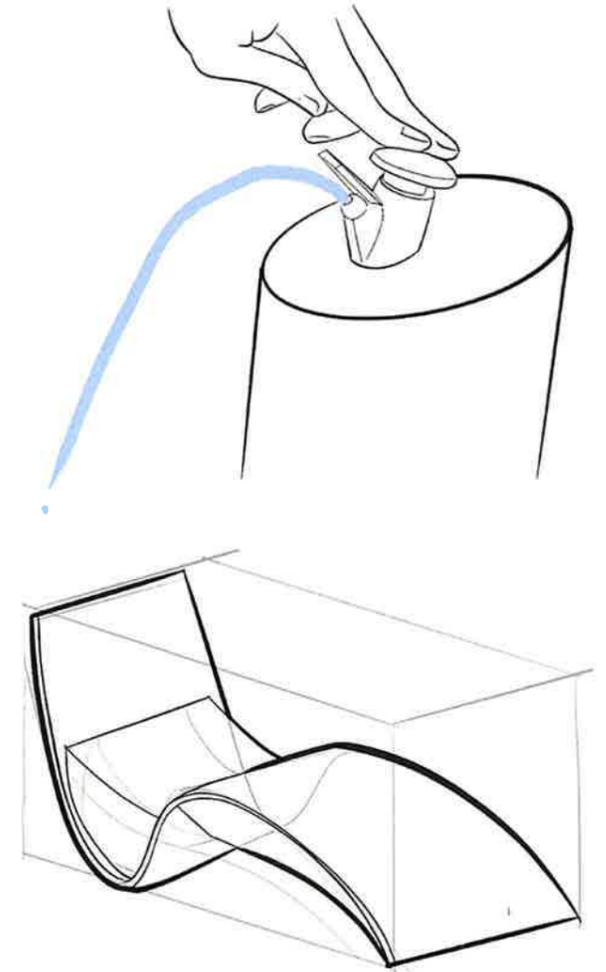
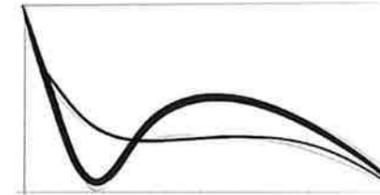
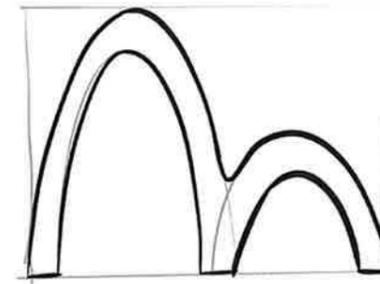
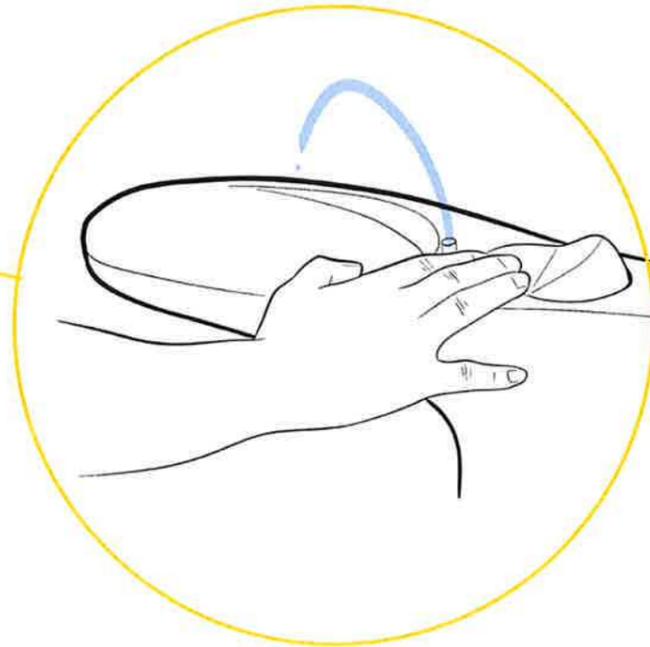
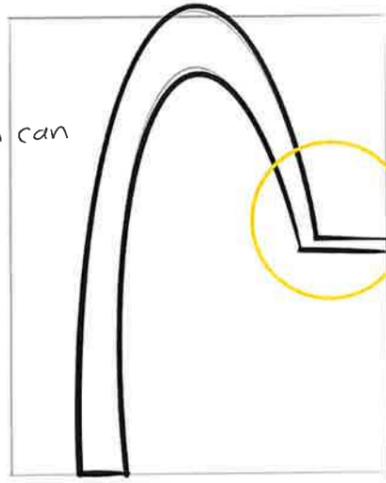
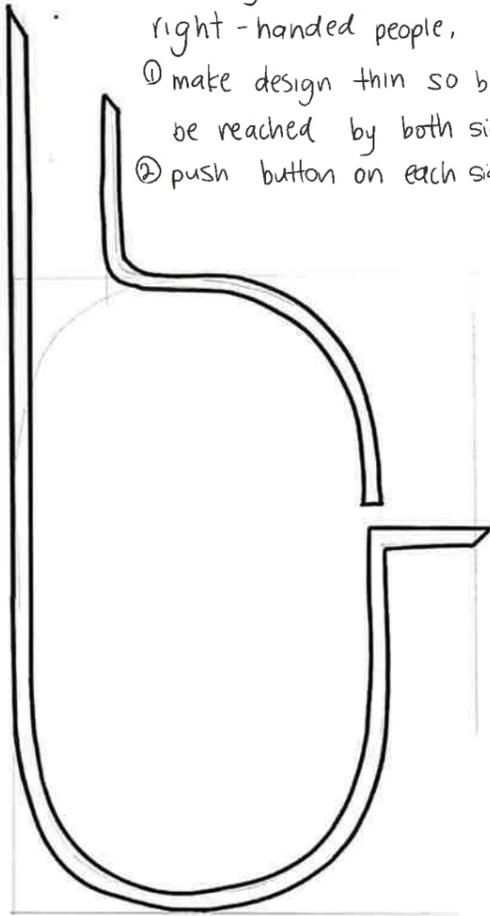
water tank

what if collects rain and recycle this water to hydrate people.



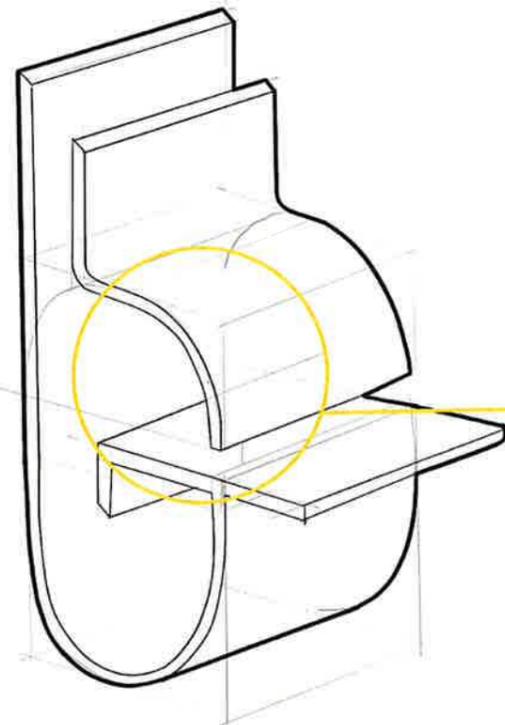
used by both left and right-handed people,

- ① make design thin so button can be reached by both side
- ② push button on each side

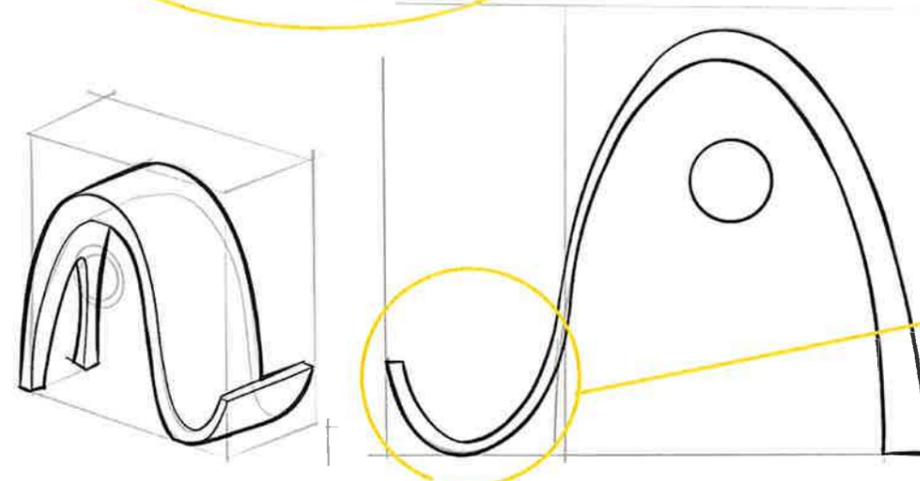
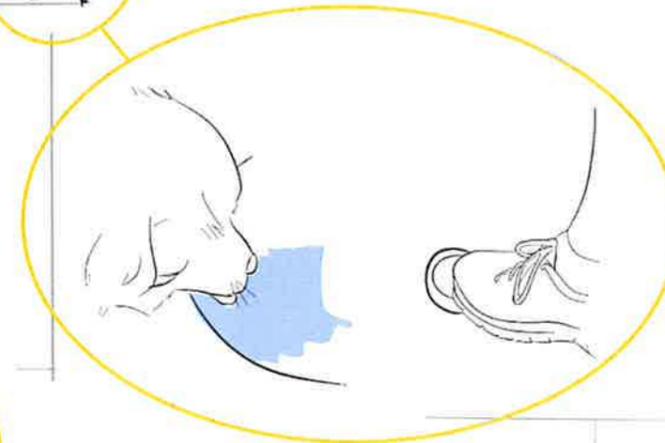
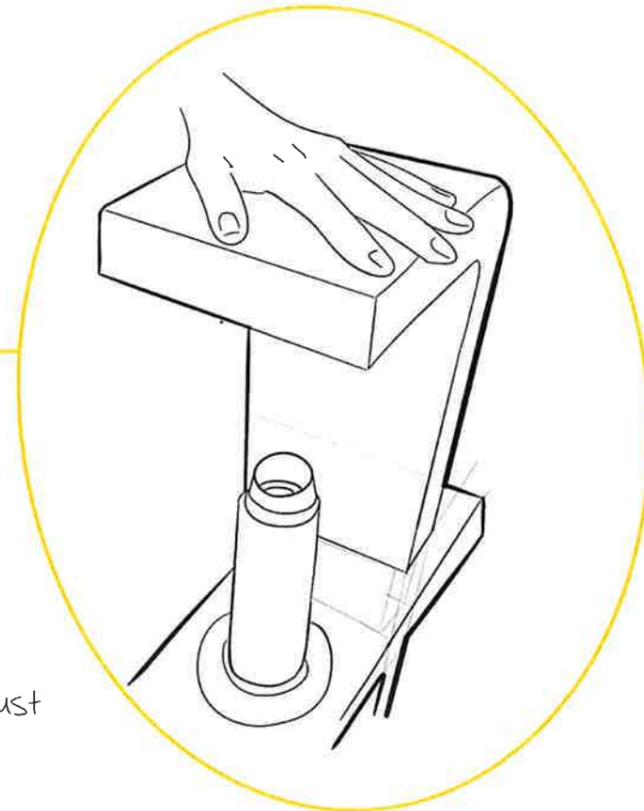


important that water outlet has an appropriate height so that it can be used by variety of people:

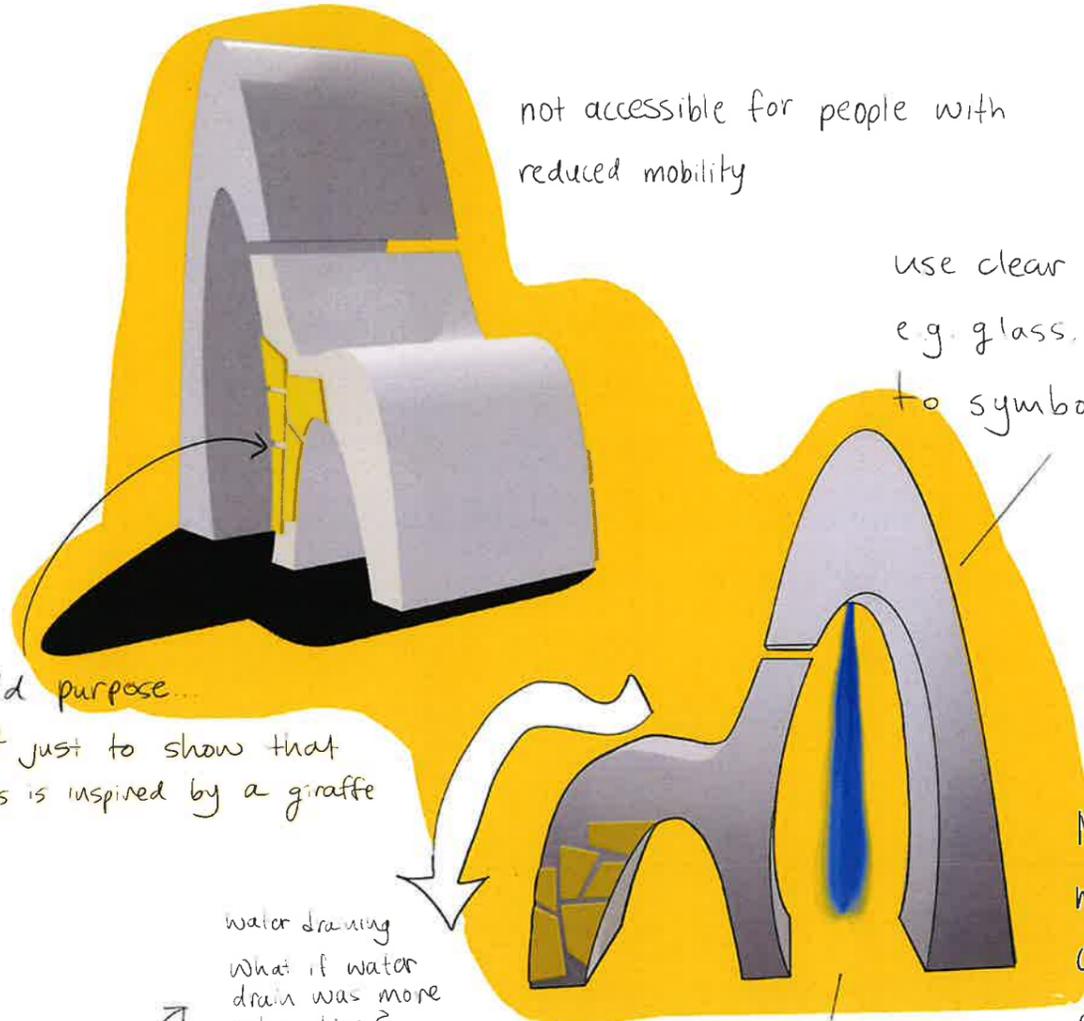
- Standing
- wheelchair
- children
- pets



it is public element. must be robust and resistant to possible abuse



CONCEPT ONE



not accessible for people with reduced mobility

use clear materials e.g. glass, acrylic to symbolise clean water

Add purpose... not just to show that this is inspired by a giraffe

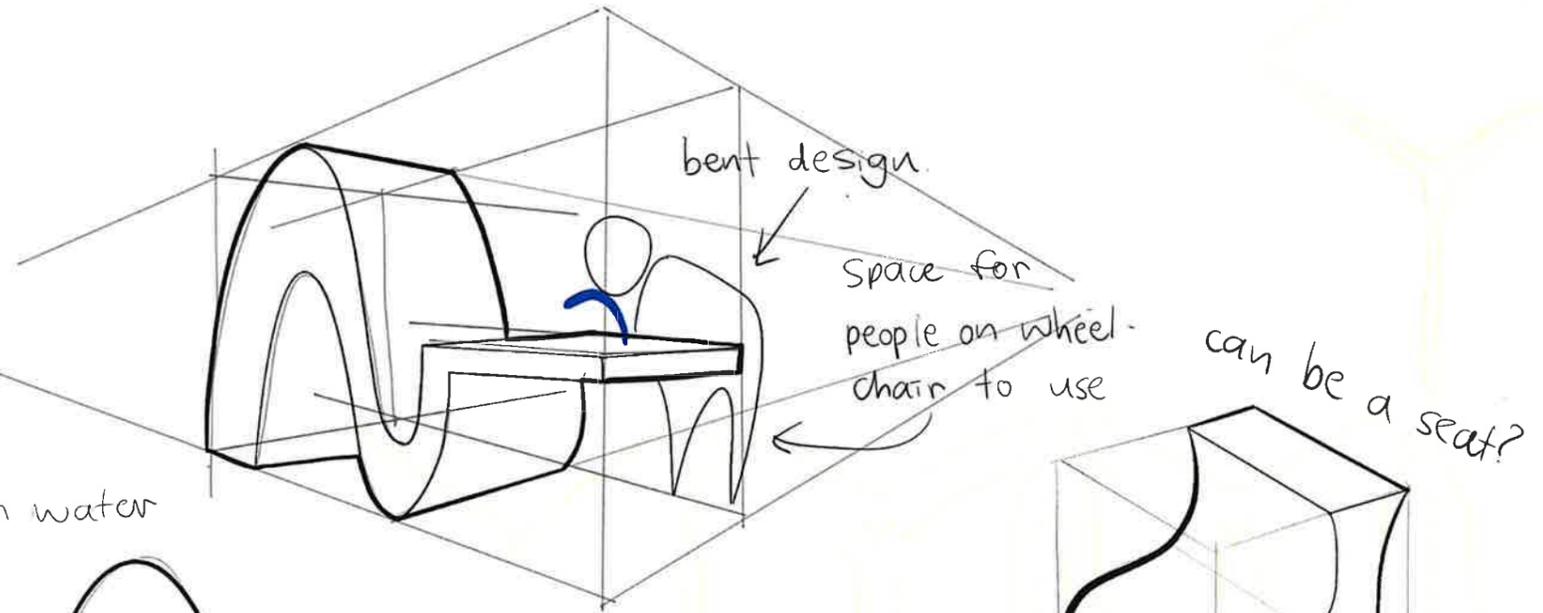
water draining what if water drain was more interesting?

water fall? filling water bottle?

problem: splashing water large wet areas around that attract mosquitoes.

Suitable for outdoor - less compact design

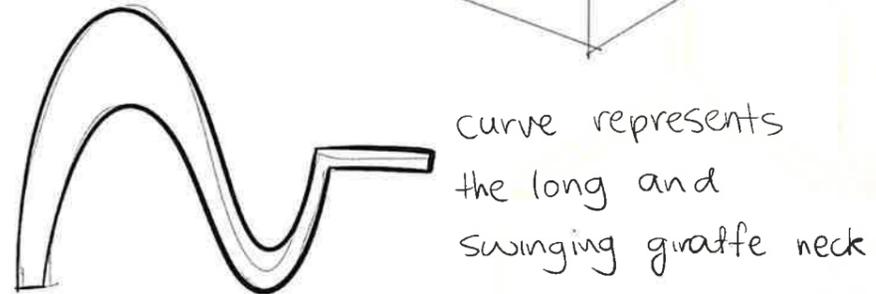
Modern drinking fountains mainly located in the city centre are made accessible and hygienic



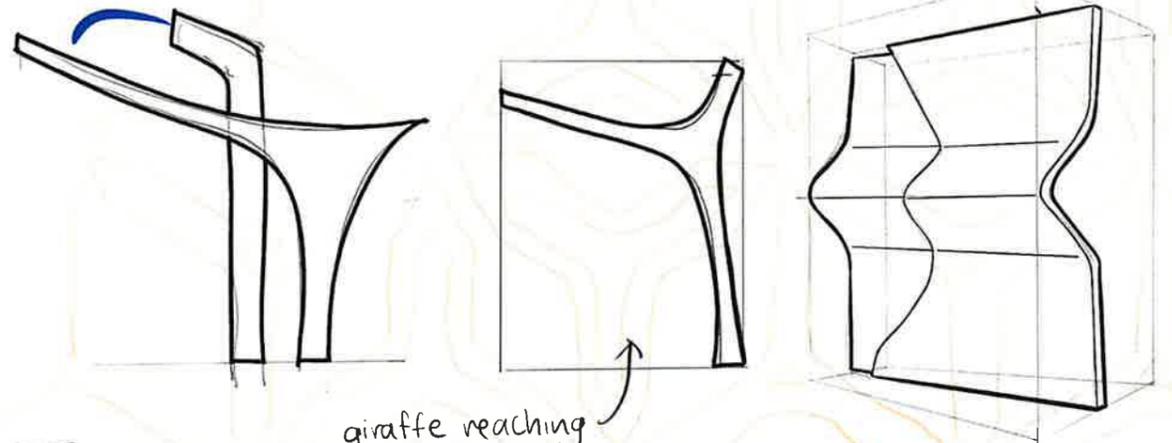
bent design

Space for people on wheelchair to use

can be a seat?

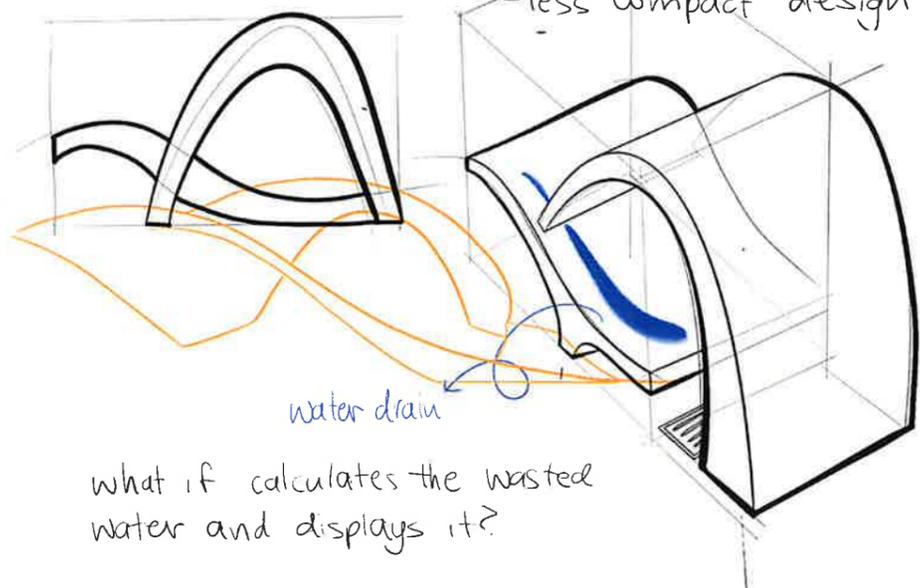


curve represents the long and swinging giraffe neck



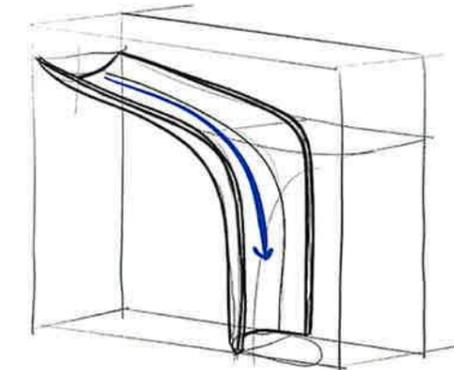
giraffe reaching

wall mounted drinking fountain



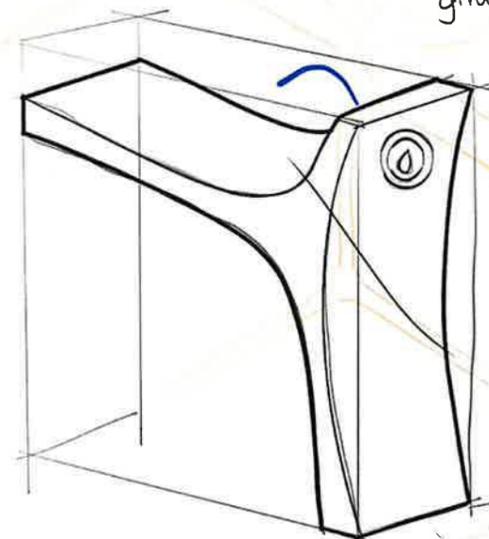
water drain

what if calculates the wasted water and displays it?

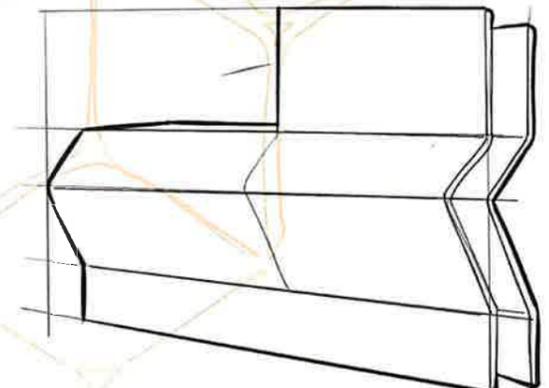


sloped board for plate connecting the water so it can drain back to centre.

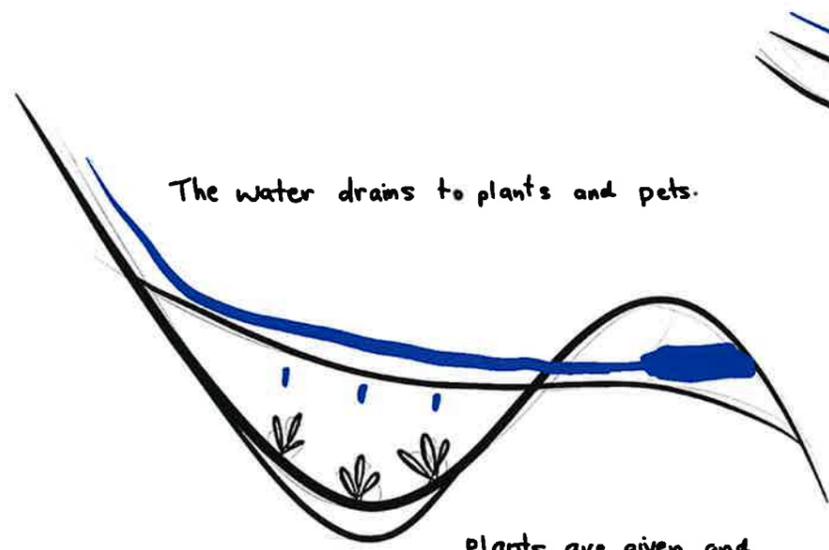
↳ less splashing



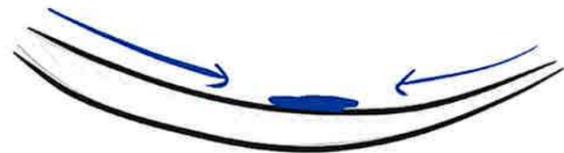
easy to install



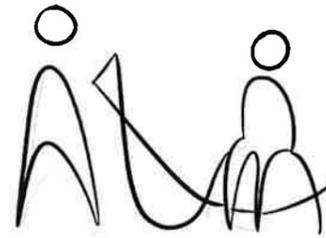
CONCEPT TWO



The water drains to plants and pets.



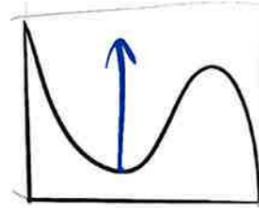
design in a 'u' shape so the water can pile in the middle to water the plants.



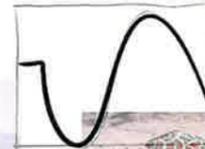
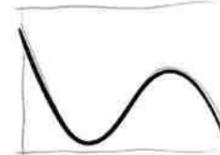
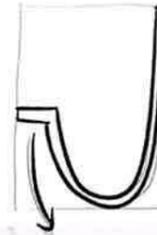
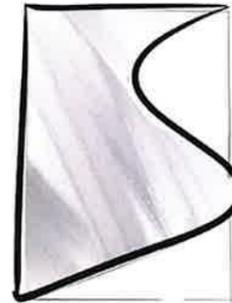
Drinking fountain needs to be lower for all age groups to drink from....

- or could make more than one output?
- or adjustable height?
- or steps?
- or make the water come out in a way that's approachable at all position.

Plants are given and freely given to the community.



what if water came out from the bottom... This could be drank by any height.



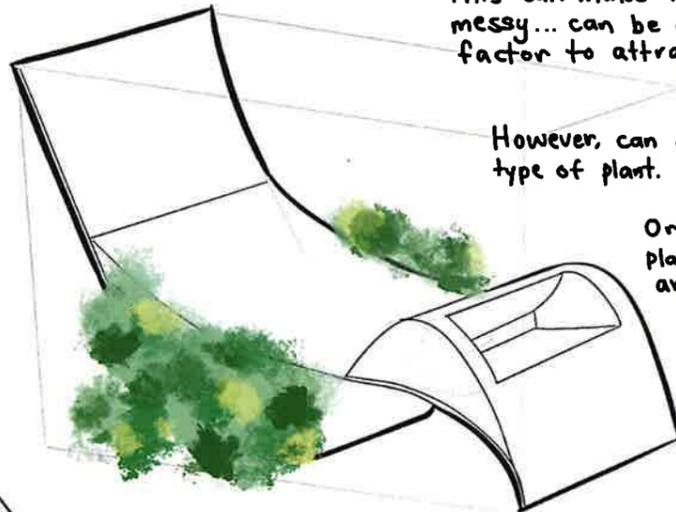
These typical water fountain knobs are found annoying and problematic.



In some place the knob needs lots of force on the button to maintain the arc shape

What if they are grown...

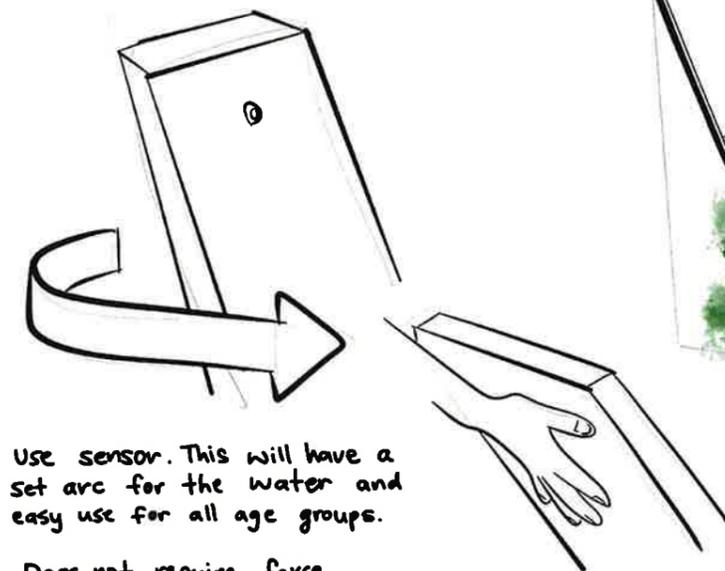
This can make the area look messy... can be a negative factor to attract people.



However, can depend on the type of plant.

Or could use for plants in a different area

From human drinking fountain to the pet fountain is too far away.



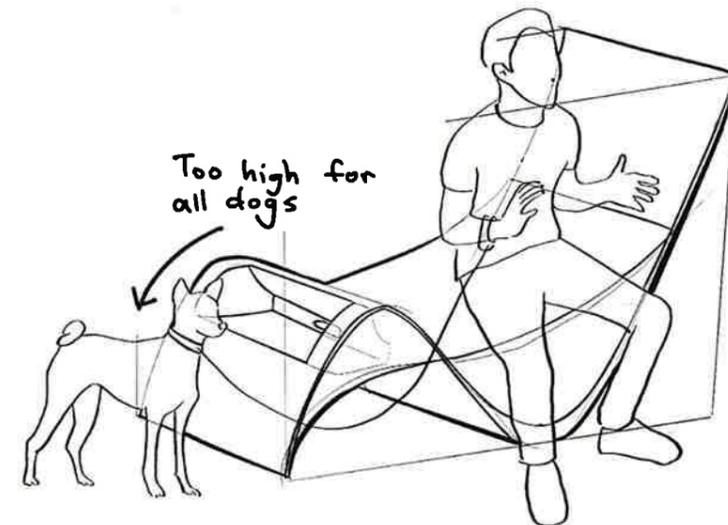
Use sensor. This will have a set arc for the water and easy use for all age groups.

Does not require force.

could the wasted space in the middle be used as a seat?



Water drains (flows) outward of seat so it does get wet.

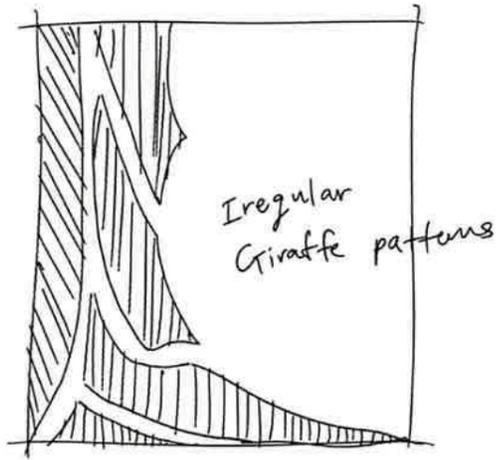


Add water button near the seat to see the pet and also full its bowl while sitting

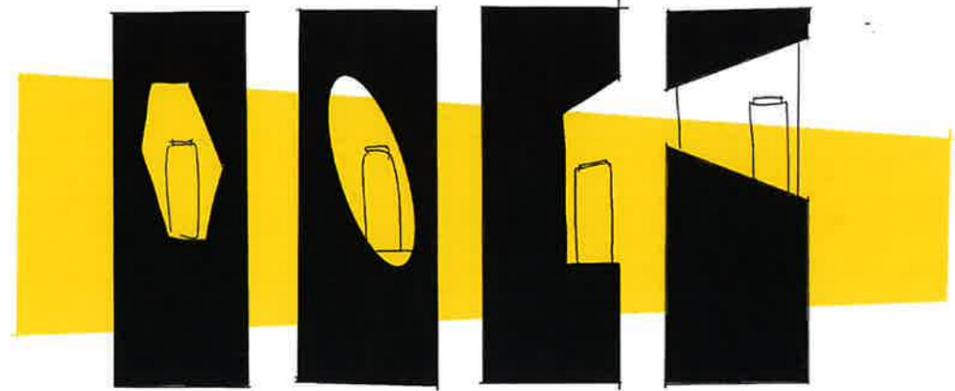
Foot sensor
water can come out by just standing on it



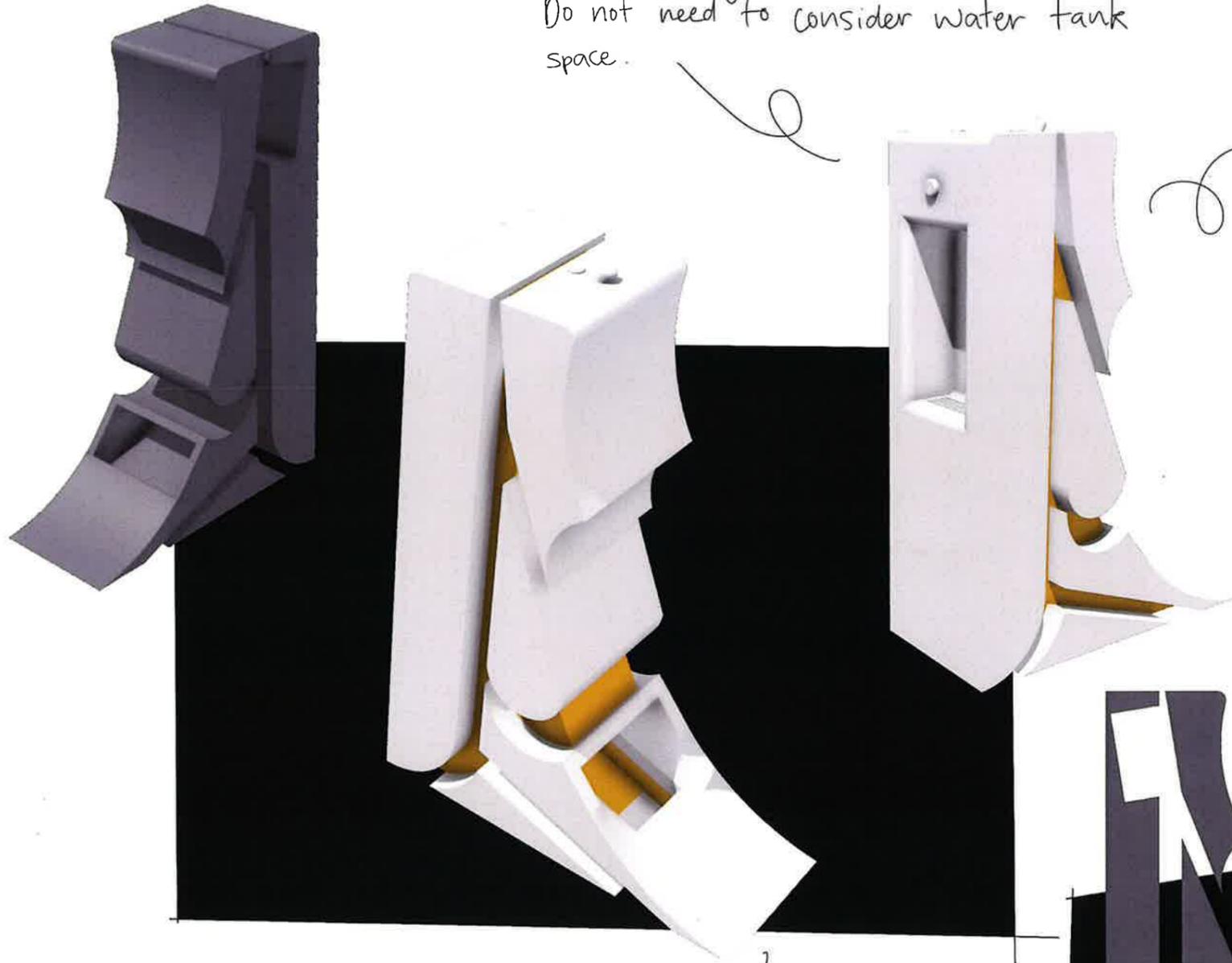
CONCEPT THREE



Outdoor uses water underground. therefore, design can be thinner... Do not need to consider water tank space.



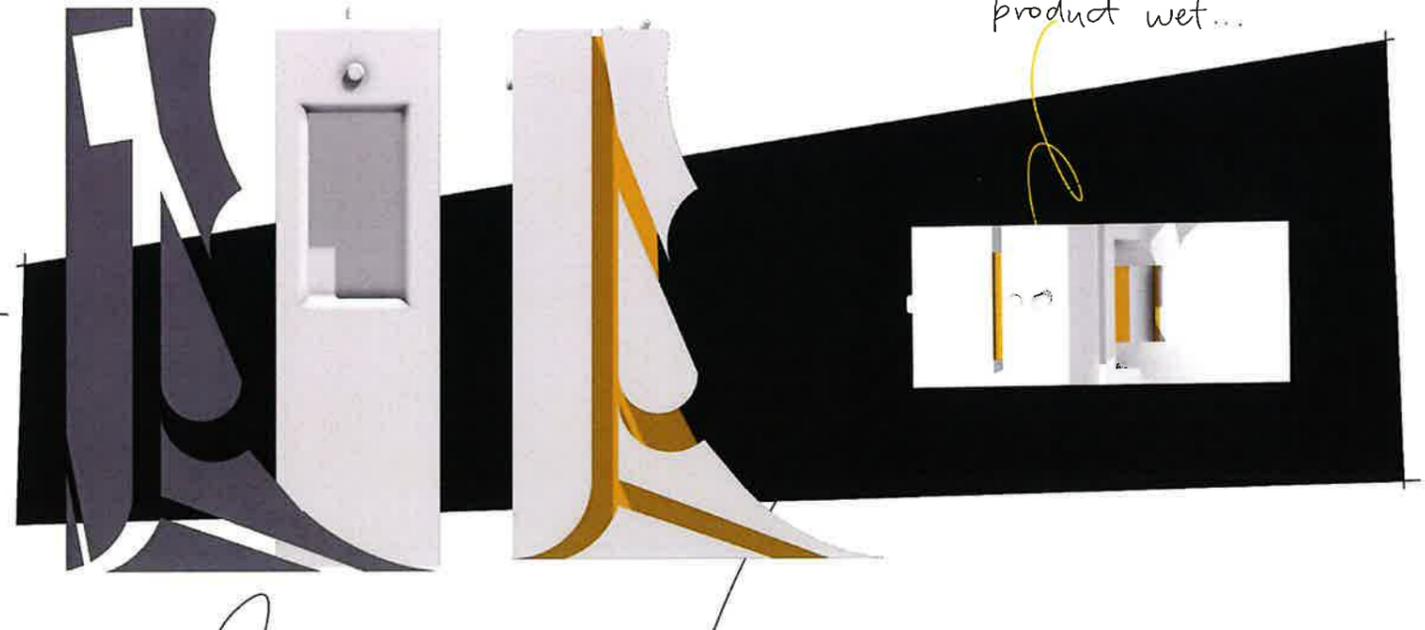
Use shapes from ideation page for cut out instead of a square...



How could it be environmental?
 - where does the waste water go?
 - How could we save water?
 ↳ limit water
 ↳ detect water used.

The back looks unoriginal...
 More common visual for indoor
 - could use for indoor version of the company.

drinking fountain will make the ground & product wet...



Sensor on the slope to fill water in the dog drinking area.
 - only water comes out when a dog is standing on it OR while the owner stands on it...

CONCEPT FOUR



waste of space
water does not reach

The footprint of the drinking fountain should be as minimal as possible, so that it can easily and flexibly be installed at any possible location.

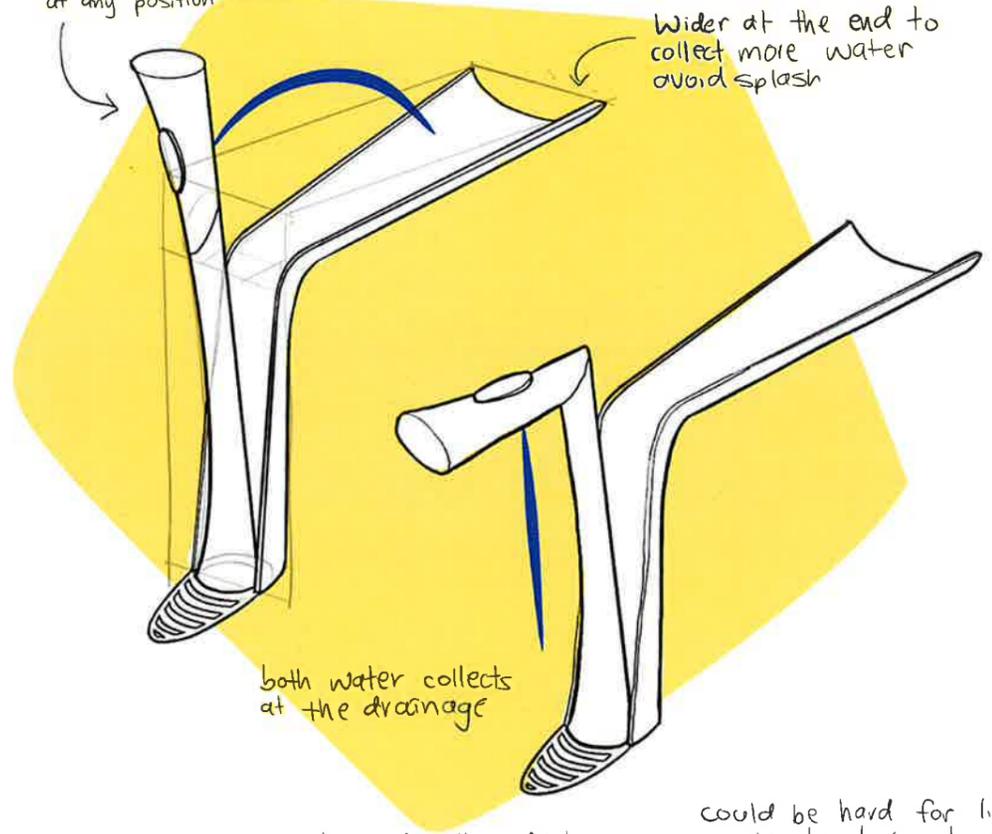
big button/sensor for all user and less effort to operate

The space for approach and use is wide and has enough space, also for wheelchair drivers.



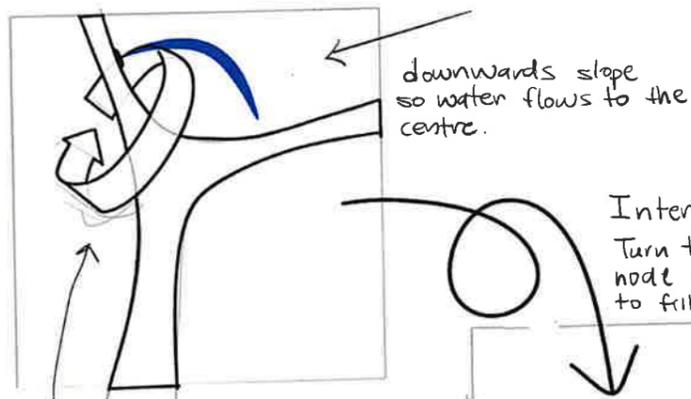
Vertical pipe allows user to reach to the water sensor/button comfortably at any position

Wider at the end to collect more water avoid splash



both water collects at the drainage

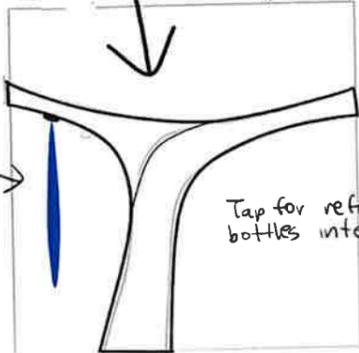
could be hard for little people to turn it around



downwards slope so water flows to the centre.

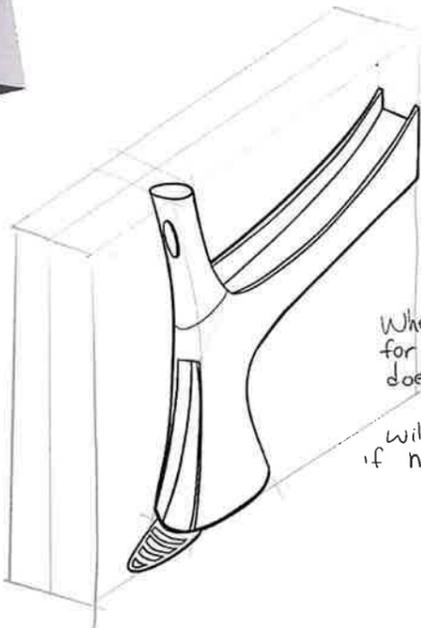
Interactive features
Turn the head with the node around to use it to fill up drink bottles

To turn it, should be thinner



How would people recognise that this is to fill drink bottles?

Tap for refilling the bottles integrated

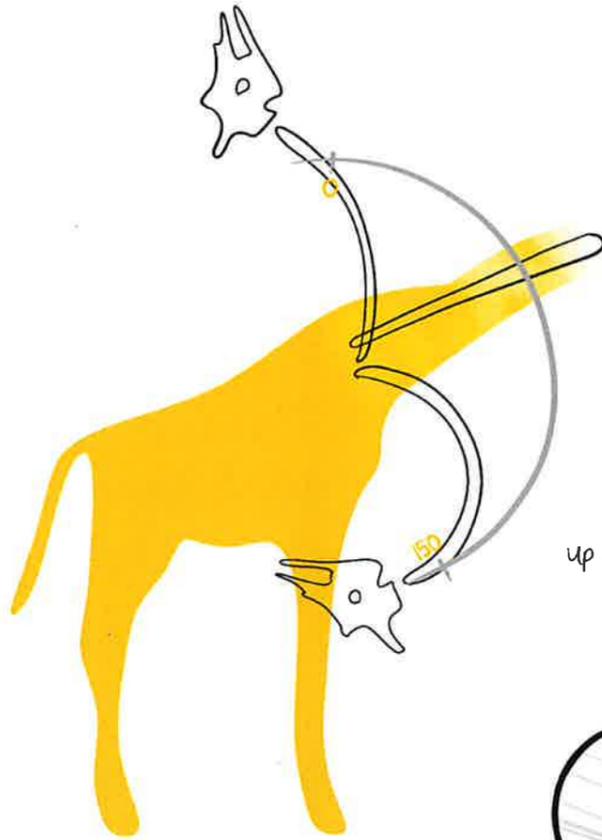


When the head is turned for these designs it does not fit smoothly.
will make sharp edge if not turned fully

When using the drink bottle top it may splash a lot as falling from distance

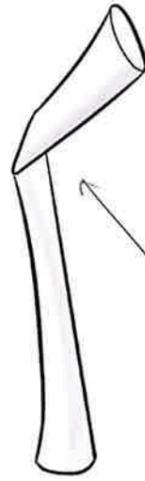
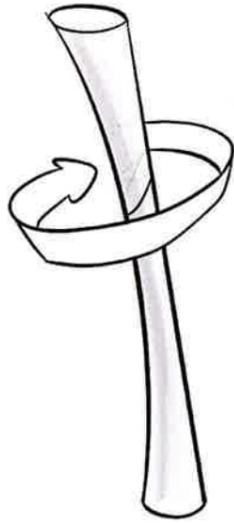
↳ water will hit drainage and splash

DEVELOPMENT MOVEMENT



Giraffe neck can change to 150°

up & down movement
↳ or left & right?

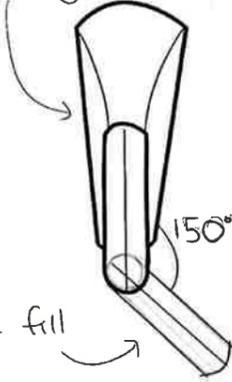


result in sharp / not smooth connection.

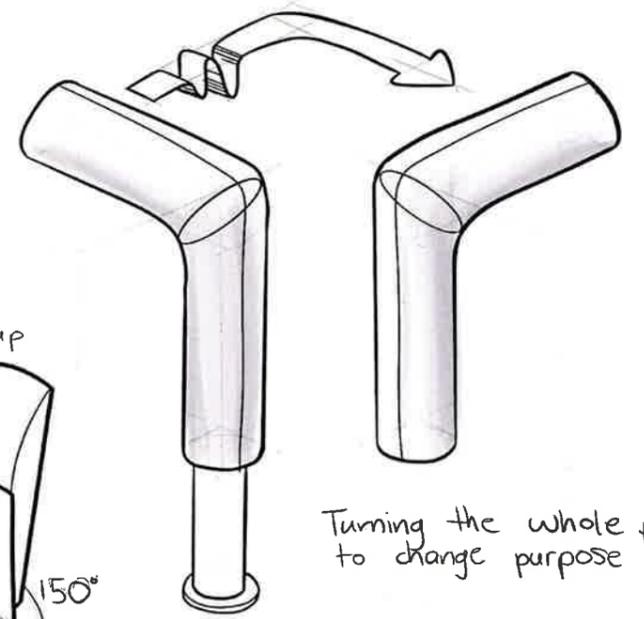
Turn horizontally to perform in 90 angle fountain



drinking tap

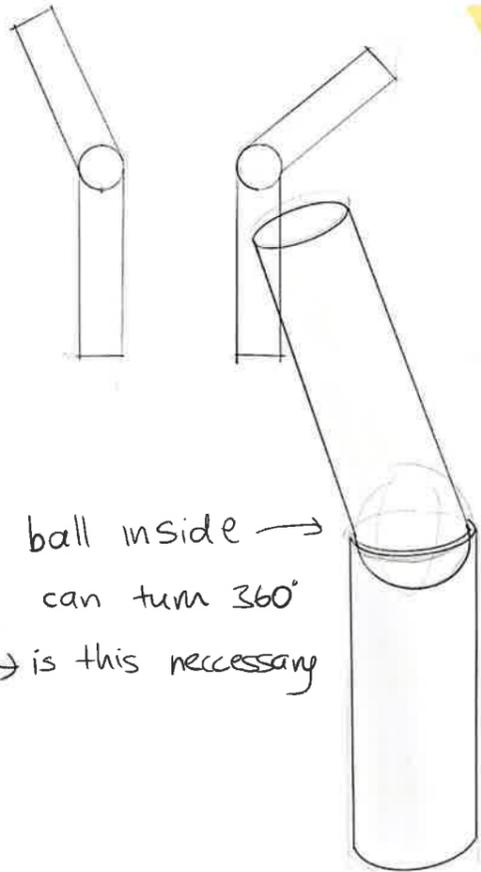


bottle fill



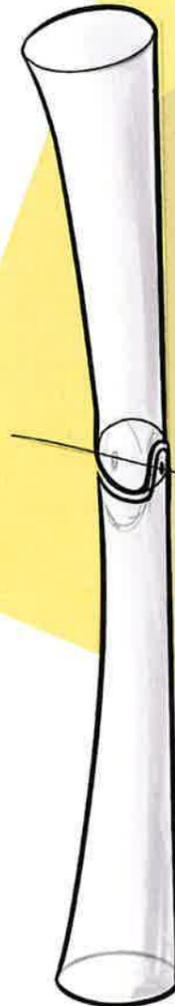
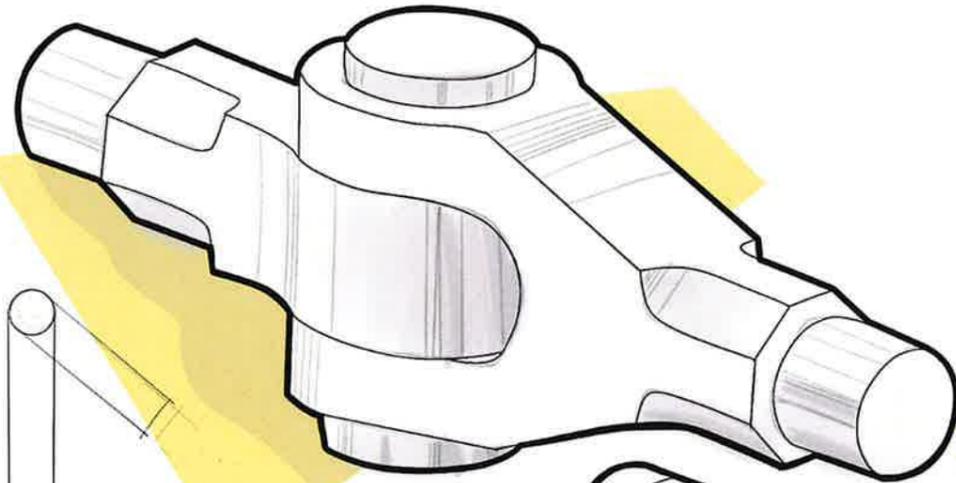
Turning the whole pole to change purpose

core in the middle



ball inside → can turn 360°

↳ is this necessary



Smother connection joint

only vertical movements.



has smooth connection for all angle

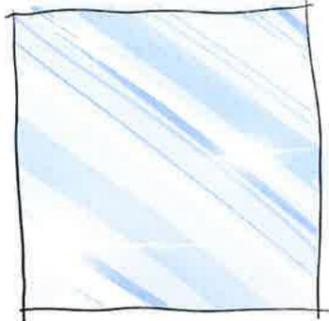
neck can bend 150° (giraffe neck angle)

DEVELOPMENT MATERIAL



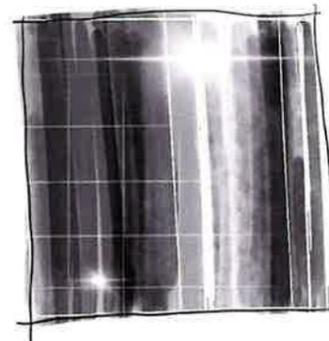
WOOD:

natural beauty, easy to work with
 Hardwoods: resist weather damage and can last decade if treated properly
 weak to water and its heavy



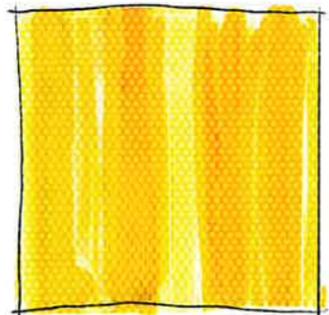
GLASS:

resistance to temperature changes
 Creates open and airy feeling.
 reflects off sun and blind people



STAINLESS STEEL:

high density & helps prevent dents and other damage from frequent use
 Endures extreme temperatures & better than most metals



POWDERCOATED METAL:

adds colour to design.
 could be unsafe when in continuous contact with H₂O.
 Appropriate for surface not in contact with water

colour stands out and unique compared to all the metal / steel public facilities

stainless steel output.

durable & resistant especially corrosion resistant and poor conductor of heat

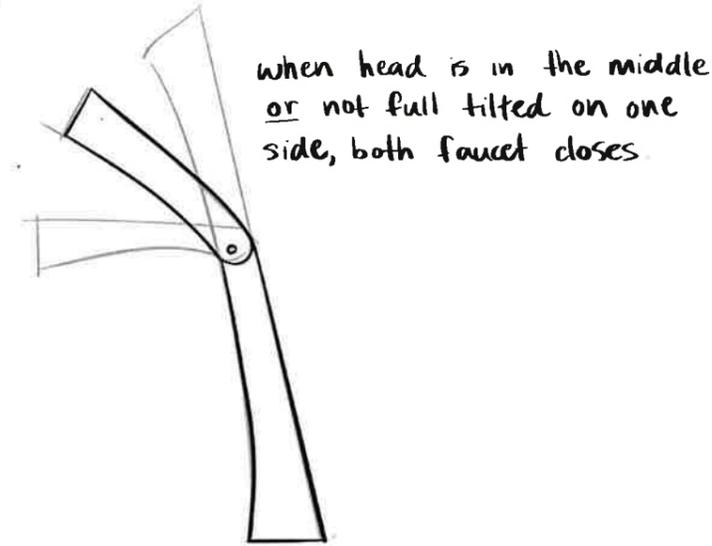
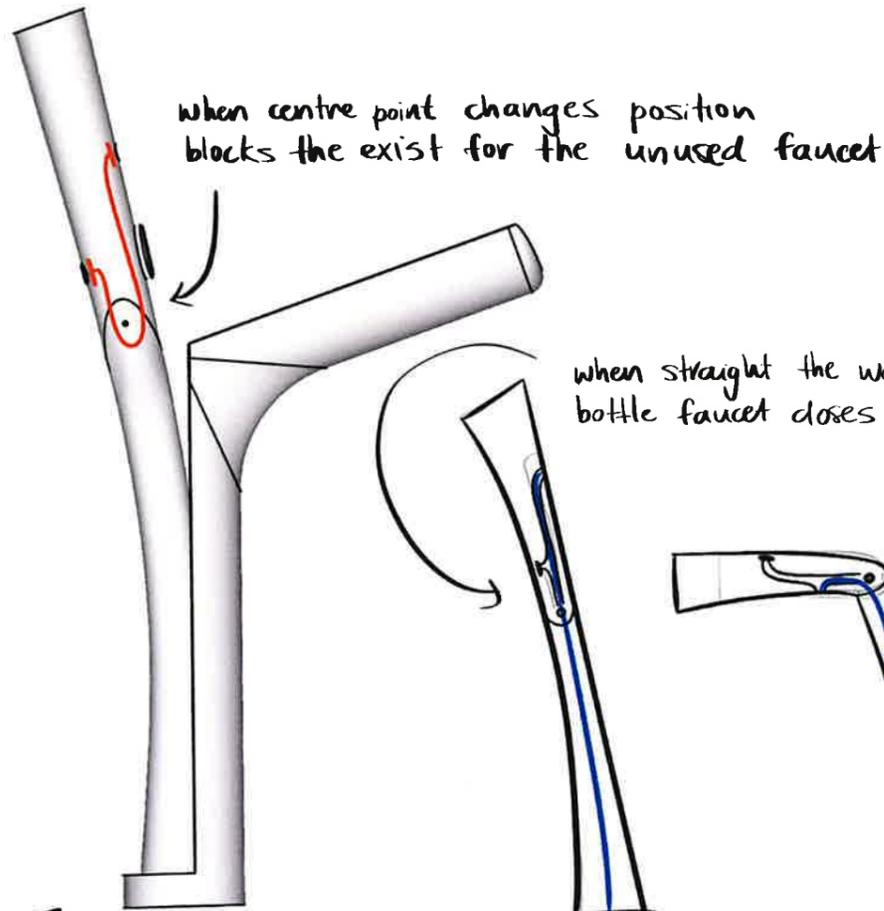
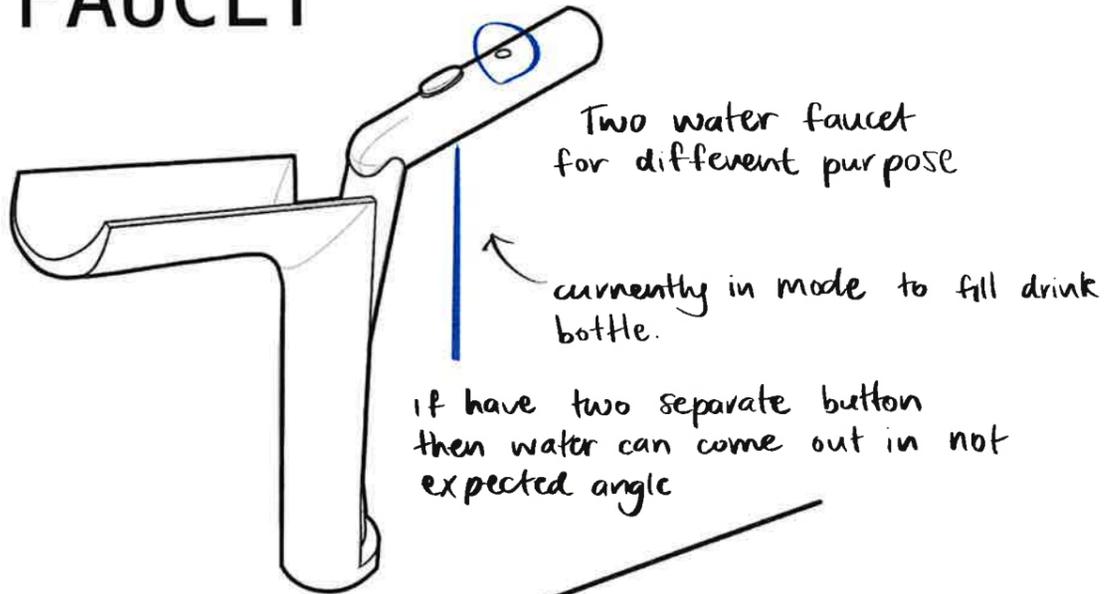
AISI 304 is lighter and more appropriate for outdoor applications in parks and within city center area.

incorrect choice of material can cause rusting.

stainless steel = AISI 304 & AISI 316
 weather in Palmerston North, NZ, has mild temperature & humidity.

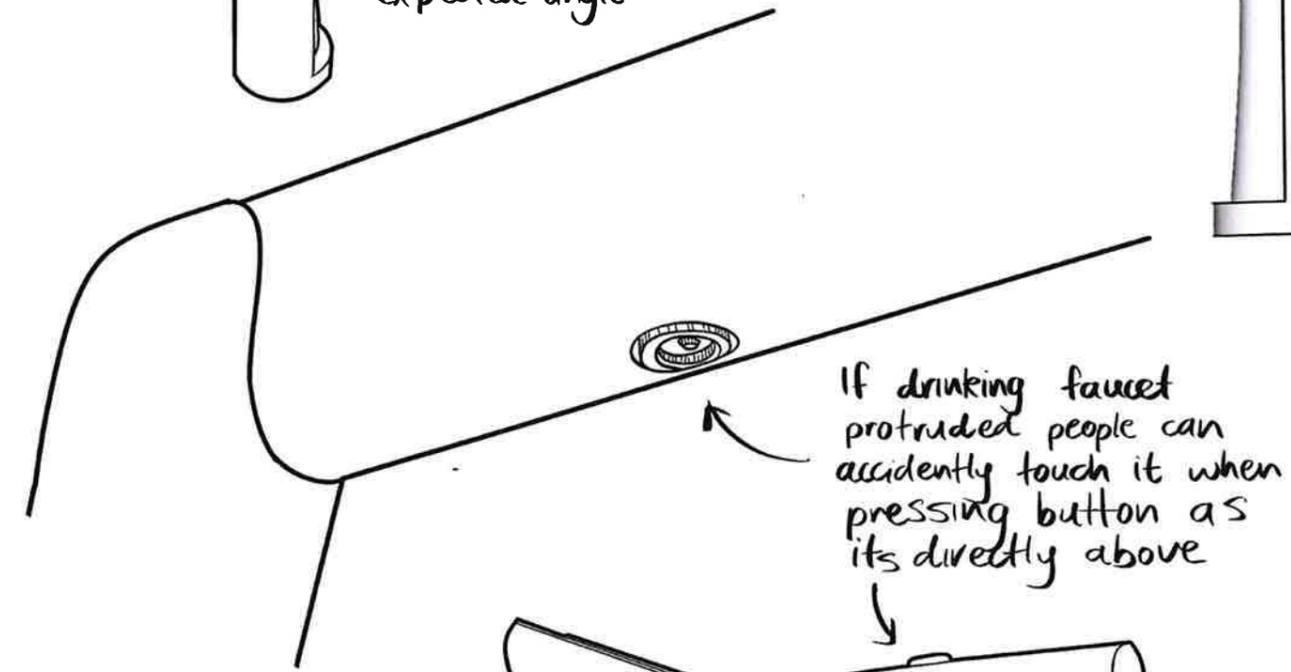


DEVELOPMENT FAUCET



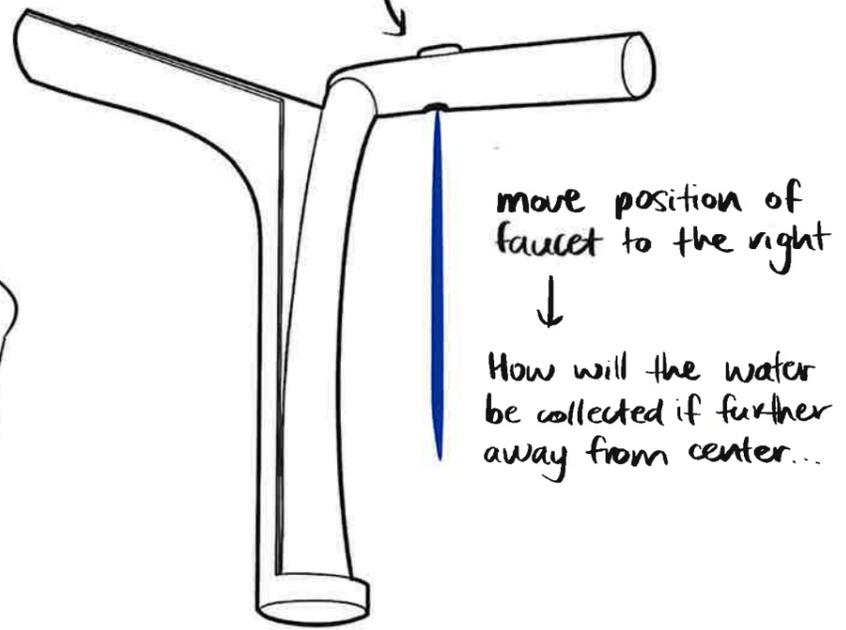
water will flow through open exist.

How could people tell if its not tilted fully? or that its tilted fully?

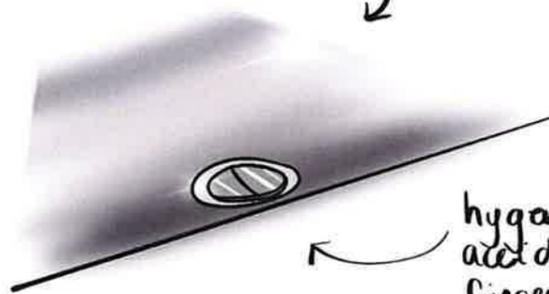


when the water output faucet is physically closed (externally) people can see that its not tilted properly. -as well as internally so water doesn't leak.

posture & height check

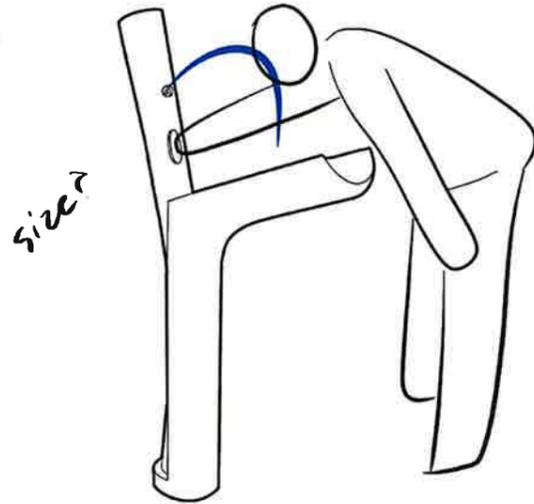


external body doesn't matter but the faucet should be stainless steel so its rust & water resistant.

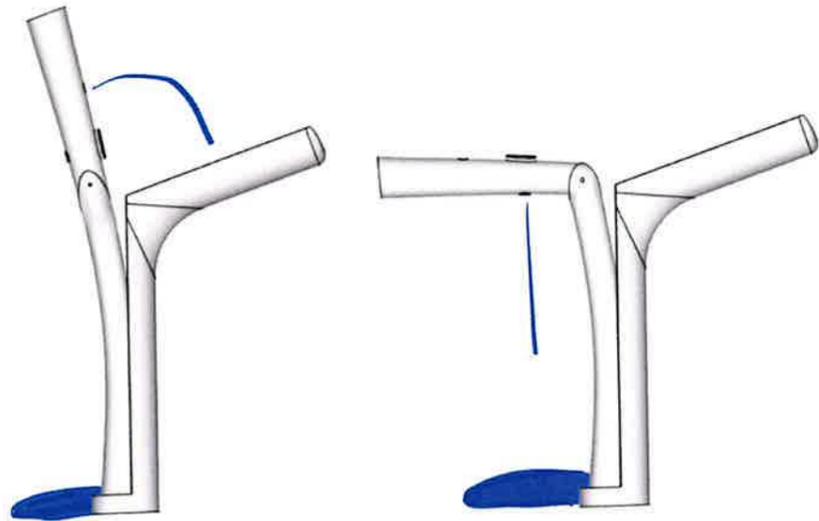


hygiene. prevents people from accidentally putting their finger inside as cannot see on the other side.

powdercoated can expose water to unhealthy chemicals.



DEVELOPMENT DRAIN



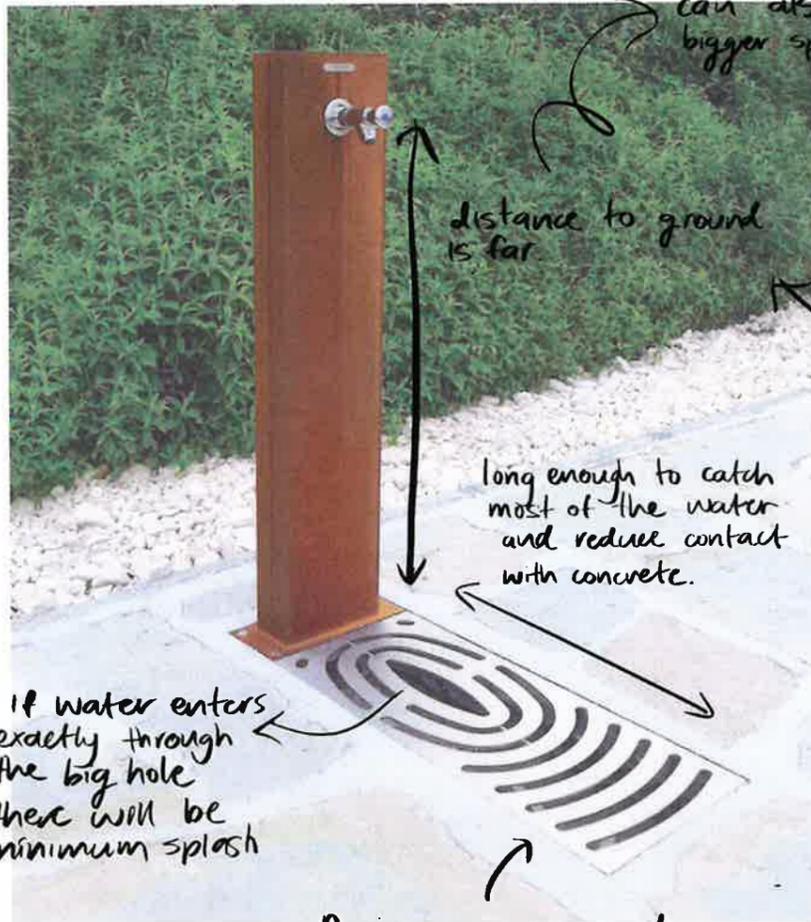
faucet installed on a plate that leads to the output pipe.



minimum splashing as water experiences less gravitational force since very close to draining cover.

uses more space compared to designs with drainage on the ground which people can walk across and on it.

if water enters exactly through the big hole there will be minimum splash



Reduces accuracy in where water will land and can also make bigger splashes

distance to ground is far

long enough to catch most of the water and reduce contact with concrete.

Drain cover on ground.

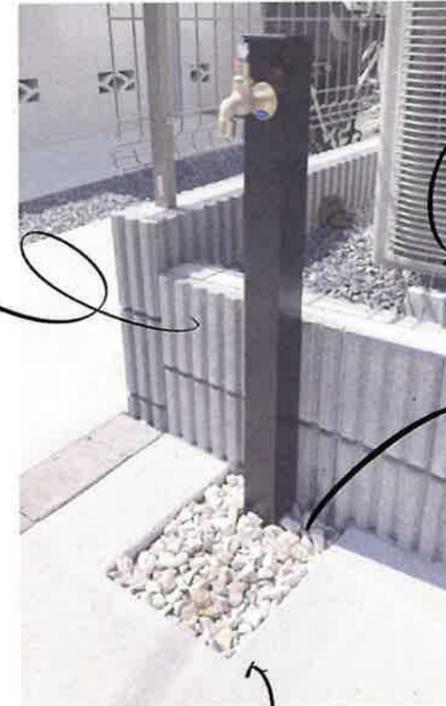
can make surrounding area wet and slimy



feels unhygienic

small drain hole resulting in overflow of water

surrounding area wet and messy



Drains through rocks

water will be wasted
not able to recycle.

e.g. - use for pet water, water trees and environment around.

This can cause overflowing later

can create big splash due to dense surface i.e. no hole or cover to reduce splash of water.



having a plate/arm close to the output of water bottle filler to collect the waste water and transport to center.

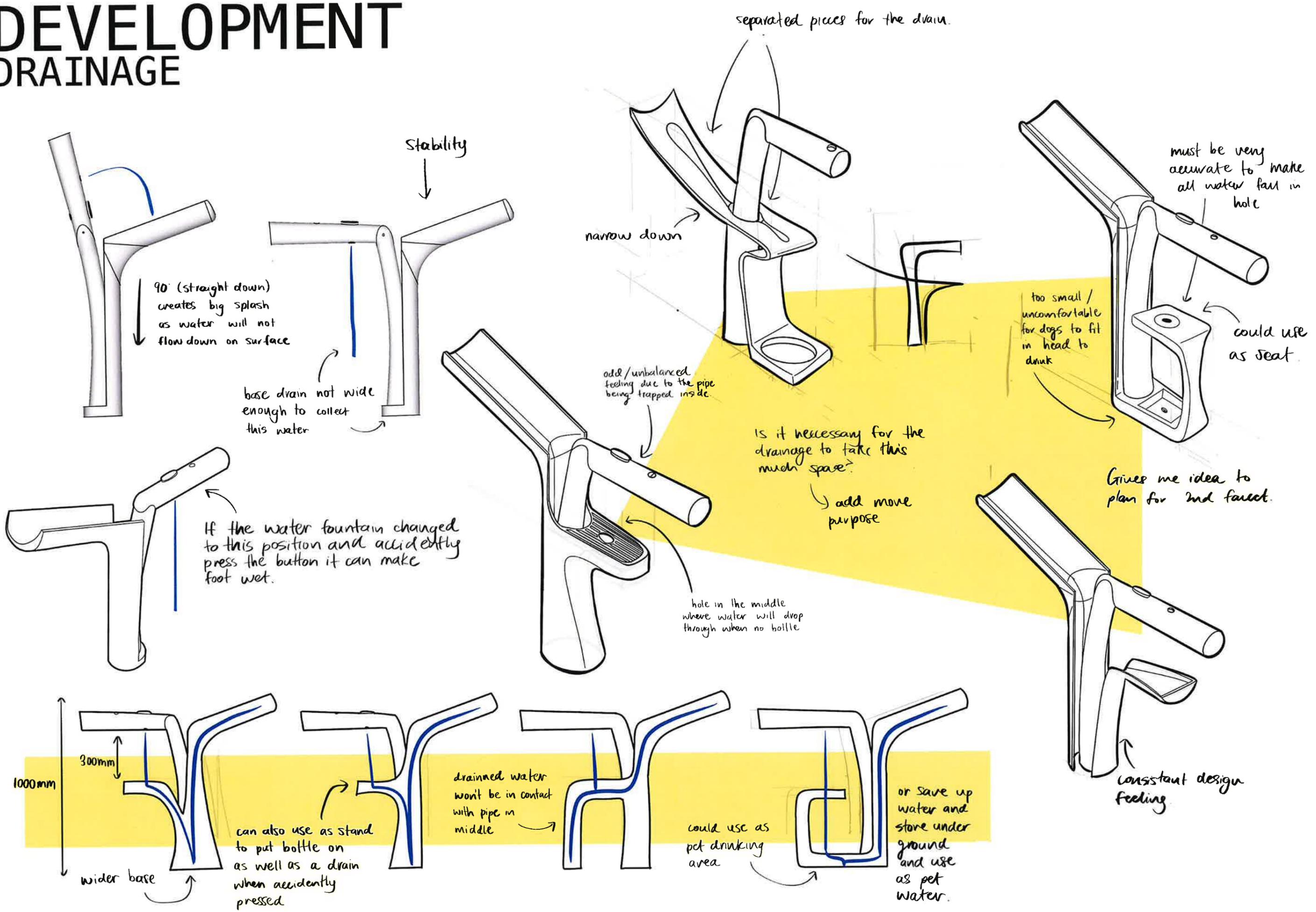
What design?

may overflow if lots of water wasted.

Drain cover on ground may make puddle on ground as high up...

What if deep in ground as water falls vertically may control where water is falling and prevent splashes

DEVELOPMENT DRAINAGE



separated pieces for the drain.

Stability

90° (straight down) creates big splash as water will not flow down on surface

narrow down

must be very accurate to make all water fall in hole

base drain not wide enough to collect this water

odd / unbalanced feeling due to the pipe being trapped inside.

too small / uncomfortable for dogs to fit in head to drink

could use as seat.

If the water fountain changed to this position and accidentally press the button it can make foot wet.

Is it necessary for the drainage to take this much space?

add more purpose

Gives me idea to plan for 2nd faucet.

hole in the middle where water will drop through when no bottle.

constant design feeding

or save up water and store under ground and use as pet water.

could use as pet drinking area

drained water won't be in contact with pipe in middle

can also use as stand to put bottle on as well as a drain when accidentally pressed

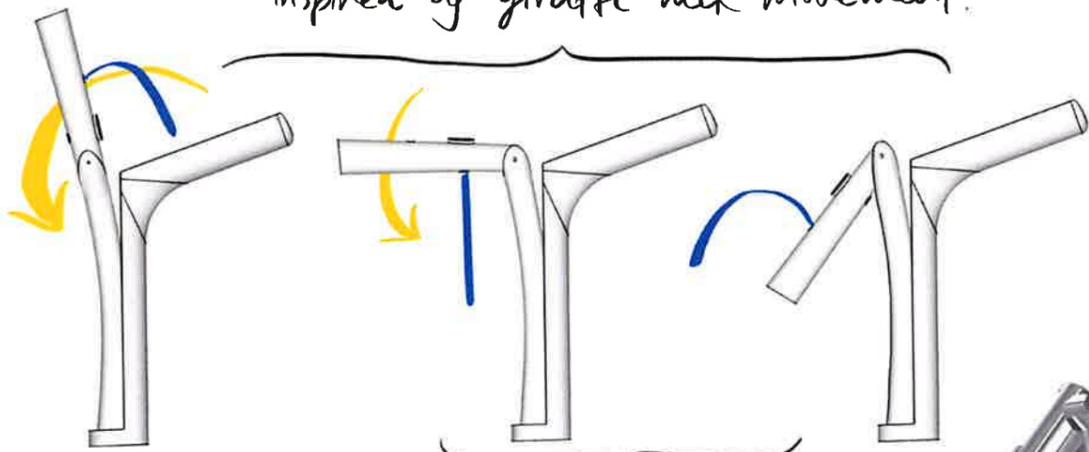
wider base

300mm

1000mm

DEVELOPMENT 2ND FAUCET

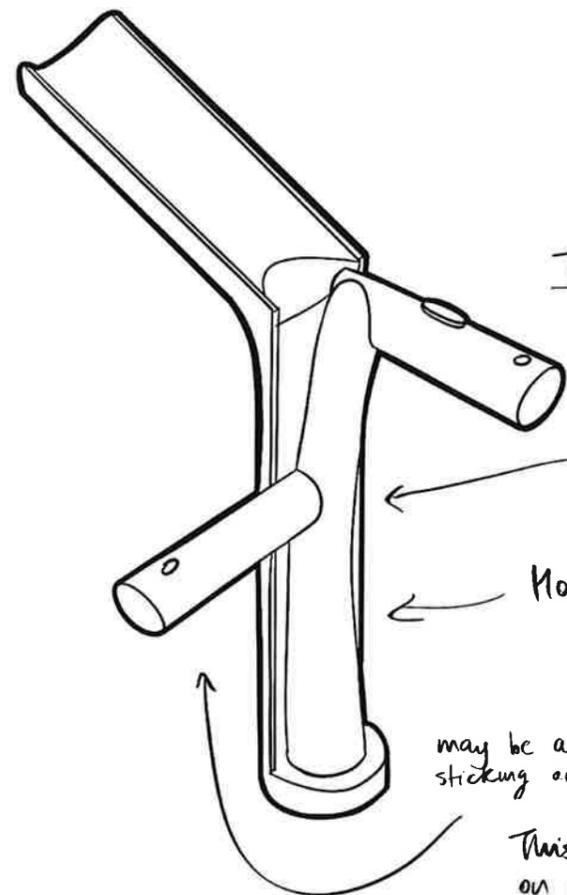
inspired by giraffe neck movement.



How would drainage work

Development ○

research on types of drain



water will directly fall on ground when used

TWO POLES

2nd faucet attached on the side at 90°

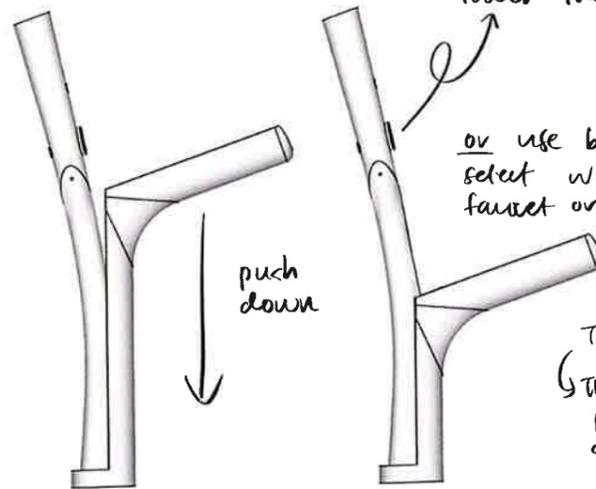
How will water drain?

may be an obstacle as it's sticking out.

This means: can't be installed on edge and interferes other area, causing accidents.



MOVEABLE DRAIN



lower the button for little people

or use button to select whether use short person faucet or normal person faucet.

Two interaction happening.

This may be confusing... public facilities should be easy to understand and be operated by most uses.

algorithm: when there's three output, one button won't work. (not a boolean)

changing button image.

This means electricity will be involved.

How can it be dealt safely?

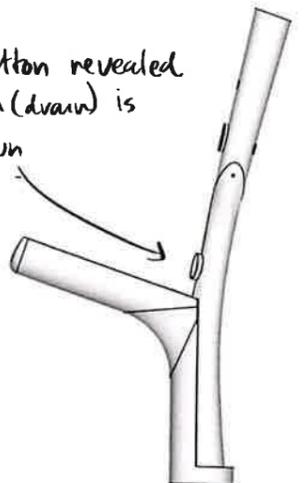
while head is down the button shows a bottle image

when head is up the button show a drinking image

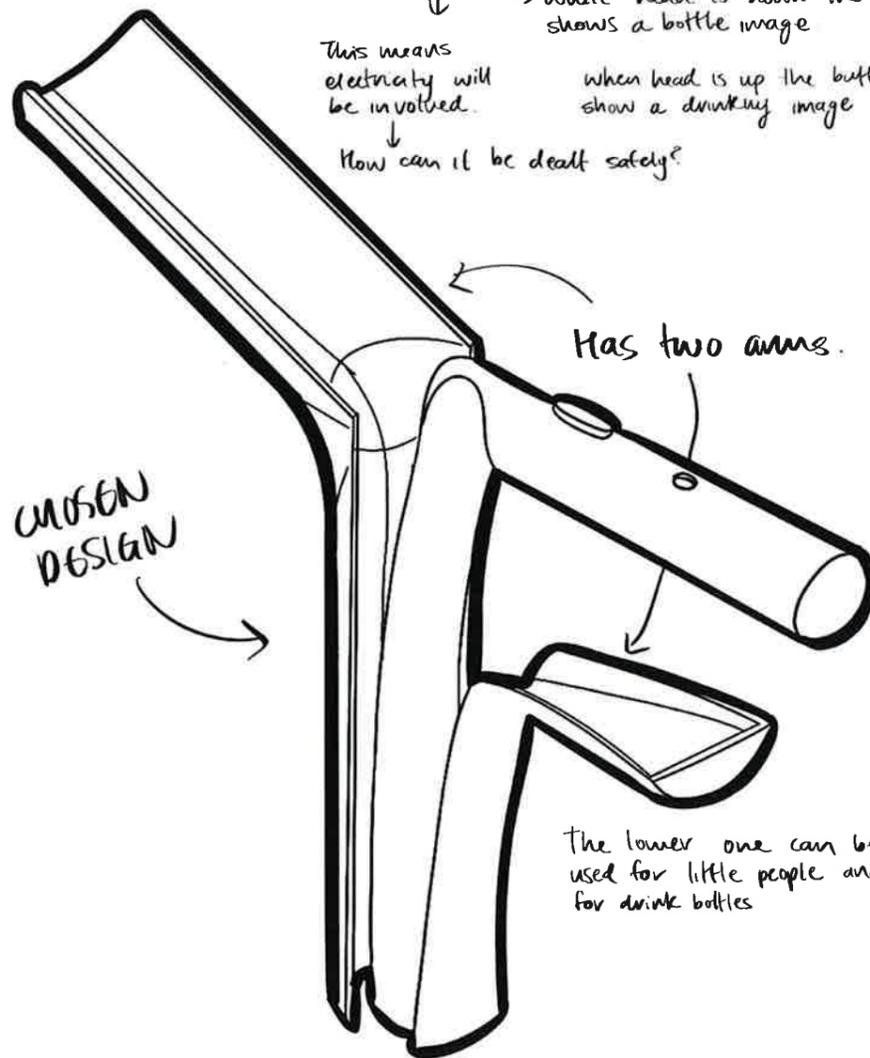


second button revealed when arm (drain) is pulled down

or have both button images at the same time.



CHOSEN DESIGN

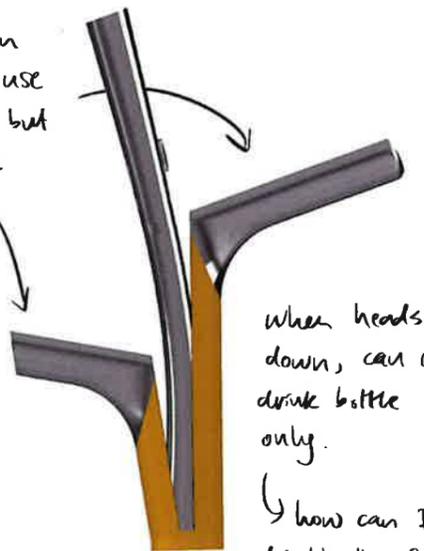


Has two arms.

The lower one can be used for little people and for drink bottles

at this position (heads up) can't use drink bottle filler but can use both the fountains

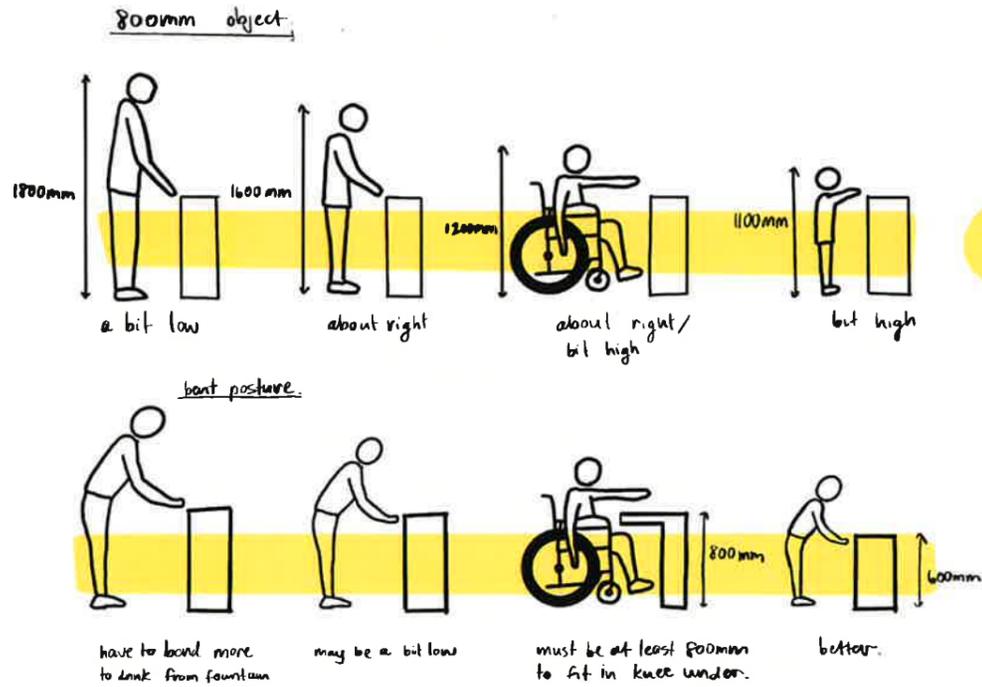
Two arms indicates that there's more than one component to drinking fountain.



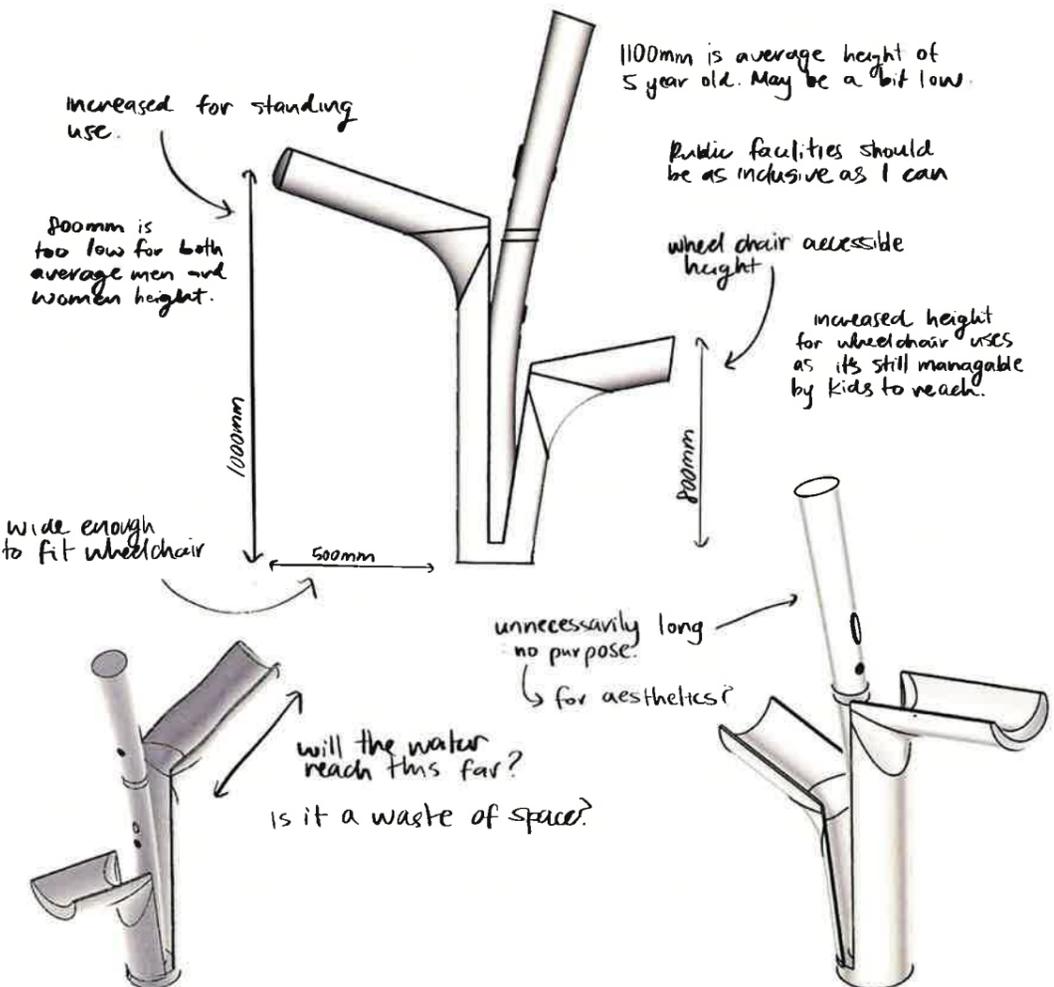
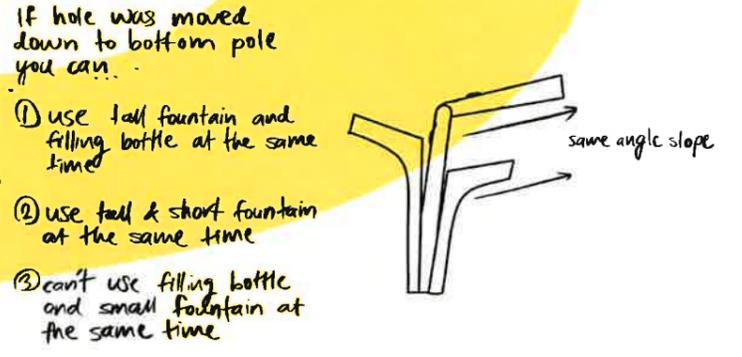
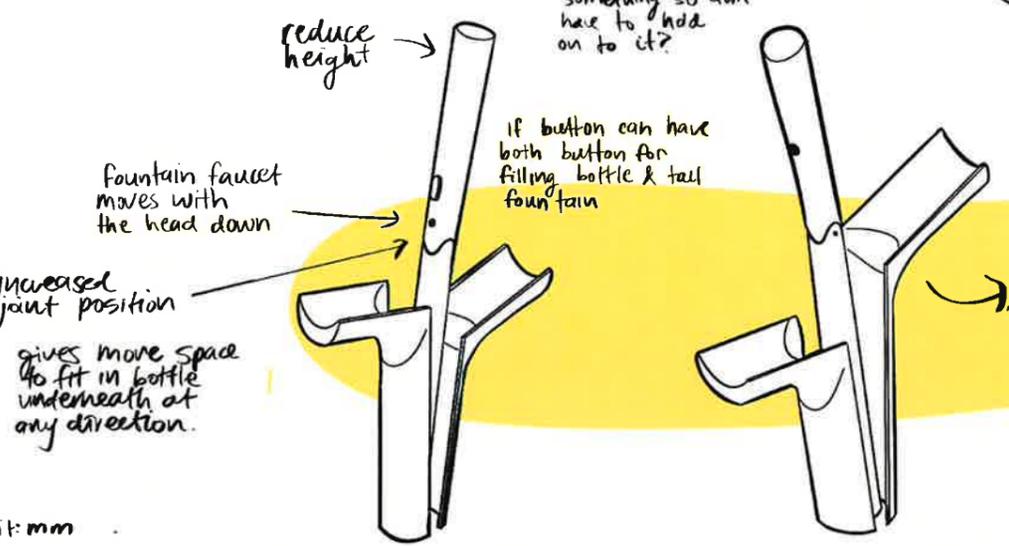
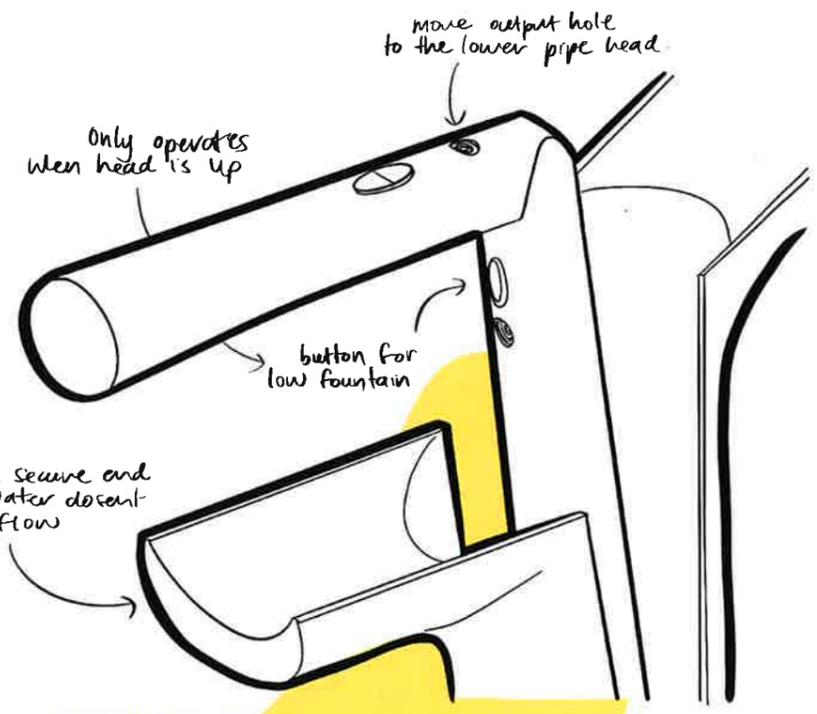
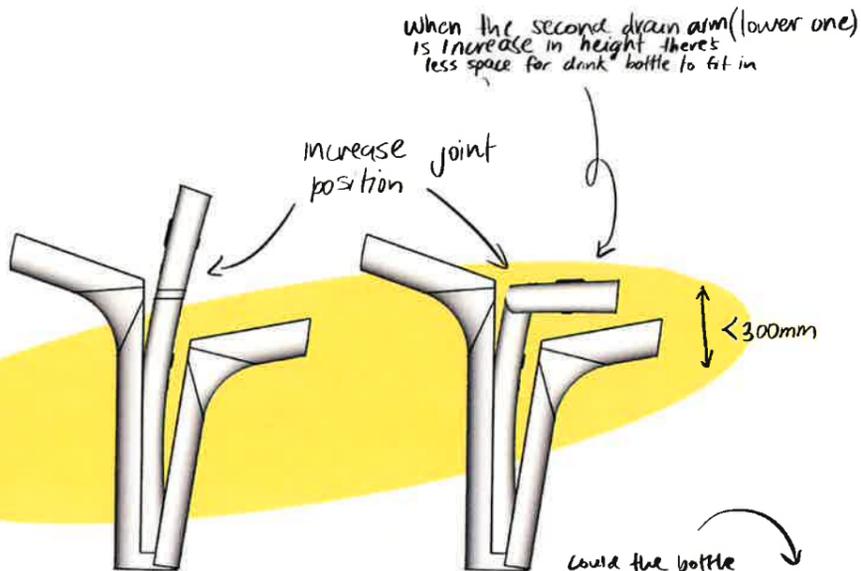
when heads down, can use drink bottle filler only.

how can I disable the fountain button?

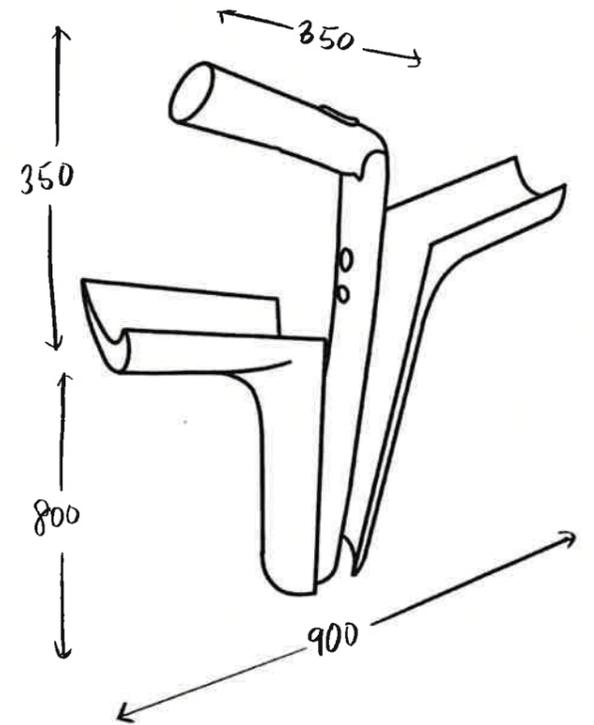
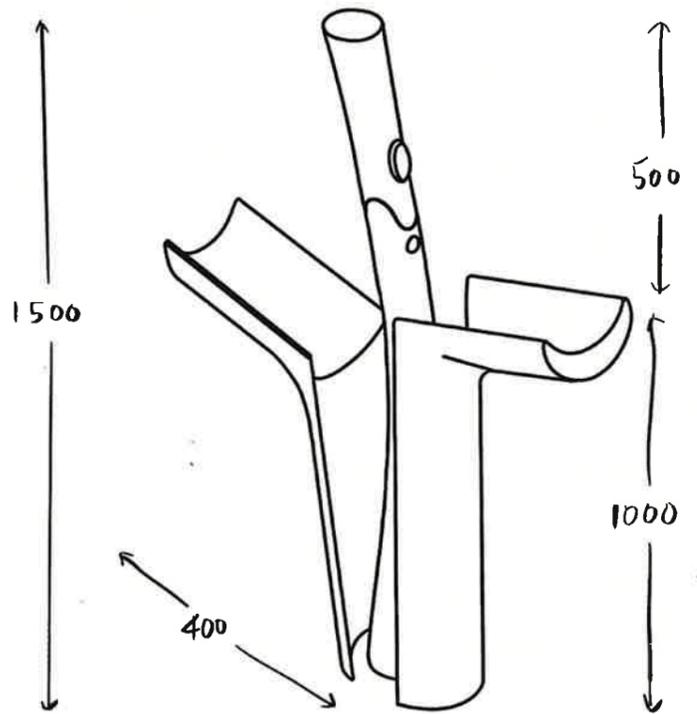
DEVELOPMENT SIZE



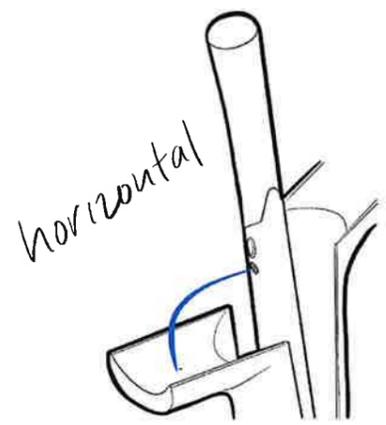
REFINEMENT



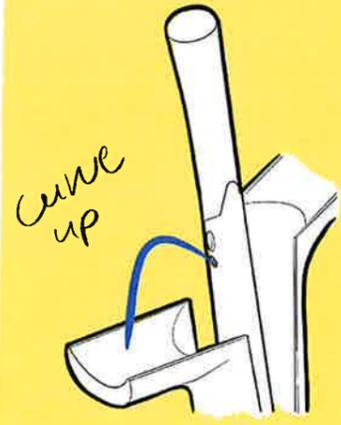
unit: mm



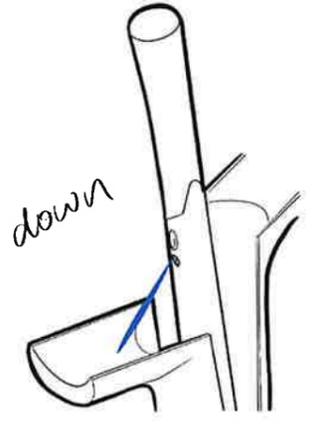
DEVELOPMENT FOUNTAIN ARC



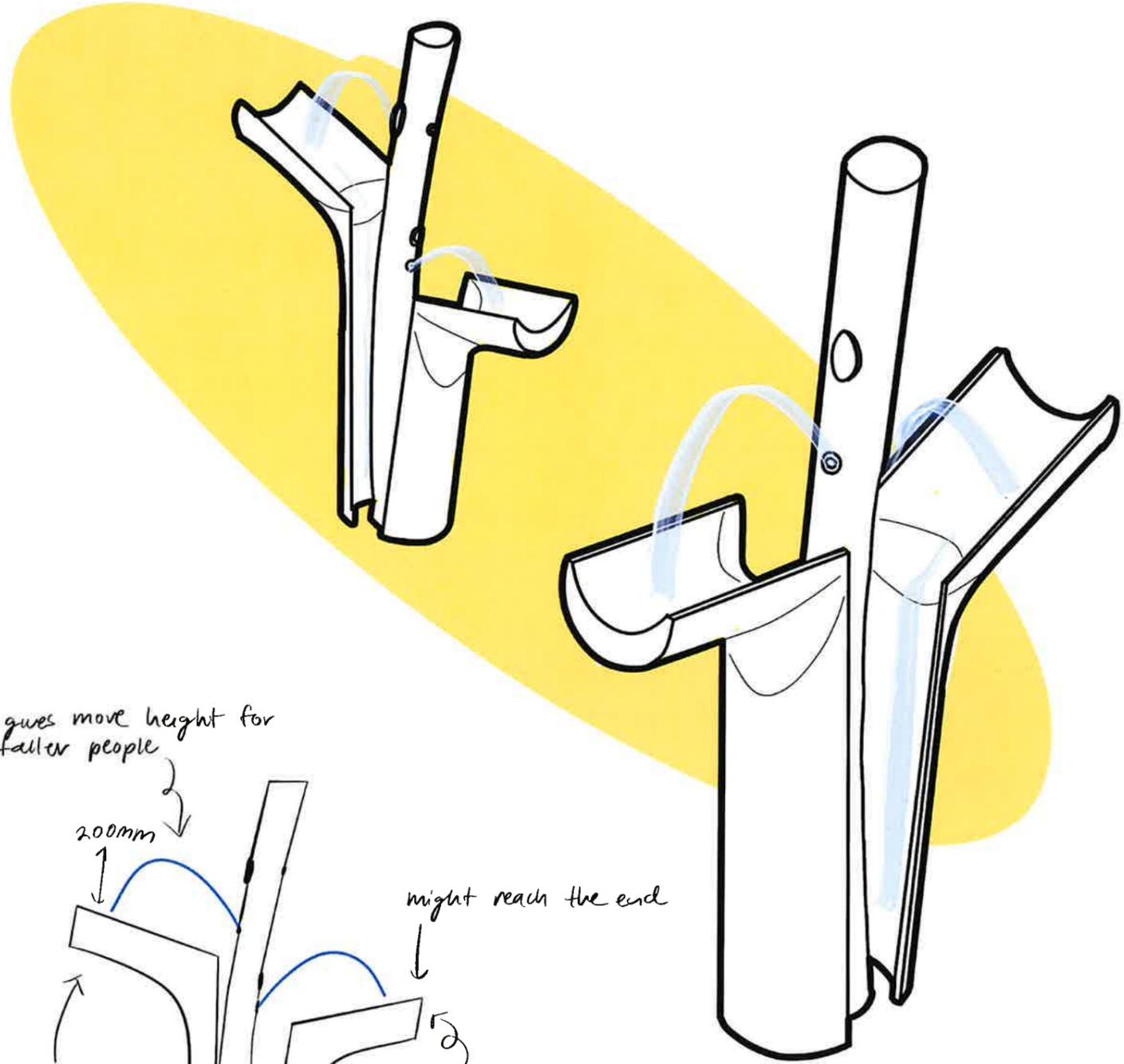
horizontal
more than one spot that water can be drunk from.



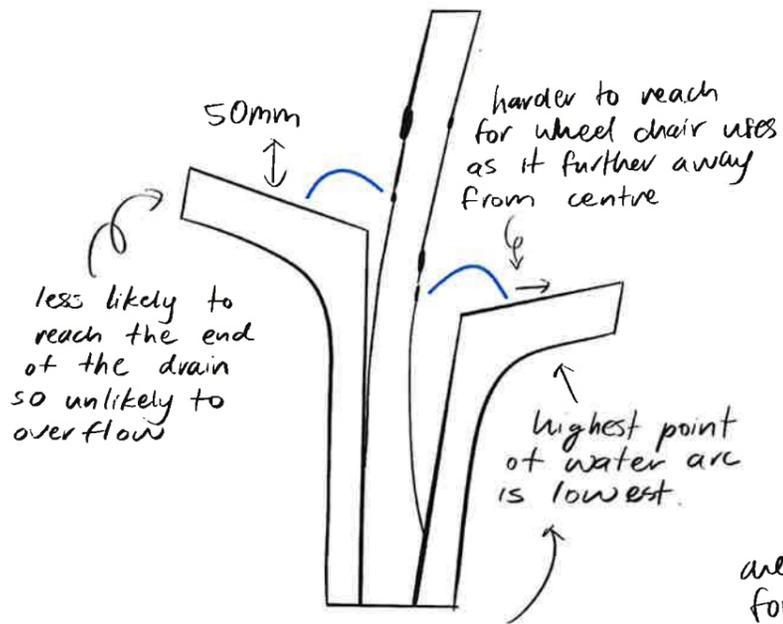
curve up
don't need to bend down as much when drinking.



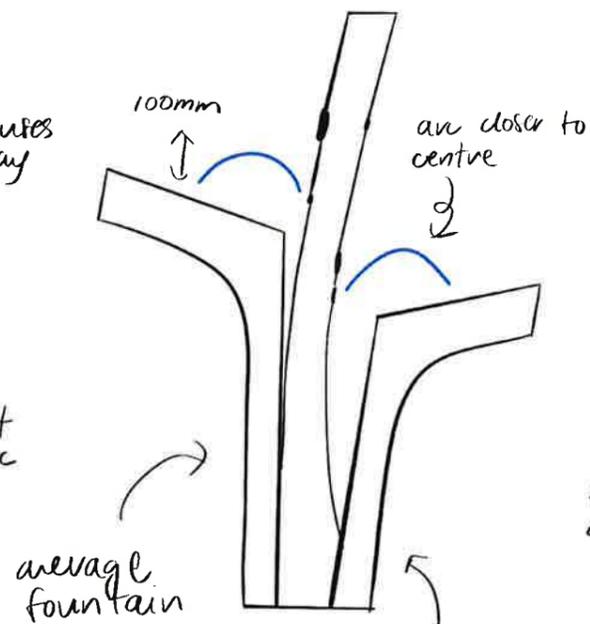
down
less splashes and mess around the area.



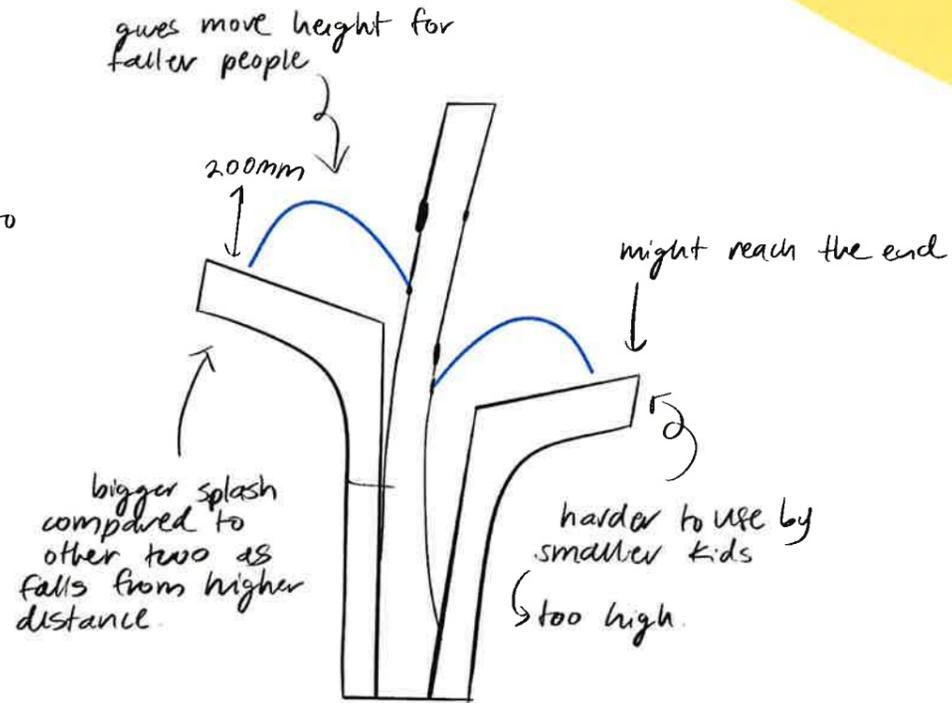
INTENSITY OF WATER



smaller kids are able to drink

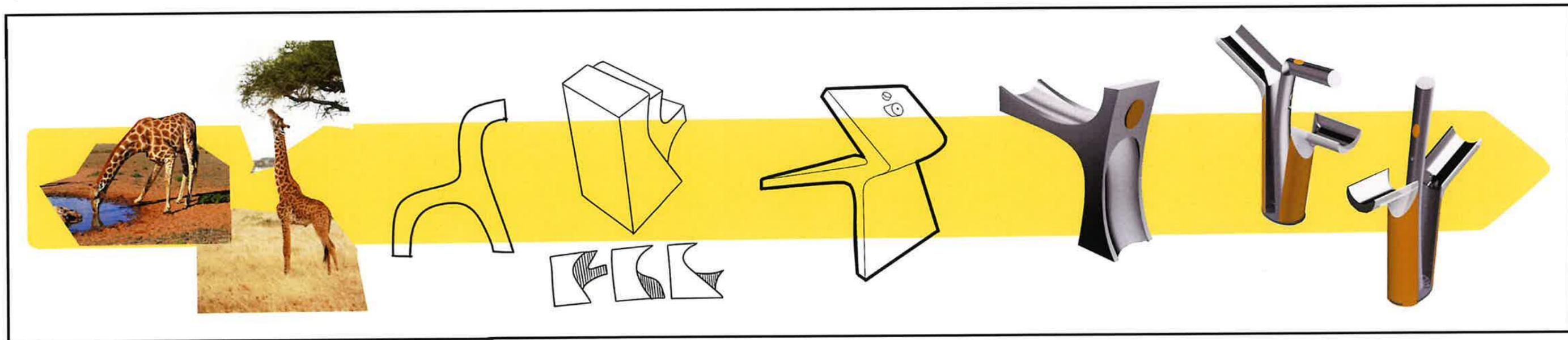


best for wheelchair uses



CHOSEN: 100mm for smaller fountain & 200mm for taller fountain (or slightly less)

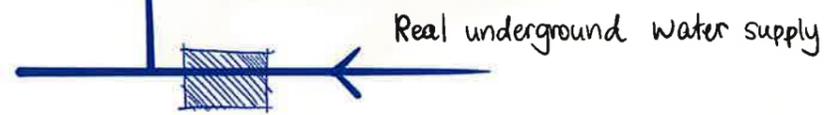
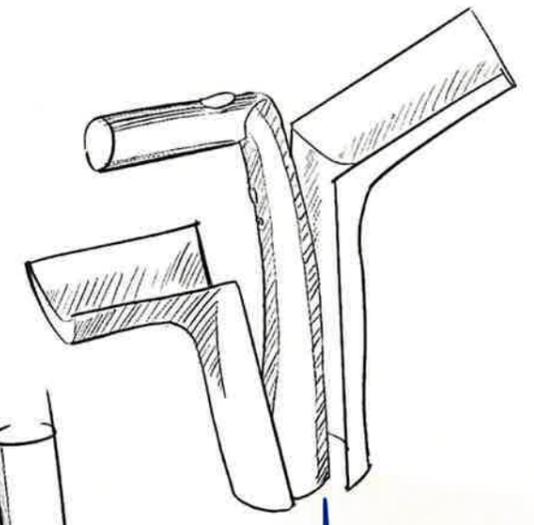
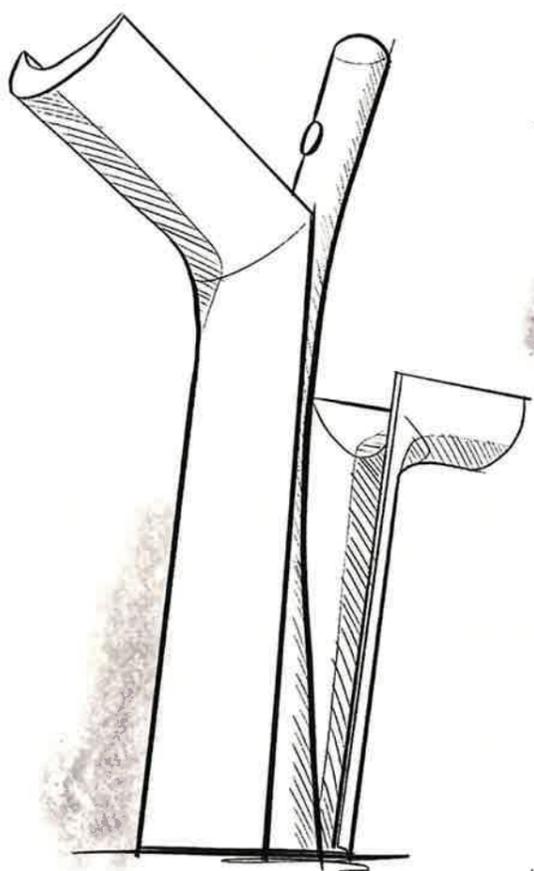
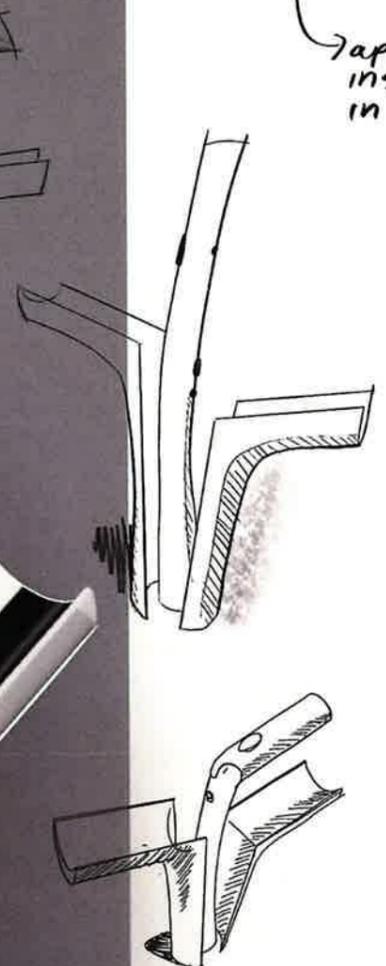
DEVELOPMENT ENVIRONMENT



DEVELOPMENT WATER COOLER

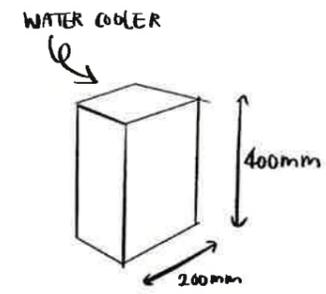
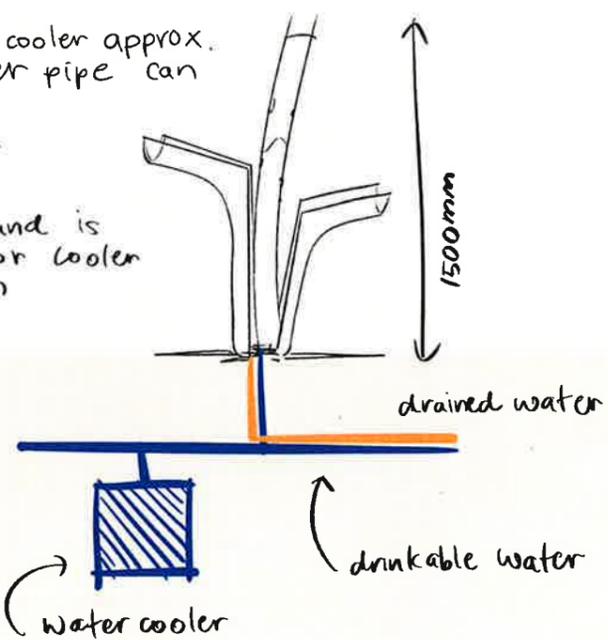
most people look for drinking fountain in hot days and after exercise

→ appreciated if water was cold instead of luke warm especially in summer.



For one water cooler approx. 3m of water pipe can be cooled

1m underground is appropriate for cooler for my design

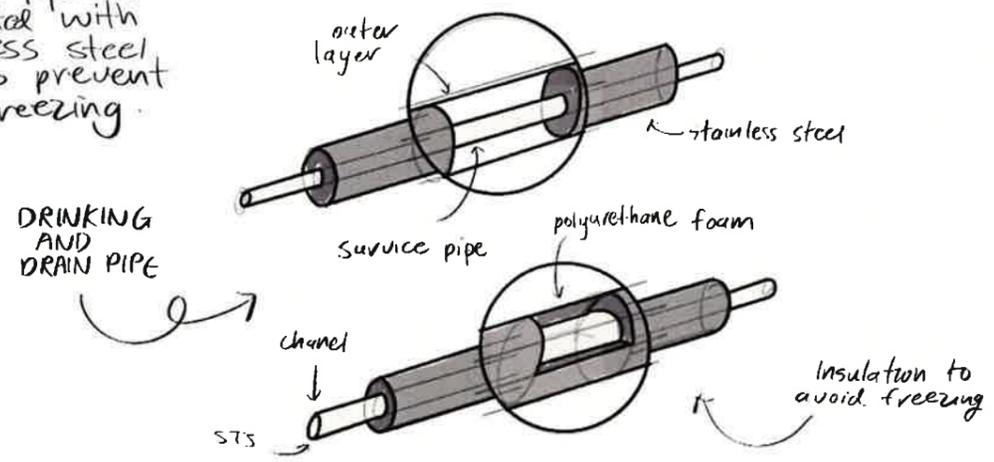


Mean annual temperatures ranges from 10°C in the south to 16°C in the north of NZ.

NZ generally relatively small variations between summer & winter temperatures.

→ relatively suitable condition to trial water cooler for outdoor

water pipe is protected with stainless steel inside to prevent from freezing.



DEVELOPMENT BUTTON ICONS



FOR BIG PEOPLE
& DRINK BOTTLE



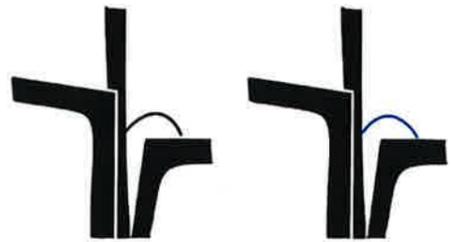
bending down posture to show how people use it

→ having the water fountain a similar design to the real one.

↓ THINGS TO CONSIDER

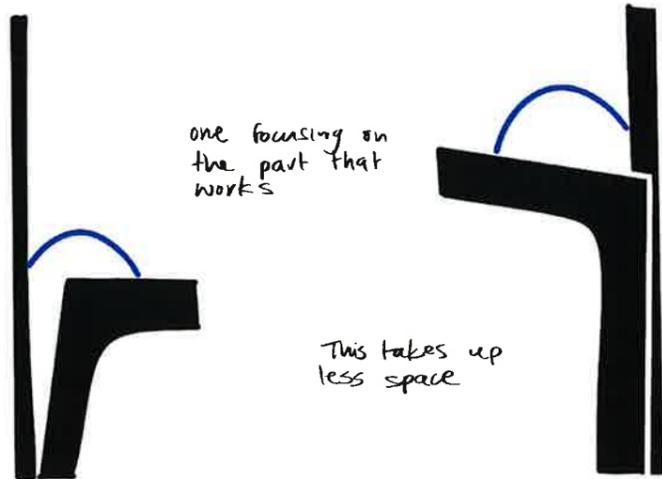
- simple
- accurate

FOR SMALL PEOPLE



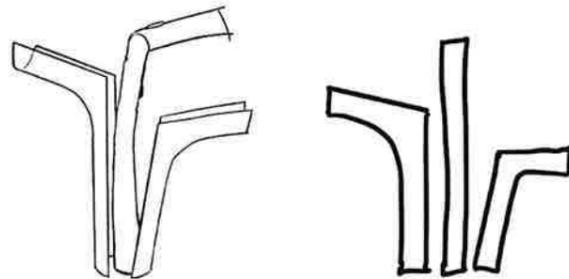
Having full body

can see better with blue



one focusing on the part that works

This takes up less space



include person



exclude person



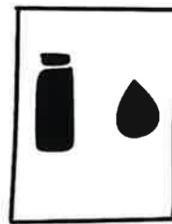
what if use symbols.



water drop
→ indicates that it is for water.
→ can get confused with the drink bottle option.



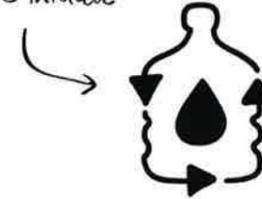
direct use



drink bottle

can have different icon next to the water drop to indicate what is what.

refilling bottle
water symbol in the middle



could also refer as recycling



adding features from the design



shows the shape of the drinking fountain for it to be used for water bottles



→ add the bottom

→ since it's new concept the design should be self-explanatory



have an explaining stand
→ explain on the design

↳ if so, no need for detailed icon of use for button

the actual design of fountain



adding the water output to match the other two.

↳ then would be better to use a drink bottle that is clear.

bottle



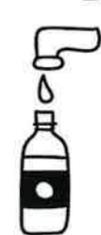
refill

simple but lack of info



negative space

tap doesn't really show



Just a drink bottle to show the main purpose

chosen design



DEVELOPMENT SHARING



- use feet to press button
- dog has direct access to fresh water
- people can stand on the drinking surface
- need larger surface area



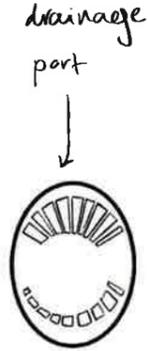
- press button by hand
- separate stand for dogs
- faucet useless

CHOSEN DESIGN

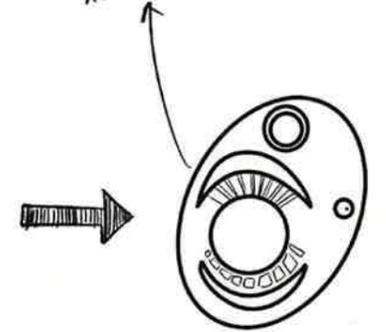
since the bottom of the design has a drainage this design would be the best



bottom view

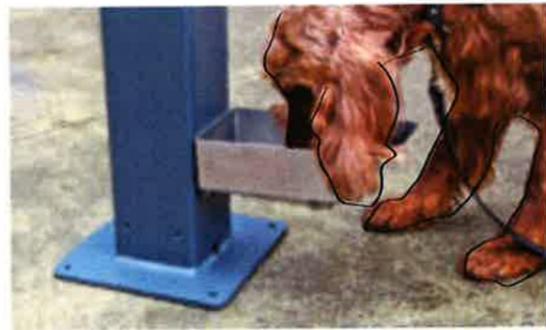


are the stripe drainage necessary?



slightly bigger so water can flow through here

split into half so when replacing and repairing do not have to uninstal the whole thing to unequip

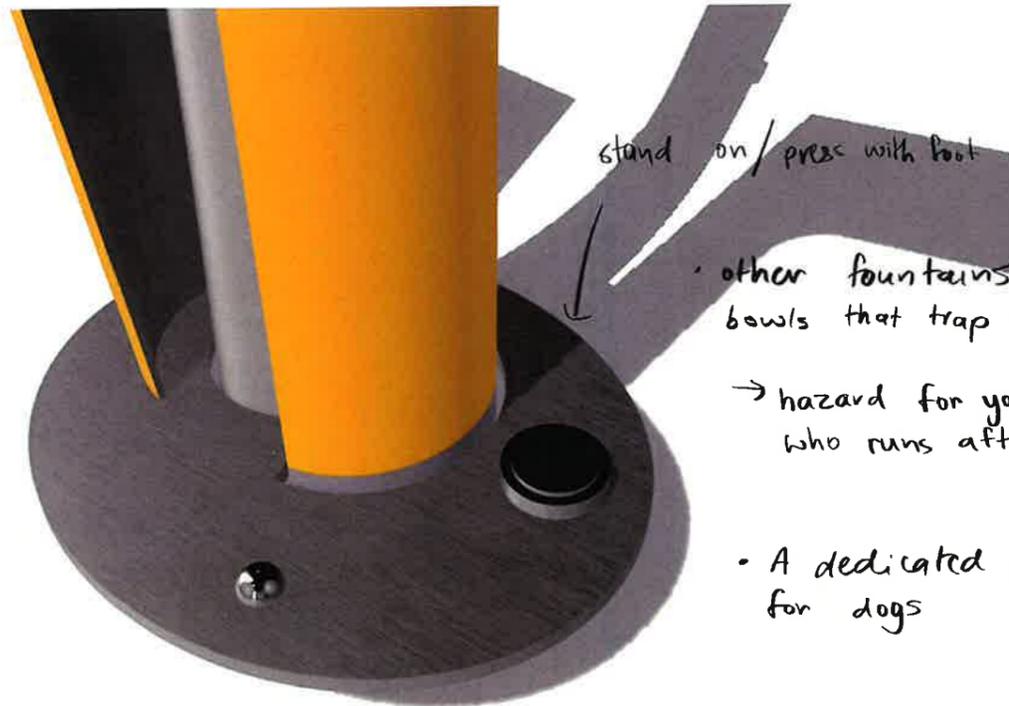


- drain water on floor
- high water output
- easy install



paw icon indicating used for pets

matte steel so water doesn't stain and safe for dogs to lick



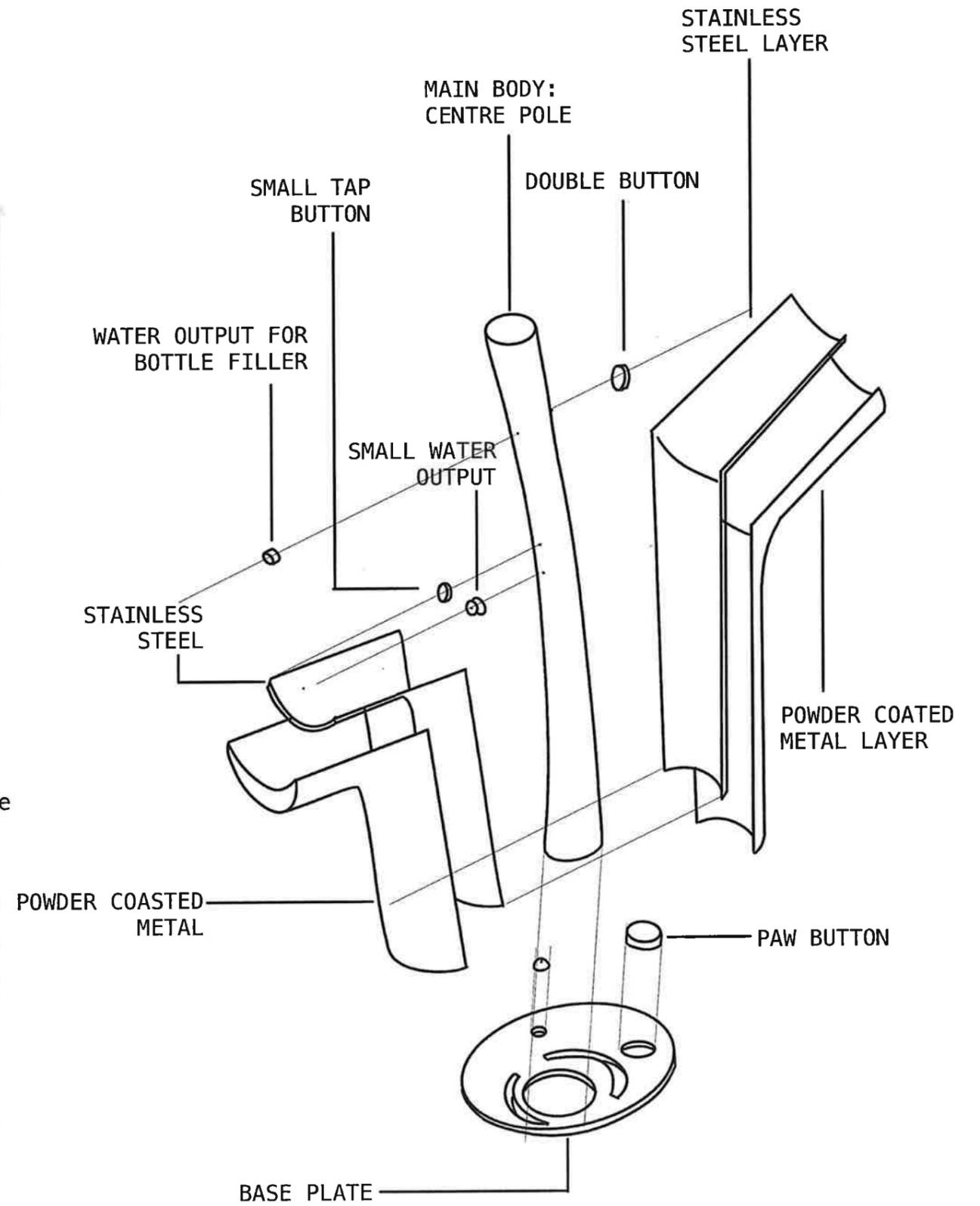
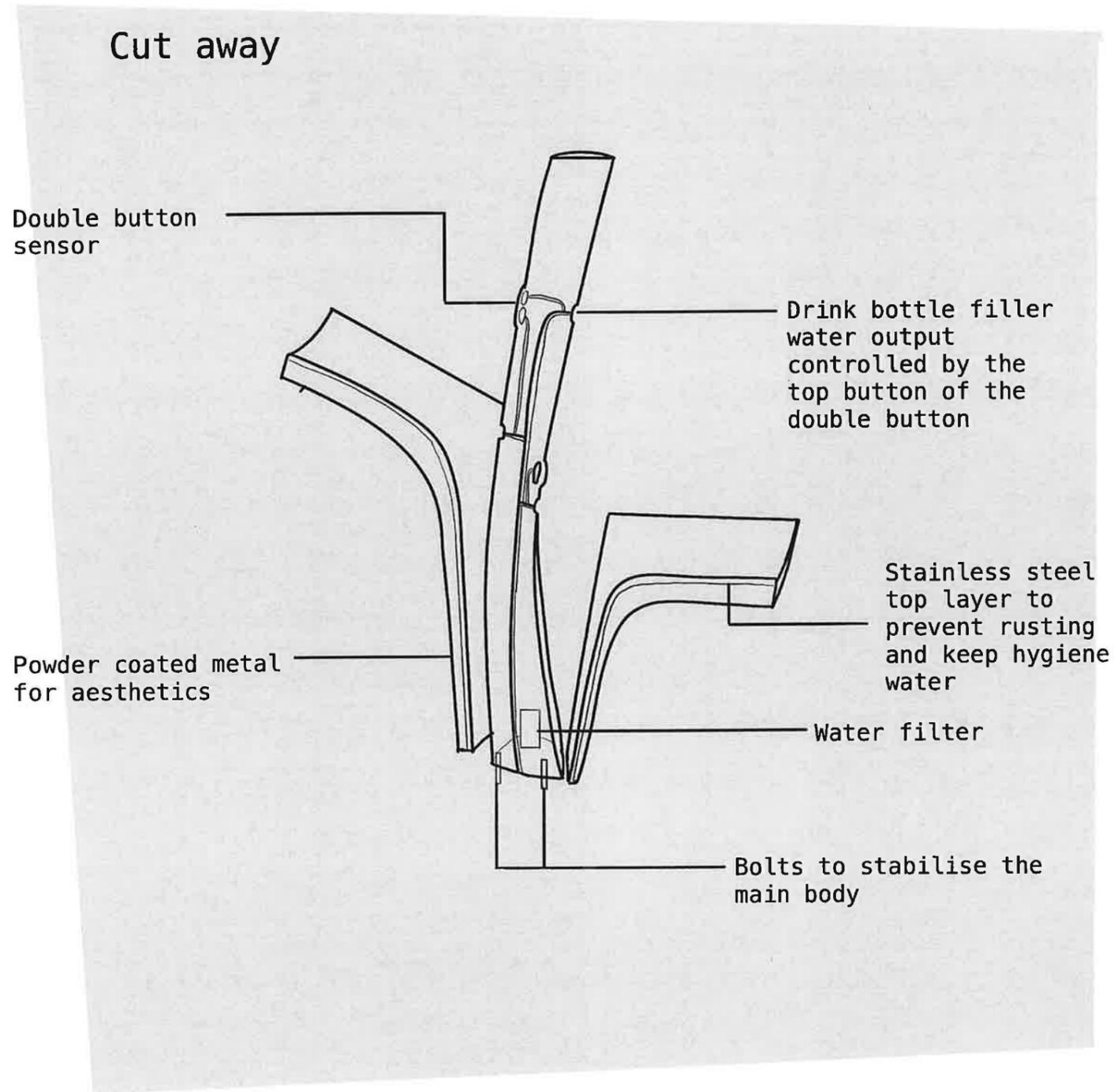
stand on / press with foot

- other fountains have messy bowls that trap stagnant water
- hazard for young children who runs after water.
- A dedicated bubbler function for dogs



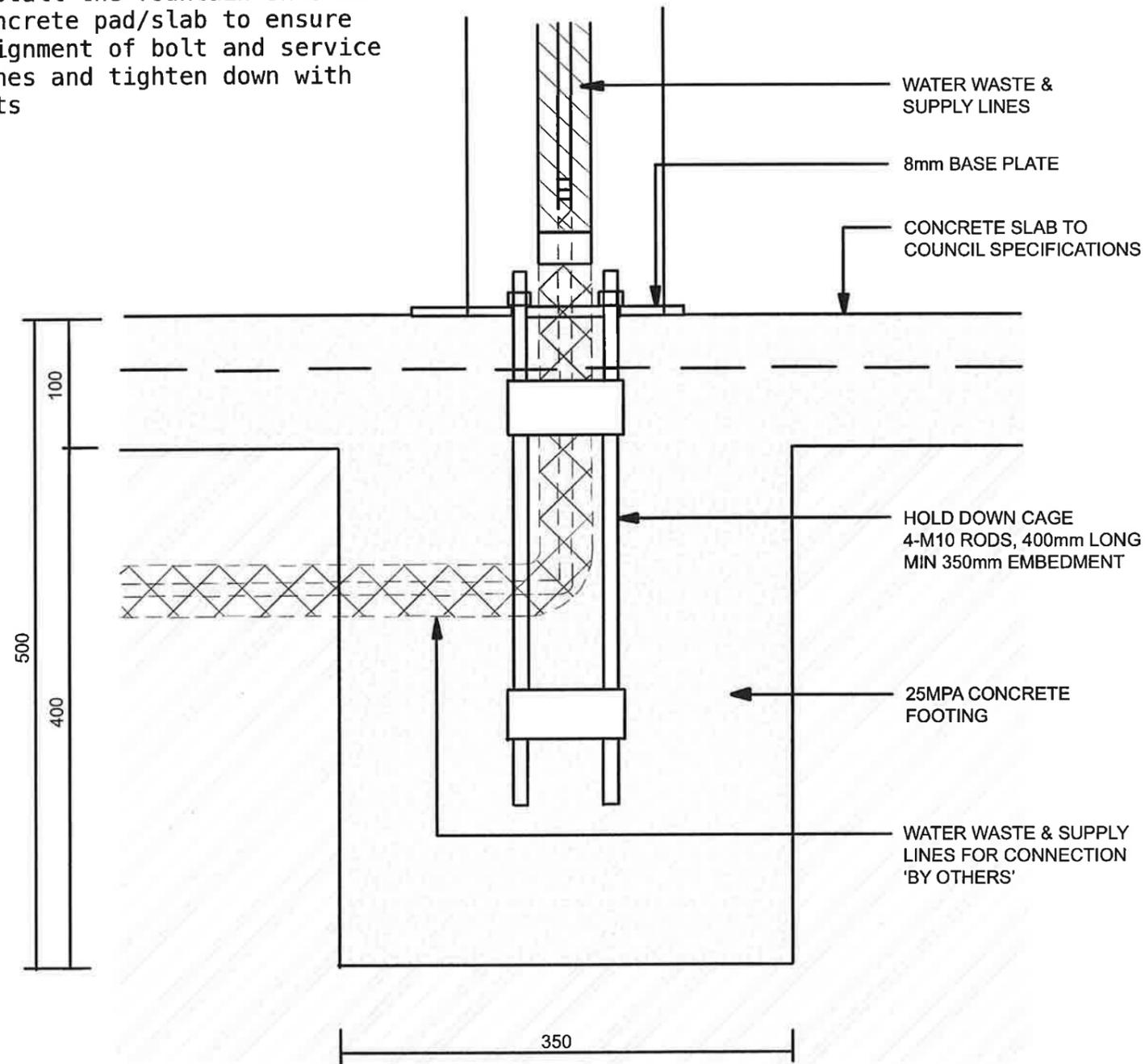
DEVELOPMENT

Details



DEVELOPMENT STRUCTURAL

Install the fountain onto set concrete pad/slab to ensure alignment of bolt and service lines and tighten down with nuts

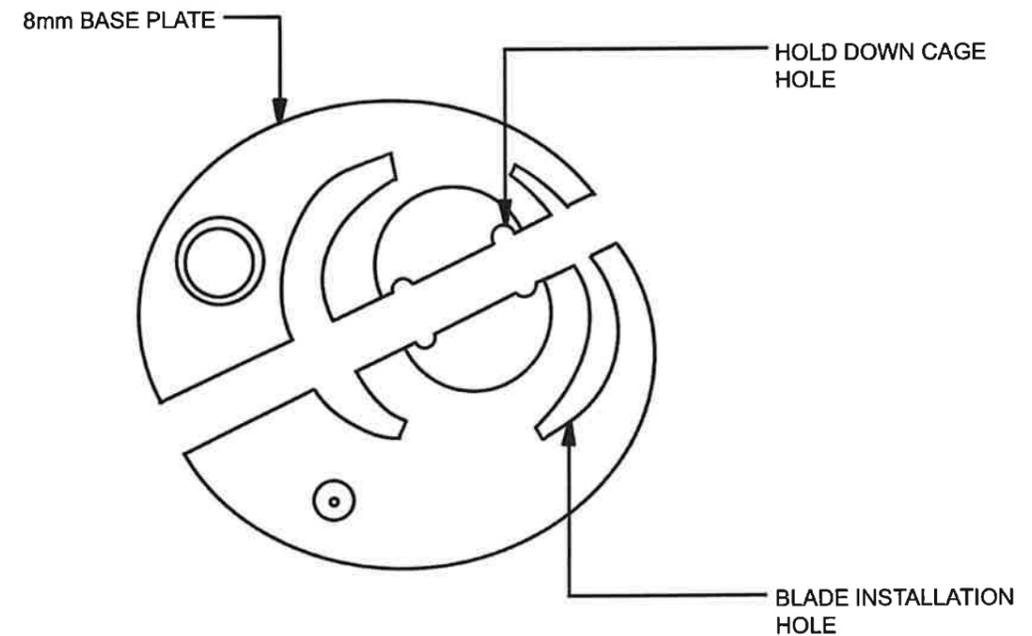


CONSIDERATIONS:

Must have enough space below for the water fountain to be stabilised. Follow the detail to dig and prepare the hole

Ensure the bolt assembly is located centrally in fountain hole and set top of all threads a minimum of 35mm above proposed finish height

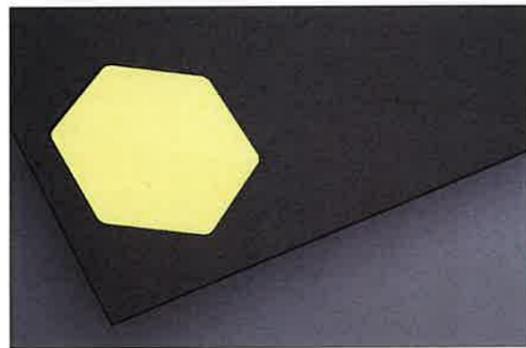
Waste and inlet water lines are located through the centre circle of the cut base plate holes; ensure



Once bolt and service lines are correctly installed, pour concrete, filling to desired height of Bottom of fountain base plate

DEVELOPMENT

LOGO CONCEPTS

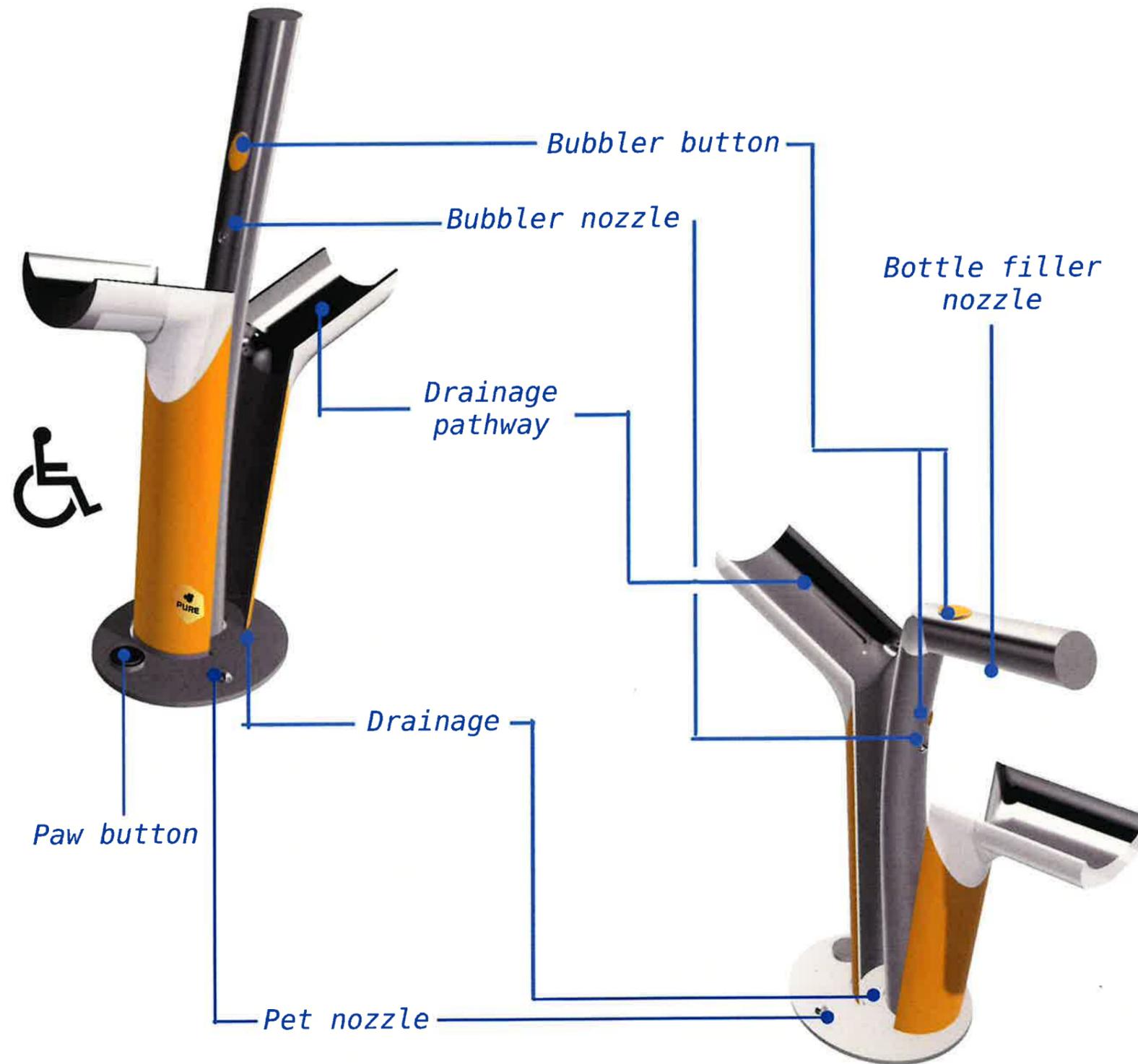




Advanced hi-tech drinking fountain
Also for the disables and dogs



PURE WATER: DRINKING FOUNTAIN

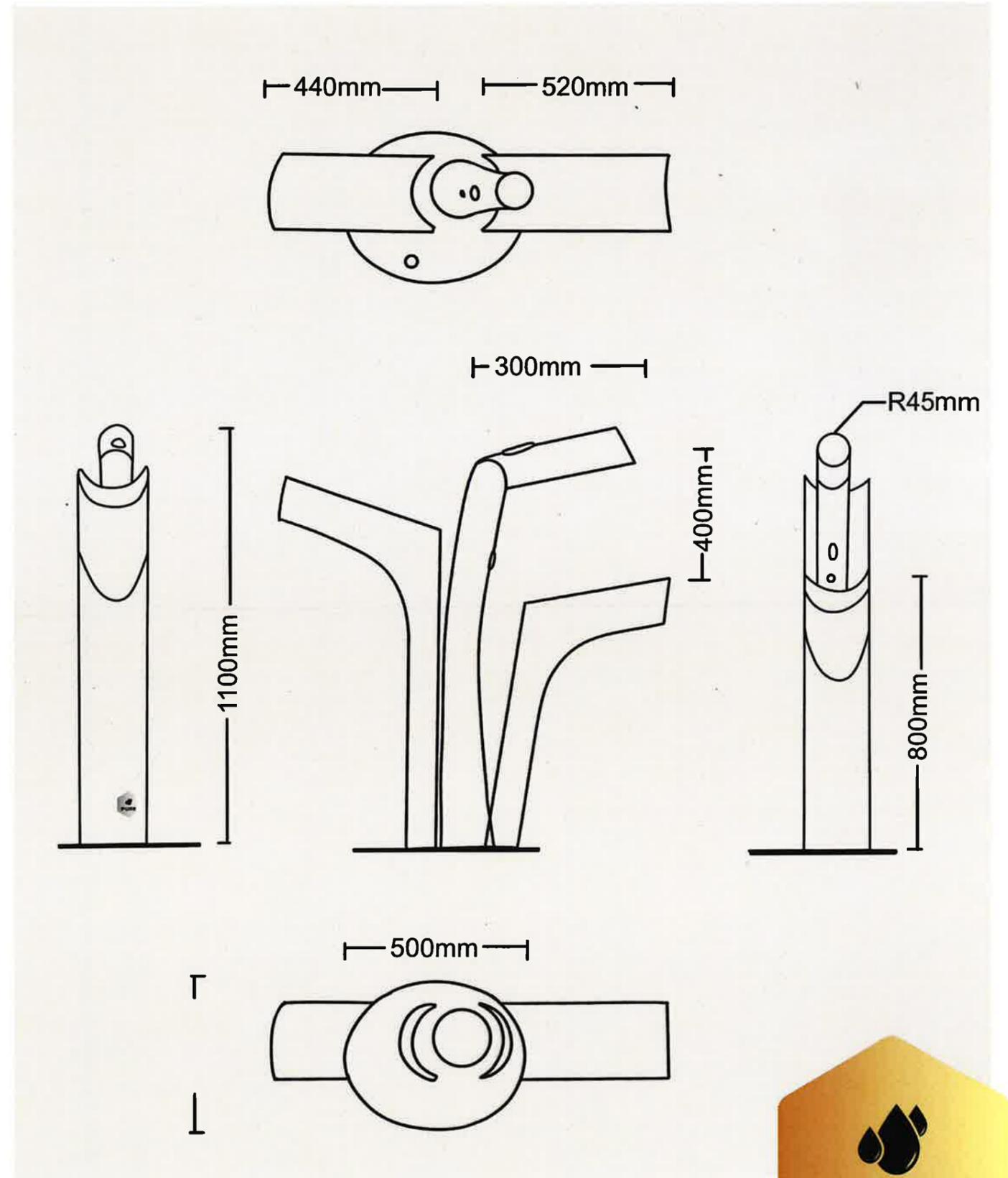
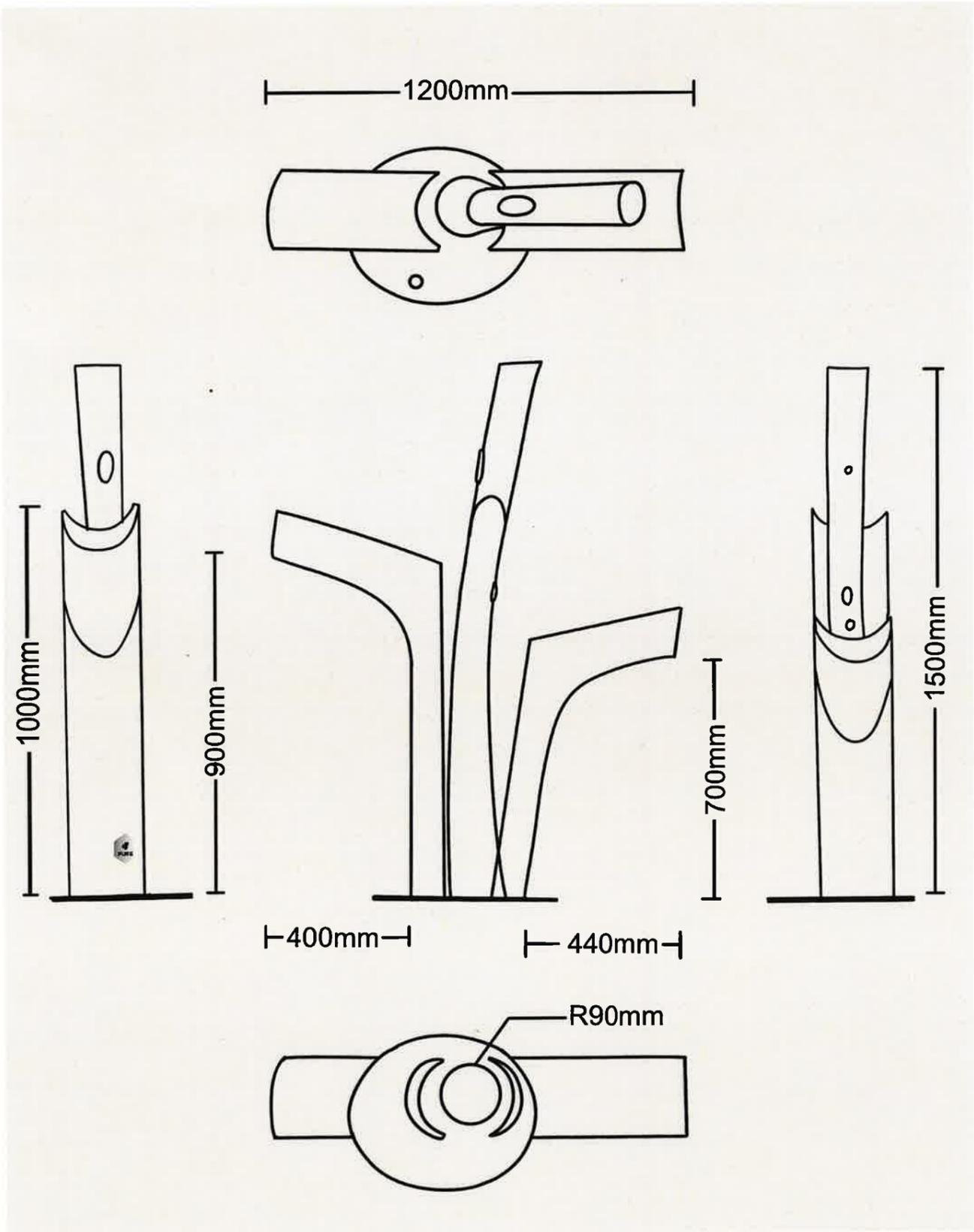


• BUBBLER • BOTTLE FILLER • WHEELCHAIR • IN-GROUND FIXING • WATER FILTER •



Standard powder coat colour range, additional powder coat colours available, galvanised/stainless options for coastal applications

DIMENSIONS



How it works

The Pure Drinking Fountain can be changed into different forms to serve different purposes.

Pin joint connection

Able to rotate in a vertical motion by the single bolt in the center

Only moving when force is applied

Gently force is added to change its form

makes a sound to inform that it's in position



state 1

state 2

state 3

Functions available:
tall and short drinking faucets, dog faucet

Functions unavailable:
drink bottle refiller faucet

Functions will be disabled while the drinking fountain isn't in its correct form: must be in the form of state 1 or 3 to able the faucets

Functions available:
tall faucet, dog faucet, drink bottle refiller faucet

Functions unavailable:
short faucet

Features

6 features make this innovative product stand out.

Double button

Stainless steel 316 valve components feature teflon-coating for smoother pushing action



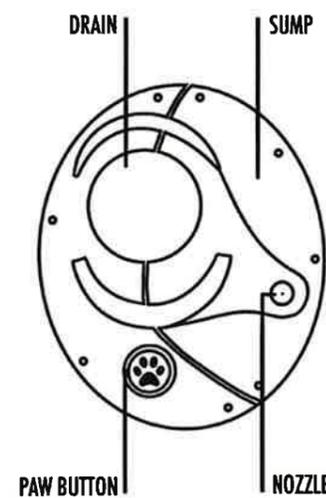
Nozzle

At a 45 degree angle for direct drinking use nozzles to perform an arc motion



Integrated dog bubbler

Step on the paw button to hydrate your dog. Water drains immediately after use for optimum hygiene. Eliminates bowl and stagnant water



Refill

Filling a bottle height <350mm is easy with the unique fountain structure



Vandal-resistance

The fountain uses extra-strong hardware designed for heavy-duty use. Can be repaired and replaced with parts

Accessibility

The Pure Drinking Fountain uses universal design principles to meet DDA requirements. It is shaped for all ages and is accessible to wheelchair-users

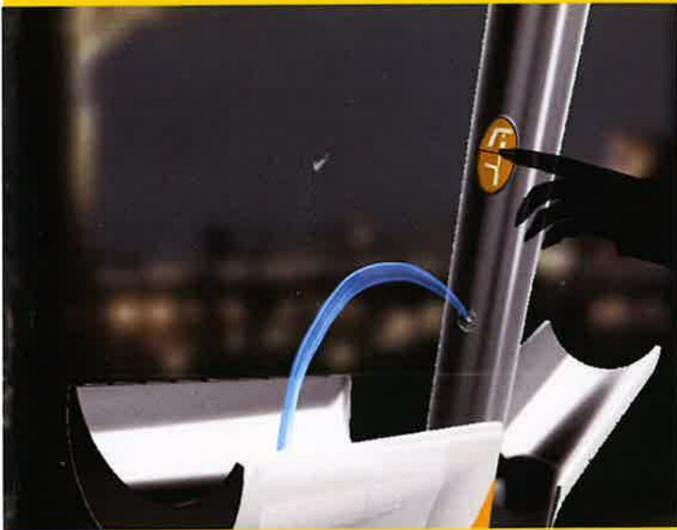
All-in-one

Refill your bottle
Take a drink
Hydrate your dog



Refill

Designed to fill regular bottles



Drink

Release water to drink



Hydrate

Step on the paw button to hydrate pets



Products



Options

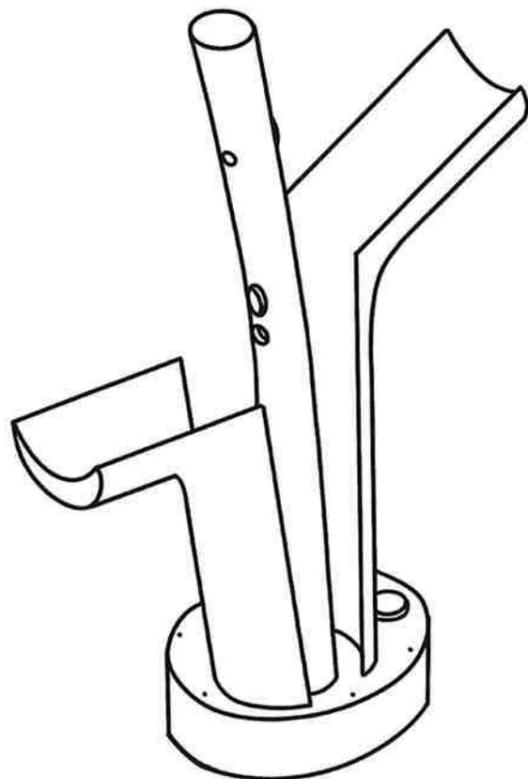
Body

Stainless steel 304
Stainless steel 316

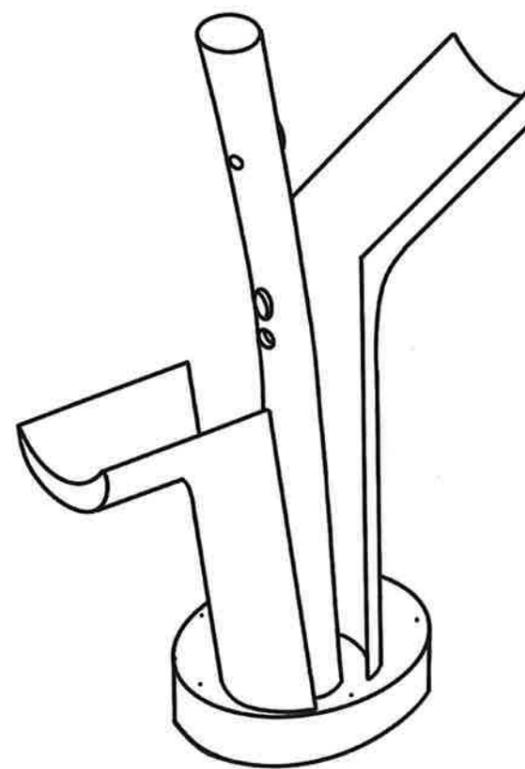
Filter

Integrated filter available

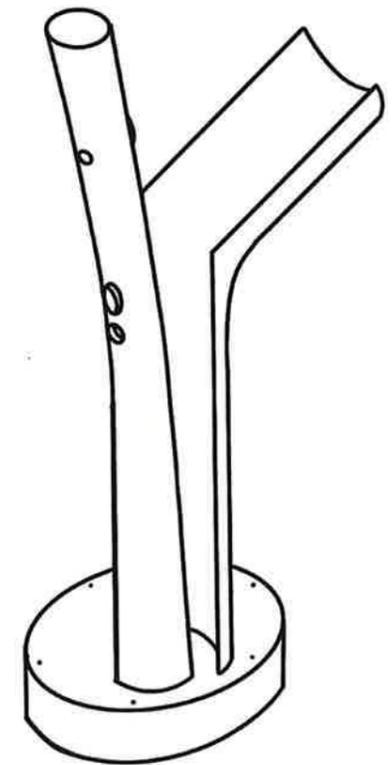
Type



Pure Dog Bubbler



Pure Fountain



Pure Single Fountain

Outstanding Product Scholarship Exemplar 2022

Subject	Design and Visual Communication	Standard	93602	Total score	19
Grade score	Annotation				
	<p>General</p> <p>This submission is a cohesive project that continually raises questions, explores possibilities, and makes improvements to ideas. The project very clearly focuses on its context and seeks ways to create an innovative response. It continually considers who the product is for, where it will be used and what it needs to do. The submission clearly demonstrates insightful thinking and robust resolution of a design outcome in terms of creating a product that can be used by a range of people and even animals. Overall, this submission demonstrates sustained levels of sophisticated thinking and convincing communication.</p>				
6	<p>Design ideation</p> <p>This submission explores and generates ideas throughout the entire project. Initially, ideas for form and aesthetics are explored. As the project progresses, the giraffe inspiration is explored in more interesting ways. The designer is fully engaged with both the potential of the giraffe inspiration as well as the issues related to the context. The idea of the height difference between a mother giraffe and her baby is used to explore design opportunities for meeting the needs of a variety of users. The way that a giraffe moves inspires the functionality of the water fountain. The final product incorporates some interesting ideas that show clever use of initiating sources. There are some opportunities for innovation within this submission that could be picked up on and explored further.</p>				
7	<p>Design practice</p> <p>The strength of this submission is its sophisticated integration of the giraffe theme with its design context and the functional requirements relating to the context. The design practice shows clear engagement with its context and deep thinking about the purpose of the design and the people who will be using it. The design thinking is perceptive, reflective and shows determination to create a high-quality outcome. The design practice has a practical focus but also aims to produce an elegant, refined product. The final product incorporates several functional features, yet also achieves a sleek, sophisticated appearance.</p>				
6	<p>Visual communication</p> <p>This submission uses visual techniques to convey a clear and engaging narrative of its design practice. A range of visual communication techniques are used effectively to communicate a thoughtful design narrative. It is very easy to understand the design thinking and to see the progression of the design using visual techniques. Visuals often include people and animals that clearly show how the product is used. The submission utilises both hand sketching and CAD techniques to express a fluent, convincing narrative. The final design is expressed using very polished CAD visuals that show the outcome convincingly. Most pages contain a range of smaller visuals, and it would be useful to utilise some larger, more powerful visuals at times. The internal details of the fountain could also be expressed more clearly.</p>				