

Andrea Ghisoni

Architectural in Extreme Environments, Urban Shelter

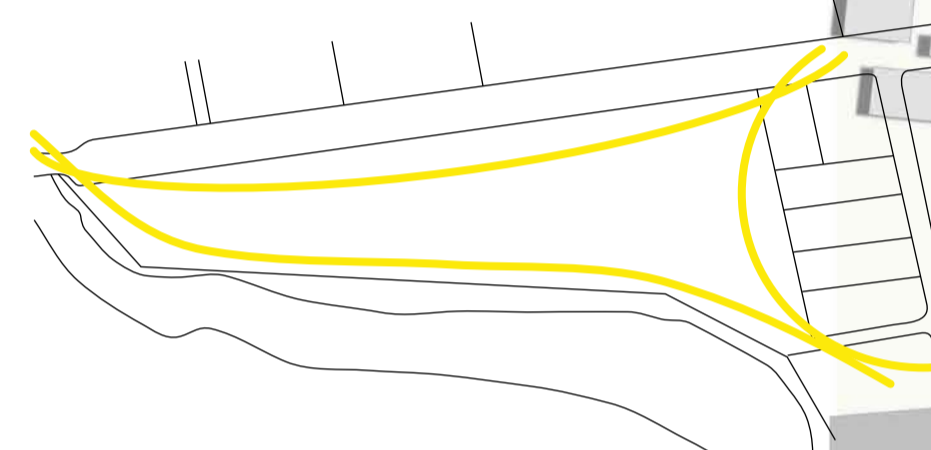
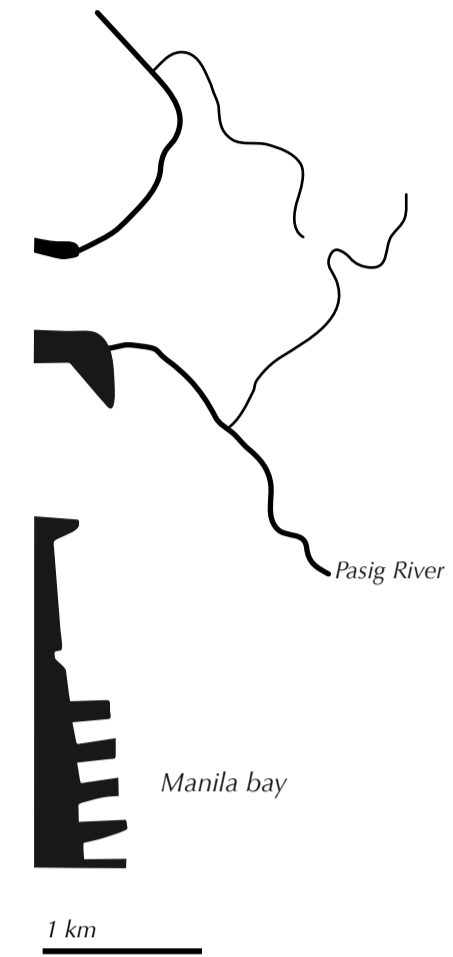
Quezon City, Metro Manila, Philippines

NEIGHBOURHOOD DESIGN

DAMAY LAGI

BEFORE:
AREA: 180.000 SQM
POPULATION: 6200 PEOPLE
1543 FAMILIES
DENSITY: 21 SQM/PP.

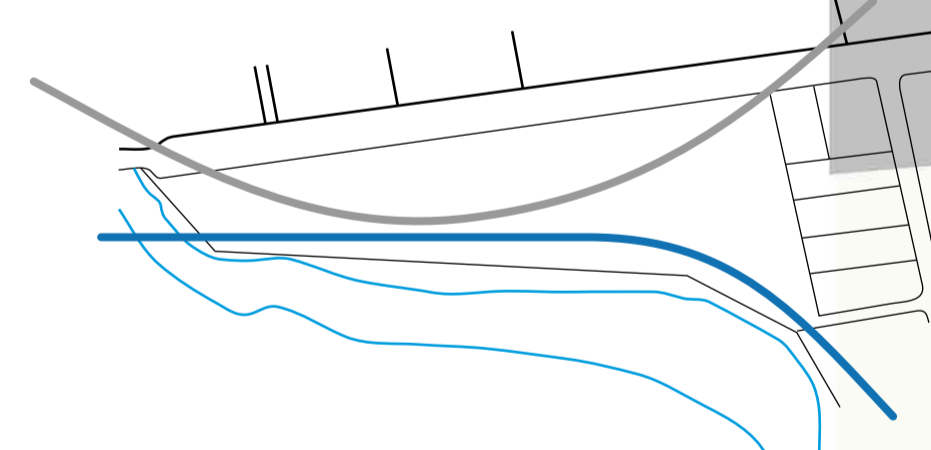
NOW:
AREA: 180.000 SQM
POPULATION: 5400 PEOPLE
900 FAMILIES
DENSITY: 33 SQM/PP.



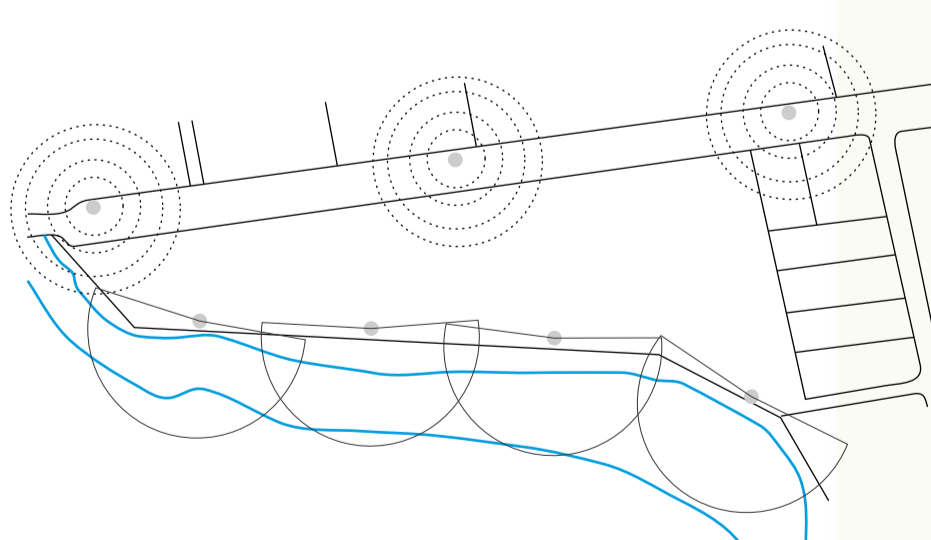
2 DIFFERENT SPACES



3 DIFFERENT RELATIONS

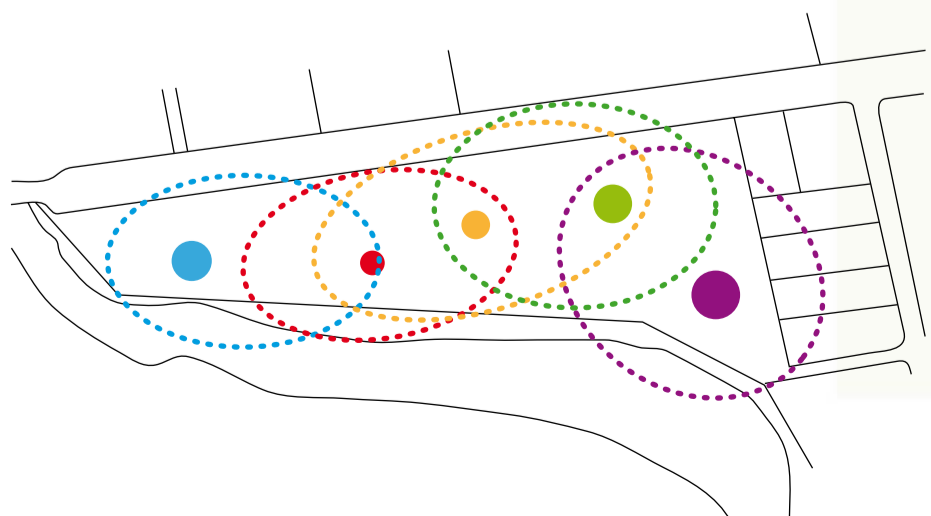


4 DIFFERENT FEELINGS



5 LINKS AND JOINTS

- EQUIPPED WORKSHOP FOR HANDICRAFTS
- COMMUNITY LAUNDRY
- WASTE COLLECTION
- PROMENADE ALONG THE RIVER
- WIFI AREA, INTERNET POINT
- PLAYGROUNDS



① SITE PLAN . GROUND FLOOR 1 : 1000



NEIGHBOURHOOD DESIGN

MINIMUM SPACE IN A COLLECTIVE HOUSING SYSTEM, ALLOW TO THINK SOME COMMON FUNCTIONS AND FACILITIES, LIKE THE LAUNDRY, WORKSHOPS, KITCHEN GARDENS, PLAYGROUNDS, SMALL HOUSING KINDERGARTEN,

CENTRES FOR WASTE COLLECTION AND COMMUNITY-SUPPORTED AGRICULTURE GROUPS. THIS ALLOWS A REDUCTION IN COST AND THEREFORE A BETTER STANDARD OF LIVING OVER TIME, SHARING SERVICE THAT ALLOWS YOU TO HAVE MORE OPPORTUNITIES FOR SOCIALISATION AMONG THE PEOPLE WHO INHABIT THE

SAME NEIGHBOURHOOD. SOCIALISATION AND SHARING HELPED TO CREATE A SENSE OF COMMUNITY, WHICH IS THEN ABLE TO CREATE AN IDENTITY INTO THE PEOPLE, IN RELATION TO THE PLACE WHERE THEY LIVE. FEEL PART OF A COMMUNITY MEANS TO CARE FOR HIMSELF, OTHERS AND

THE SPACE AROUND US. BECAUSE WE FEEL OUR. IN THESE WAY THE QUALITY OF THE SPACES, AND THE LIFE STANDARD OF LOW-INCOME PEOPLE CAN INCREASE.



- 1 KINDERGARTEN
- 2 WASTE RECYCLING
- 3 WORKSHOP
- 4 LAUNDRY
- 5 PLAYGROUND
- 6 SENIOR CENTER
- 7 GREEN AREAS
- 8 SHOPS
- 9 CATWALK

GROUND FLOOR | 1 : 500



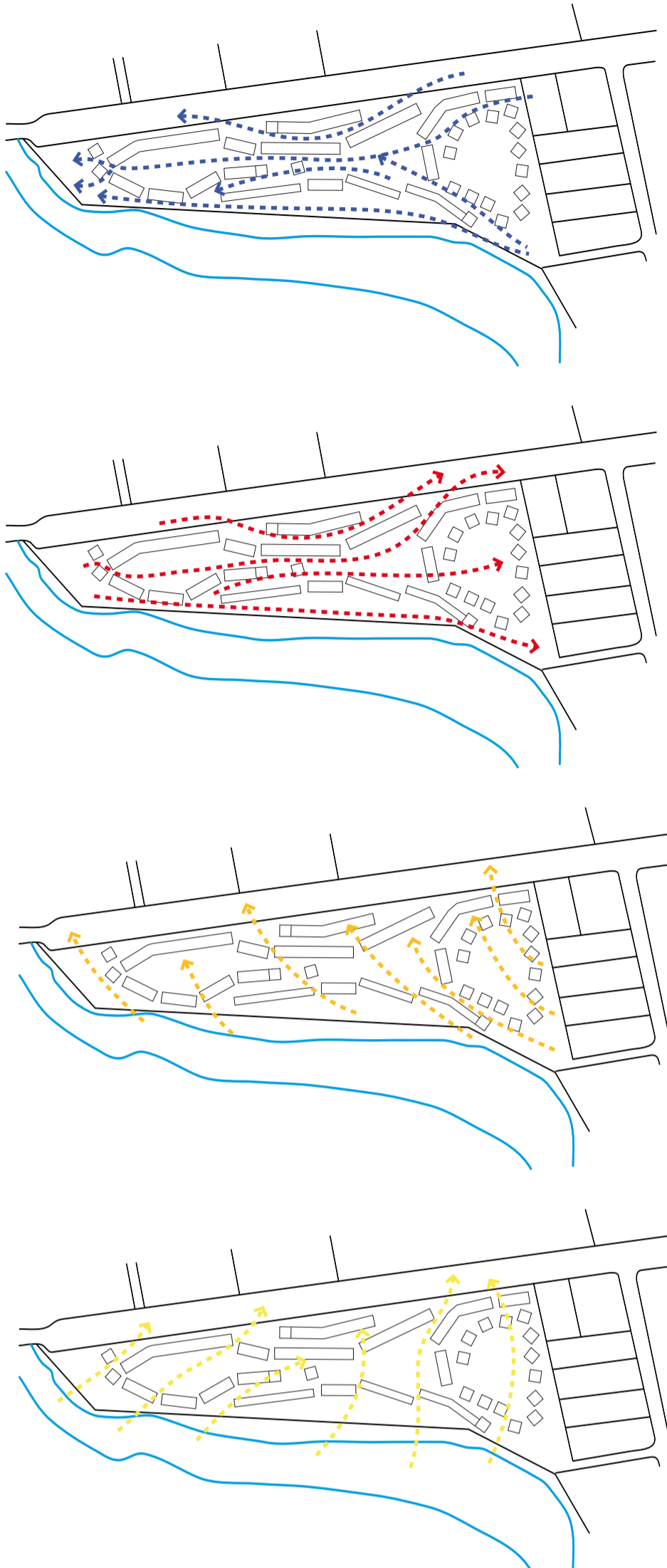
SECOND FLOOR | 1 : 500

5 COMMON AREAS FOR RESIDENTS. COMMON AREAS HELP TO CREATE A SENSE OF COMMUNITY AND THEREFORE IDENTITY

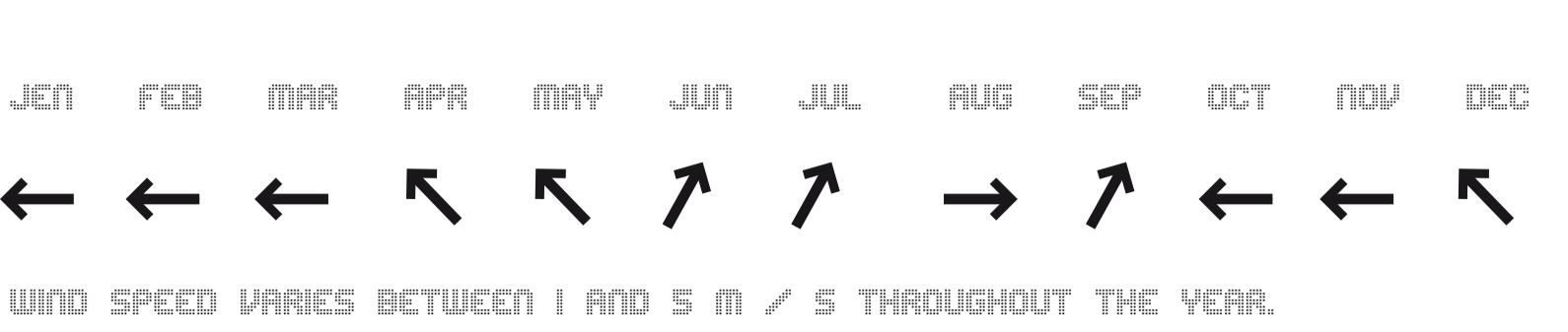
7 A NETWORK OF LINKS TO DIFFERENT SCALES CAN ALLOW SHORTCUTS IN EVERY DIRECTION. SPACE IS COMPLETELY PERMEABLE

8 SHOPS CREATE A FILTER WITH THE STREET, AND THE BUILDING ON THE OTHER SIDE ARE MORE OPEN TO THE LANDSCAPE WITH A LONG CATWALK ON THE RIVER



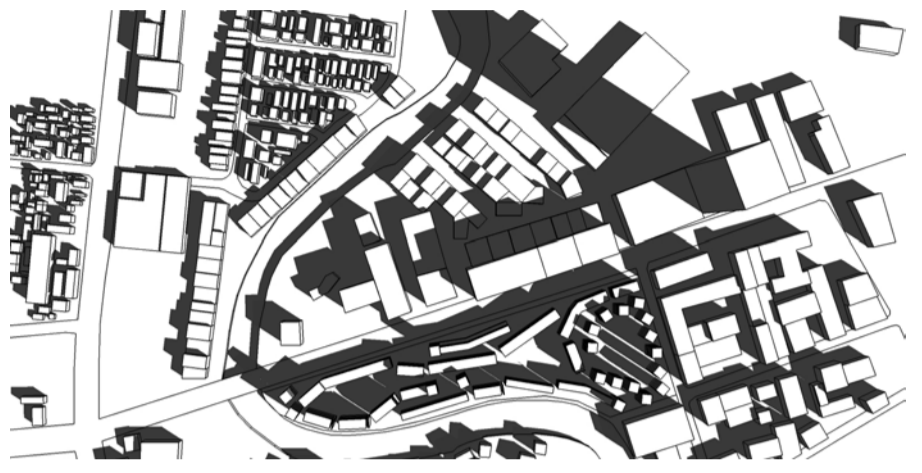


WIND CAN CROSS ALL THE SITE IN EVERY DIRECTION

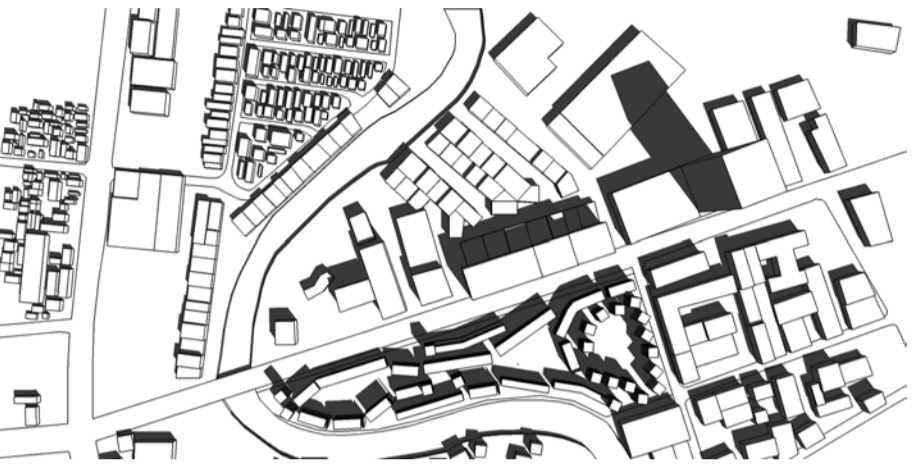


WIND DIAGRAM

JANUARY
FEBRUARY
MARCH
OCTOBER
NOVEMBER



21TH JAN 08.00

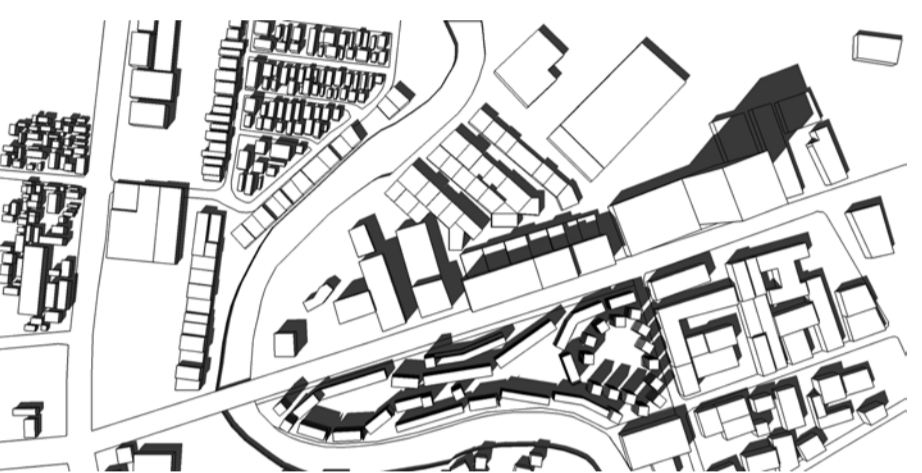


SOLAR DIAGRAM

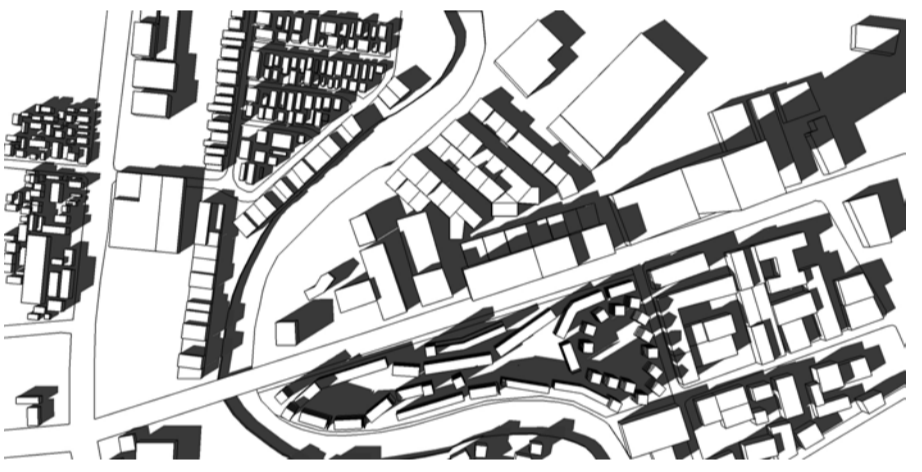
21TH JAN 10.00



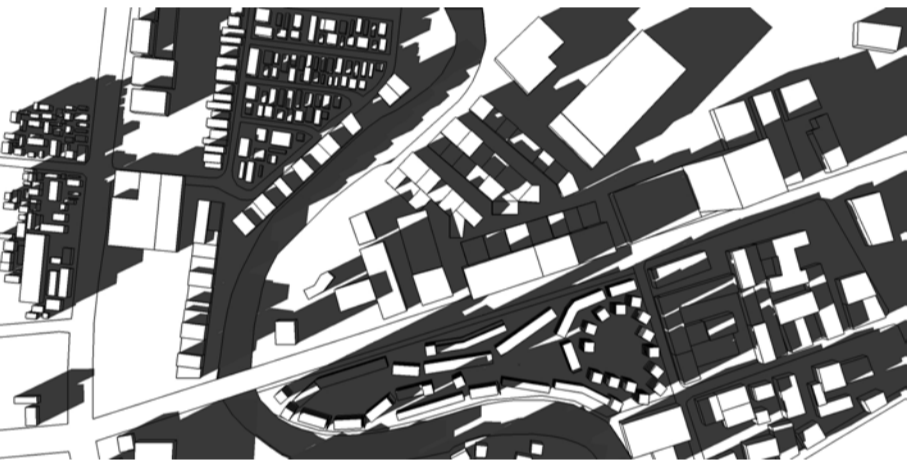
21TH JAN 12.00



21TH JAN 14.00



21TH JAN 16.00



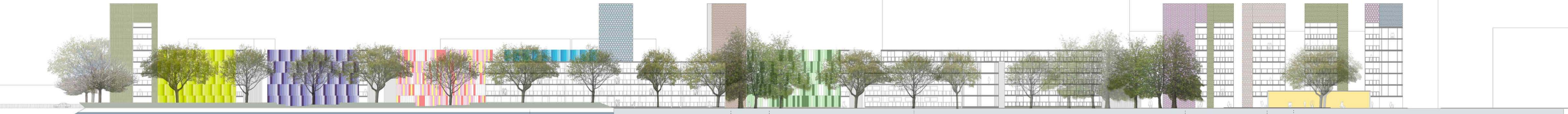
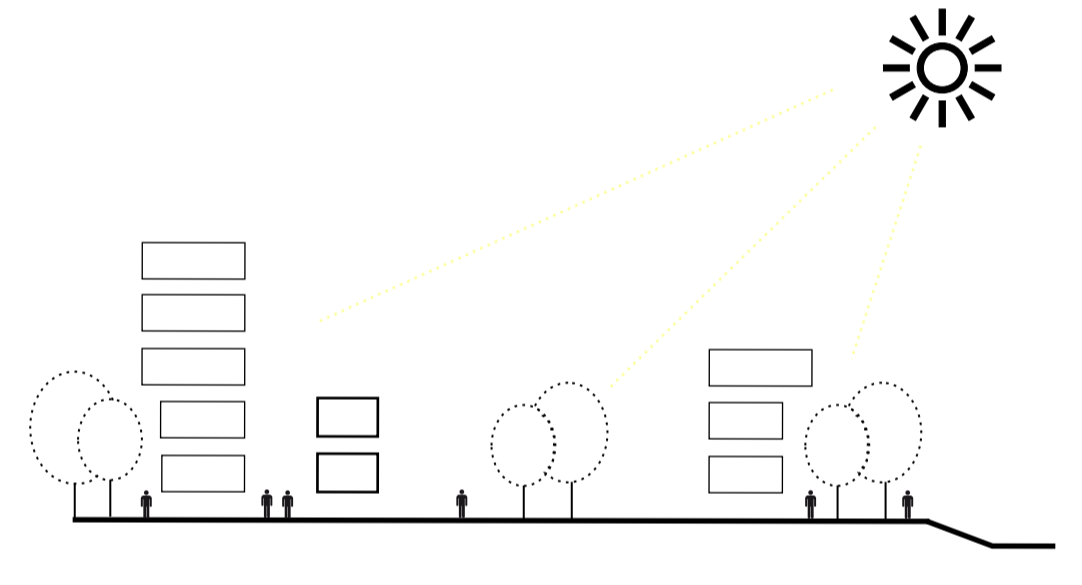
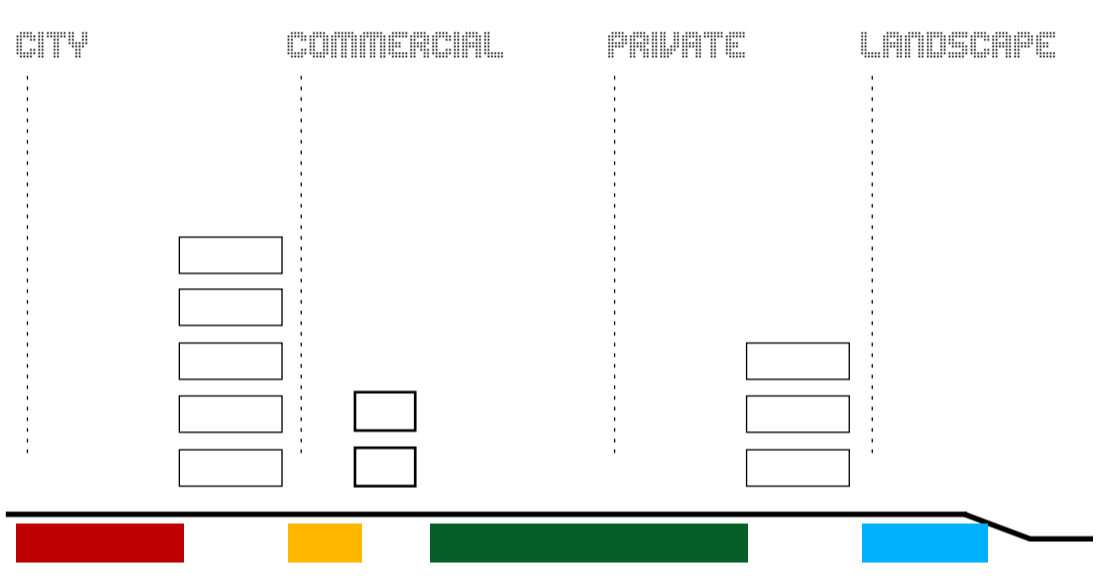
21TH JAN 18.00



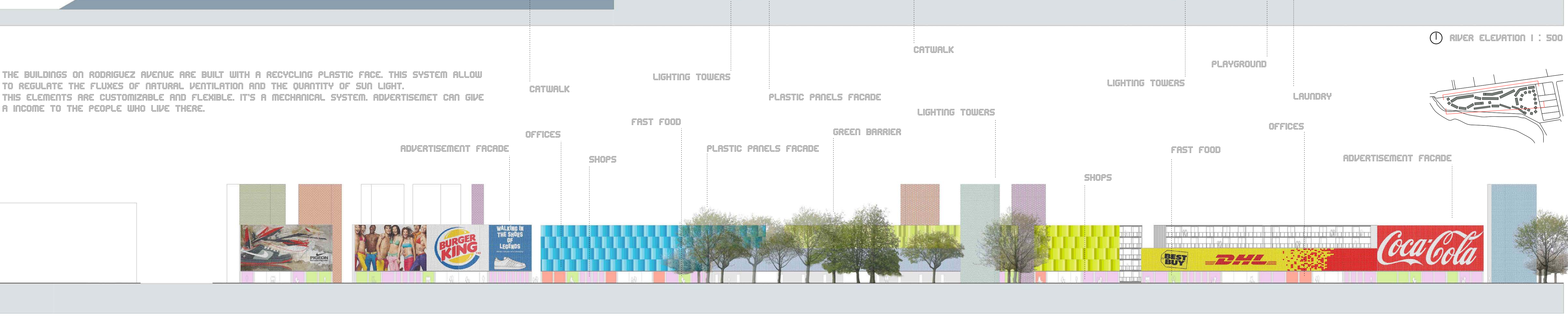
RODRIGUEZ AVENUE VIEW

DIFFERENT LAYERS DIVIDE THE LANDSCAPE FROM THE CITY, PRIVATE FROM THE PUBLIC

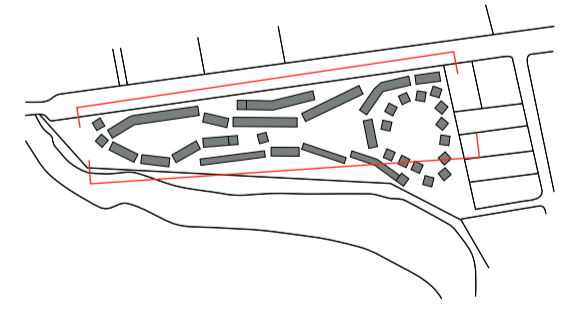
TREES PROTECT THE BUILDING AND COMMON AREAS FROM THE SUNLIGHT. BUILDING IS RELATED TO THE TREES, THEY CHANGE THEIR SHAPE WHERE THERE ARE TREES



THE BUILDINGS ON RODRIGUEZ AVENUE ARE BUILT WITH A RECYCLING PLASTIC FACE. THIS SYSTEM ALLOW TO REGULATE THE FLUXES OF NATURAL VENTILATION AND THE QUANTITY OF SUN LIGHT. THIS ELEMENTS ARE CUSTOMIZABLE AND FLEXIBLE. IT'S A MECHANICAL SYSTEM. ADVERTISEMET CAN GIVE A INCOME TO THE PEOPLE WHO LIVE THERE.



RIVER ELEVATION 1 : 500



STREET ELEVATION 1 : 500

HOUSING DESIGN

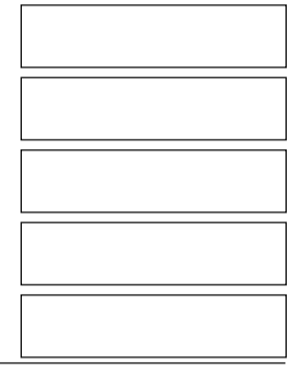
GREEN ELEMENTS

CANEADA ODORATA	YLANG-YLANG	FLOWERS	< 10 M
CINNAMOMUM PARthenoxylon	YELLOW CAMPHOR	FLOWERS	20 > M
ERYTHRINA FUSCA	CORAL BEAN	FLOWERS	< 10 M
INTSIA BIJUGA	TARL	FLOWERS	20 > M
FICUS BENJAMINA	FICUS	FRUIT	20 > M
MAROLO	KAMAGONG	FRUIT	< 10 M
MUSA	BANANA'S TREE	FRUIT	< 10 M
CAMELLIA SINENSIS	GREEN TEA		< 3 M
IKORA COCCINEA	JUNGLE FLAME	FLOWERS	< 3 M
PLUMERIA ACUMINATA	KALACHUCHI	FLOWERS	< 3 M



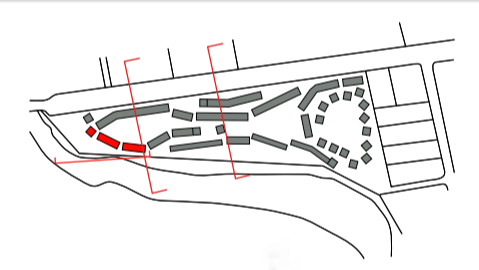
TREES ARE NATURE'S AIR CONDITIONERS. IN ONE YEAR THE AVERAGE TREE INHALES 26 POUNDS OF CARBON DIOXIDE, THE AMOUNT EMITTED BY A CAR ON AN 11,000 MILE TRIP. THIS SAME TREE WILL IN TURN EXHALE ENOUGH OXYGEN TO KEEP A FAMILY OF 4 BREATHING FOR A YEAR.

TREES ARE THE GREATEST COLLECTORS OF THE SUN'S ENERGY. ALL ENERGY COMES FROM THE SUN AND OUR TREES COLLECT AND STORE MORE OF IT THAN ANYTHING ELSE IN THE WORLD. THE BENEFITS OF TREES CAN BE DIVIDED INTO TWO GENERAL AREAS. DIRECT BENEFITS, SUCH AS COOL FROM SHADE OR INCREASED PROPERTY VALUE AND INDIRECT BENEFITS. INDIRECT BENEFITS IMPACT YOU, THE TREE OWNER AND THE COMMUNITY IN REAL, BUT LESS TANGIBLE WAYS. IN FACT, INDIRECT BENEFITS FROM TREES ARE MORE NUMEROUS THAN DIRECT BENEFITS. THESE BENEFITS INCLUDE FILTRATION AND ABSORPTION OF AIR POLLUTANTS, REDUCED STORM WATER RUN OFF.



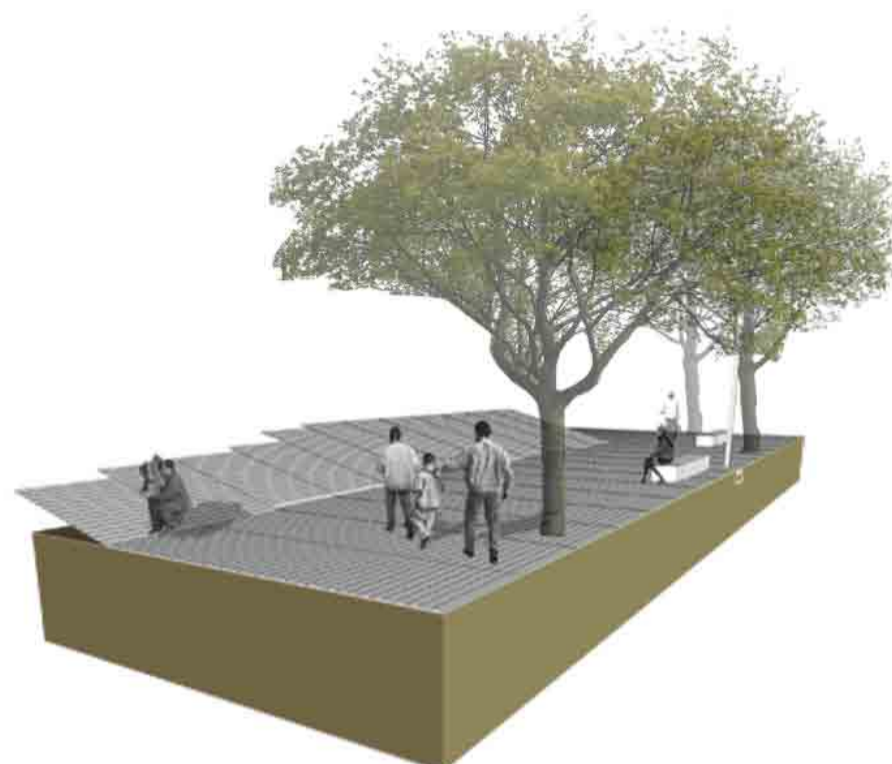
STORING OF THE GREENHOUSE GAS CARBON DIOXIDE AND BENEFICIAL IMPACT ON THE GENERAL QUALITY OF LIFE. PERHAPS THE GREATEST CONTRIBUTION OUR TREES MAKE IS AN EMOTIONAL ONE. PEOPLE WHO LIVE IN CITIES BRIGHTEN UP AT THE SITE OF A TREE, THE SCRAWNIEST SAPLINGS CHALLENGING THE CONCRETE. SILENTLY IN OUR MINDS THEY RISE AS SYMBOLS OF STABILITY, DIGNITY, ADVENTURE, COMFORT AND KNOWLEDGE.

TREES MARK THE PASSAGE OF TIME AND THE SEASONS IS ONE OF THE THINGS THAT TREES DO IN A CITY. IS THERE A THERMAL EFFECT SAID CITY EFFECT FOR WHICH THE STONE, BRICK AND ASPHALT IS FIERY SUMMER BY RAISING THE AVERAGE TEMPERATURE OF 4 / 5 DEGREES. THIS EFFECT IS GREATLY MITIGATED BY AN IMPORTANT PRESENCE OF TREES AND THEIR FOLIAGE. THE SHADE UNDER THE TREES NOT ONLY CREATES A UNIQUE URBAN SPACE AND SOCIAL, BUT ALSO LOWERS THE TEMPERATURE SIGNIFICANTLY. THE TREES ALSO HELP TO CHANGE THE RELATIVE HUMIDITY TOWARD GREATER PHYSICAL COMFORT.



HOUSING DESIGN

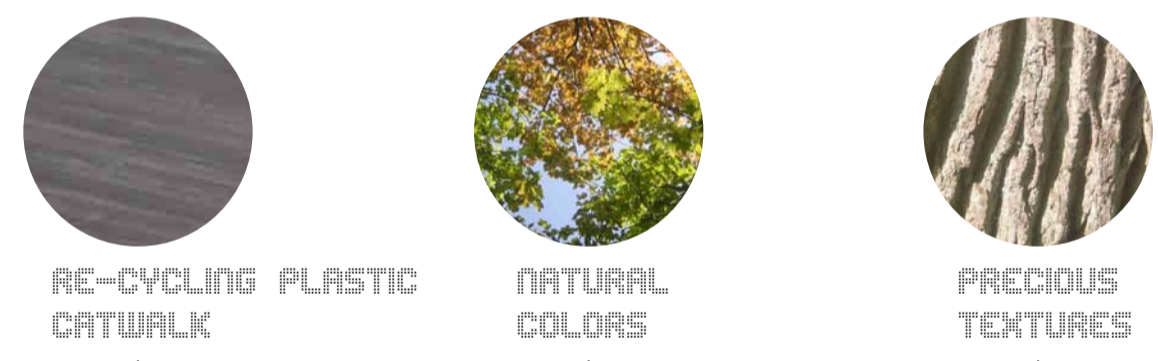
CATWALK IS MADE BY RE-CYCLING PLASTIC MATERIAL. IT COULD BE COLOURED AND EASILY REPAIRED. A SIMPLE, AFFORDABLE AND ENVIRONMENT-FRIENDLY PLASTIC RECYCLING TECHNOLOGY WHICH CONVERTS WASTE PLASTICS, ESPECIALLY FORMED POLYSTYRENE, POLYETHYLENE AND POLYPROPYLENE PLASTIC BAGS INTO USEFUL PRODUCTS. BACKS TESTING OF DOTS_ITDI PLASTIC DENSIFIER TECHNOLOGY WITH THE DEPT. OF SCIENCE AND TECHNOLOGY



PLACE FOR WALKING, RELAXING AND WATCHING

FILIPINOS AS USERS OF OPEN SPACE:
 . FILIPINOS LOVE TO INTERACT, THEY ARE VERY SOCIALBLE.
 . THEY ARE THEY ARE FOND OF PLAYING GAMES.
 . CHILDREN WANT TO ROAM AROUND AND PLAY.
 . FILIPINOS WANT TO STAY UNDER THE SHADE
 WHEN IT COMES TO SPACE, FILIPINOS LOVE TO FEEL THEM.
 . FILIPINOS LOVE COLORS.

PLAYGROUND ARE FLEXIBLE SPACES, IT CAN BE USE IN DIFFERENT WAYAND IT'S FREE FROM OBSTACLES. IT'S A CHEAPER SOLUTION TO PUT PEOPLE TOGHETER



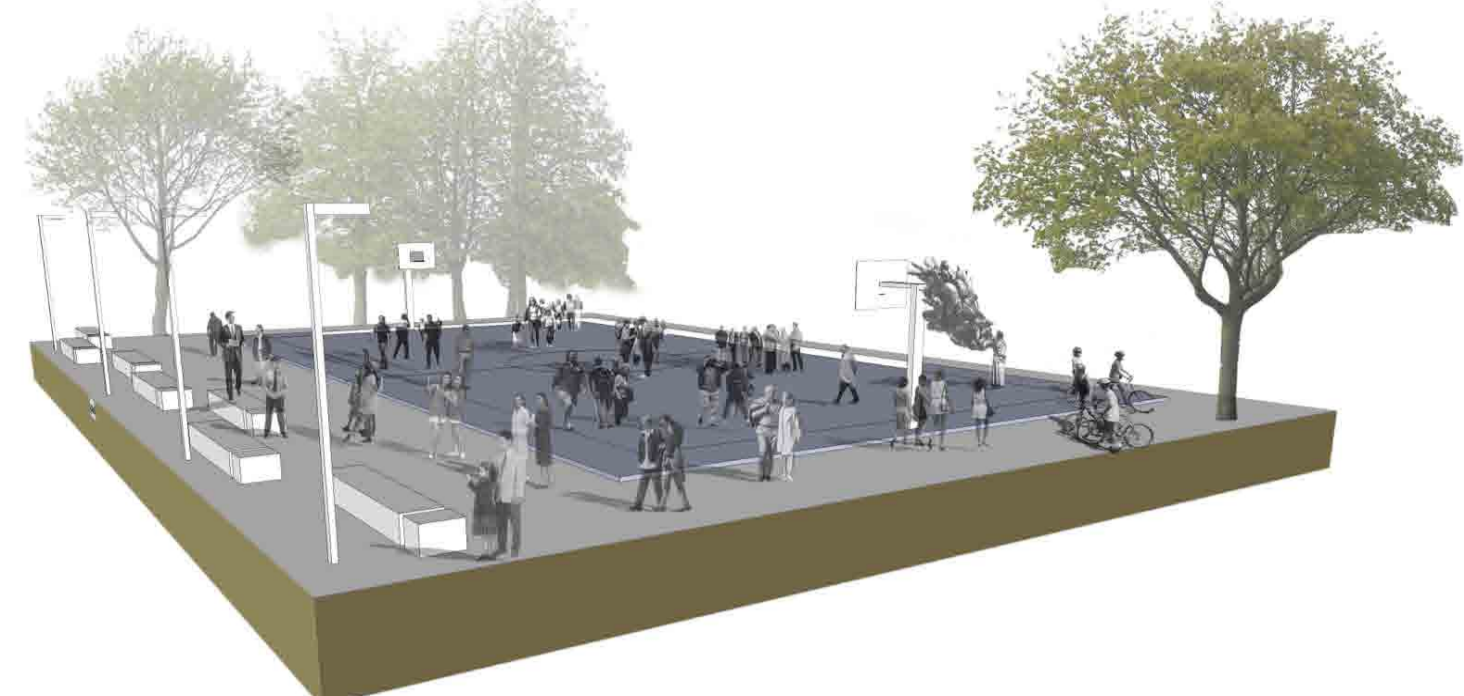
PLAYGROUND DESIGN



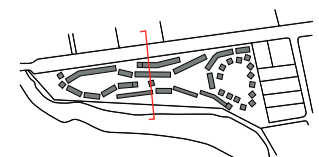
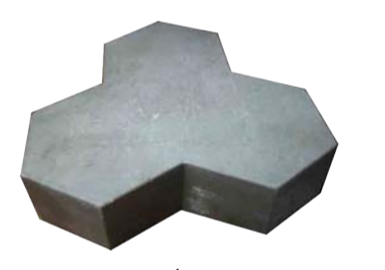
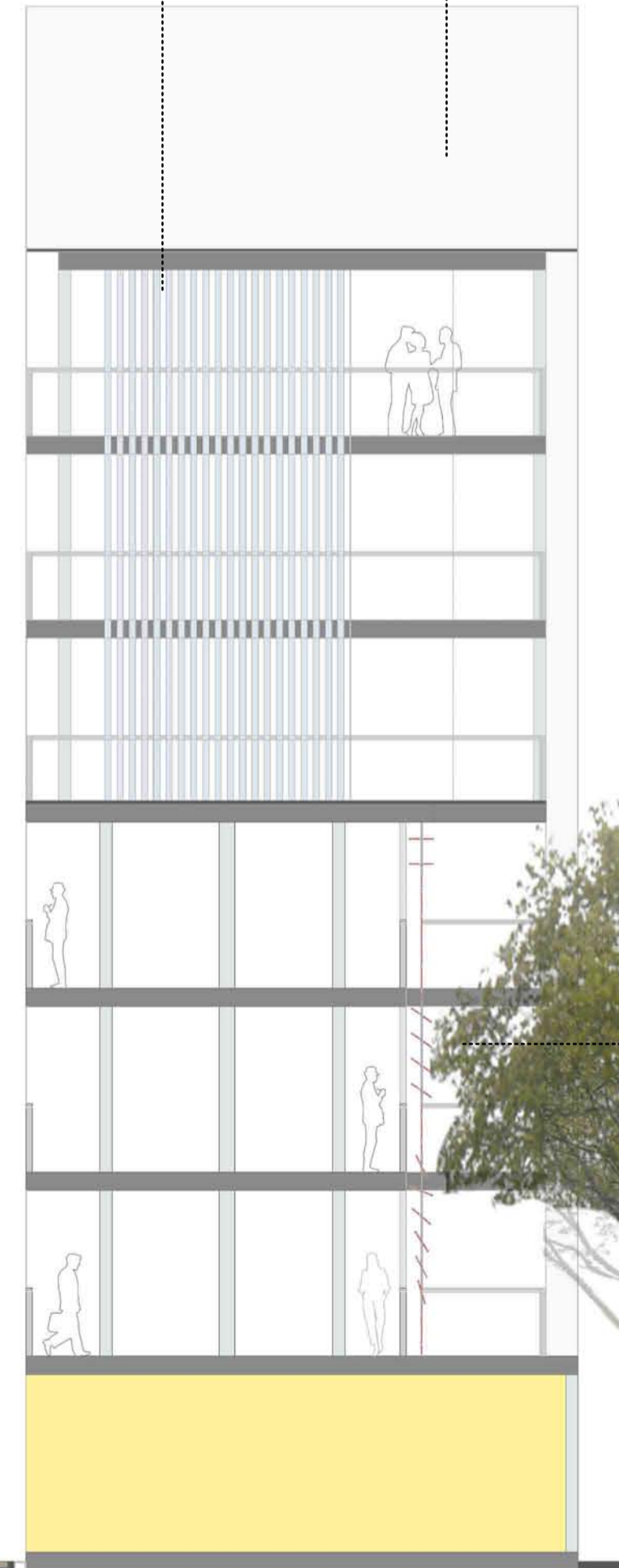
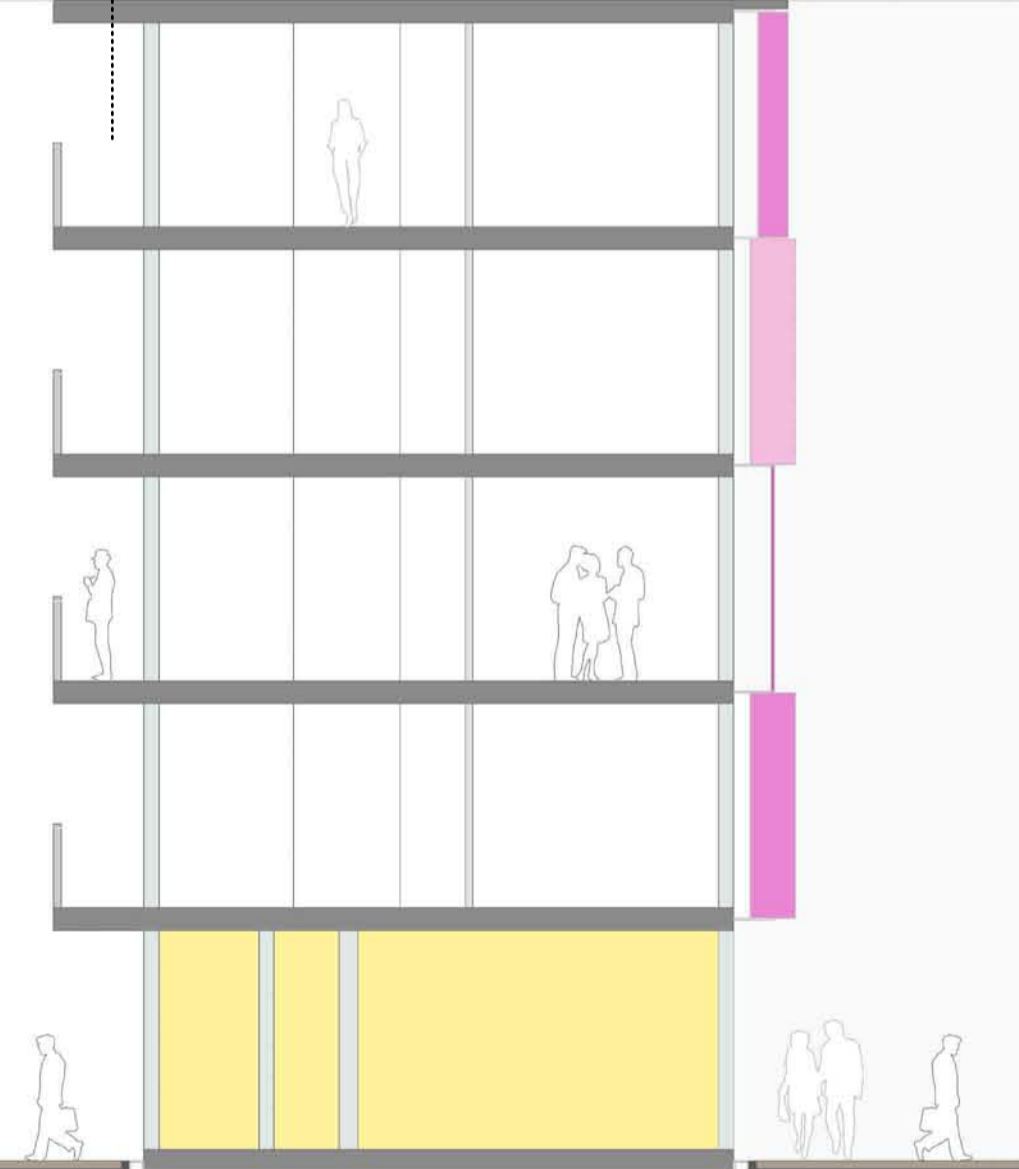
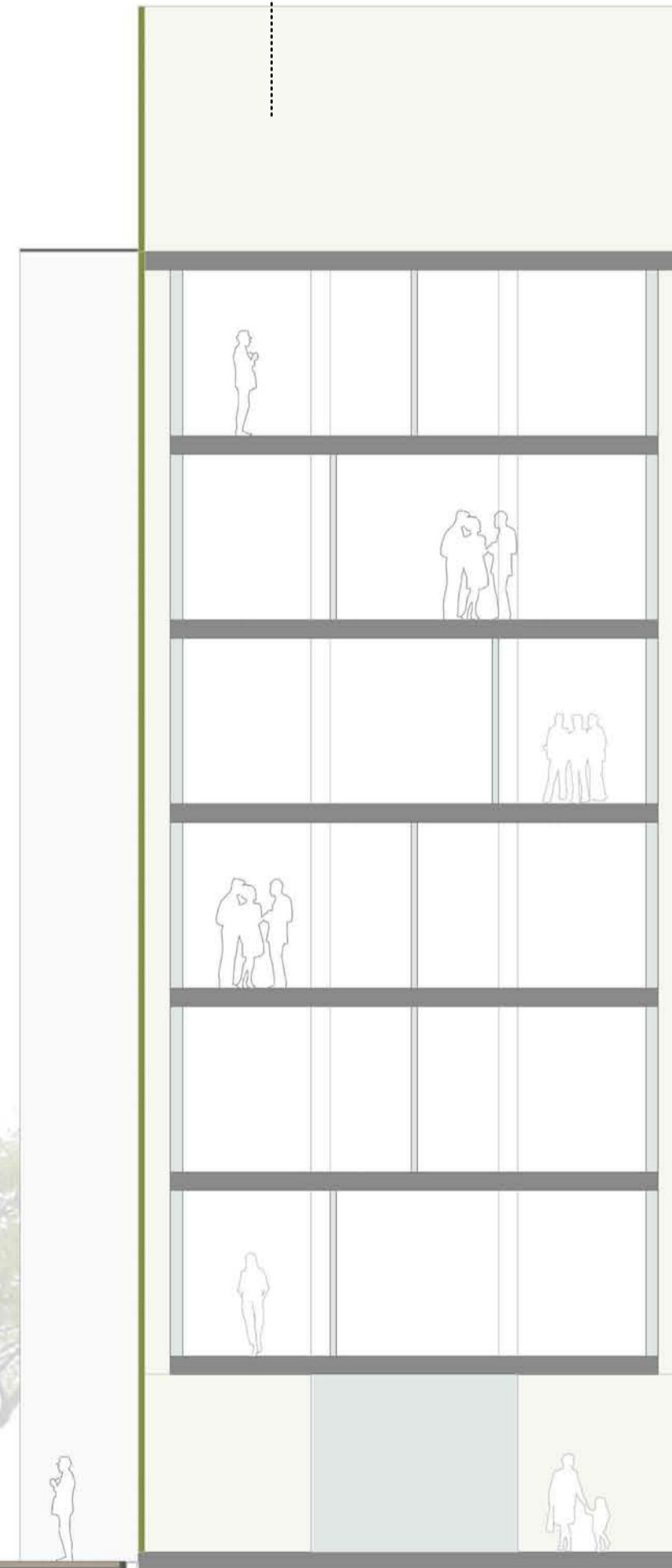
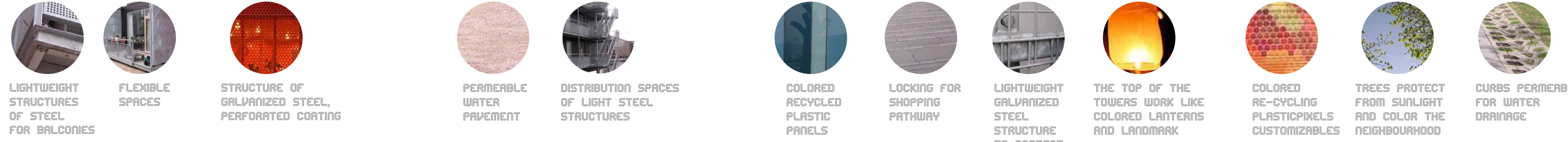
PLACE FOR RUNNING, SKATING AND BIKING



PLACE FOR BASKETBALL, RELAXING AND WALKING



PLACE FOR MEETING, CONFERENCES AND CONCERTES



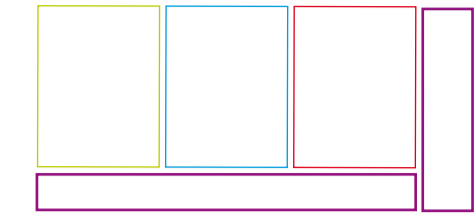
SECTION 1 : 100



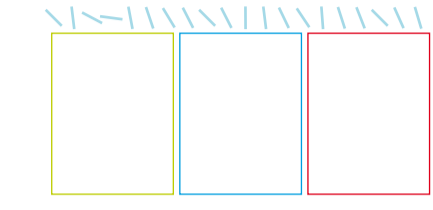
TYPOLGY A+H
24 SQM
SECTION 1 : 100



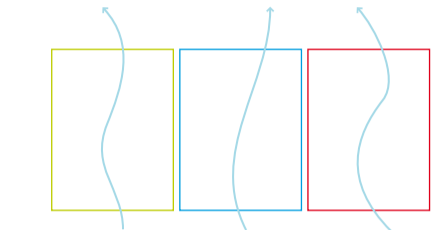
TYPOLGY A
24 SQM
SECTION 1 : 100



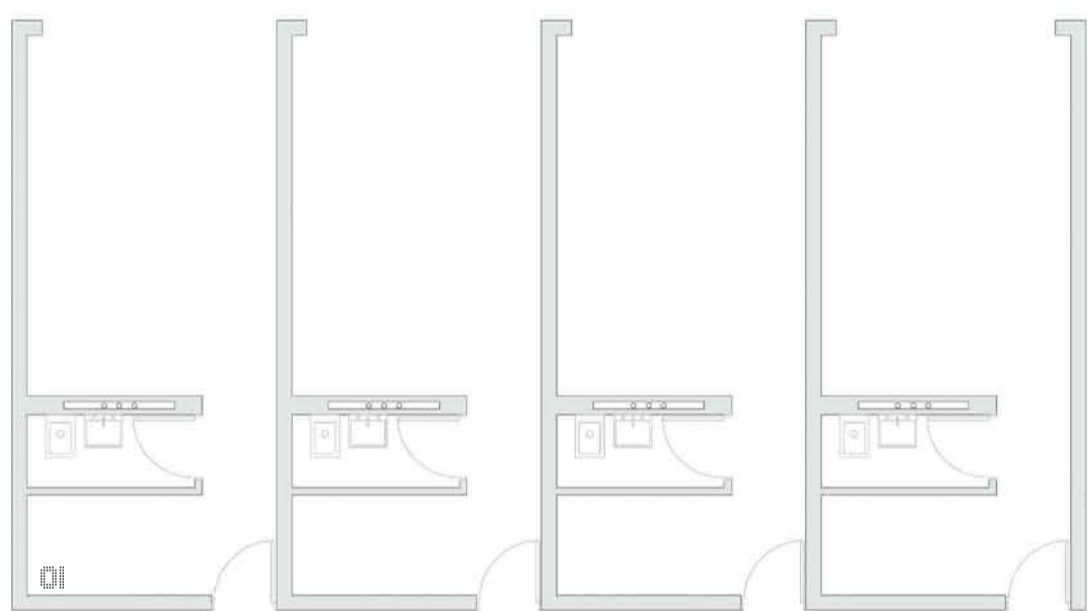
DISTRIBUTORS SPACES
CONSIST OF LIGHT
STRUCTURES LINKED TO
THE MAIN BUILDING



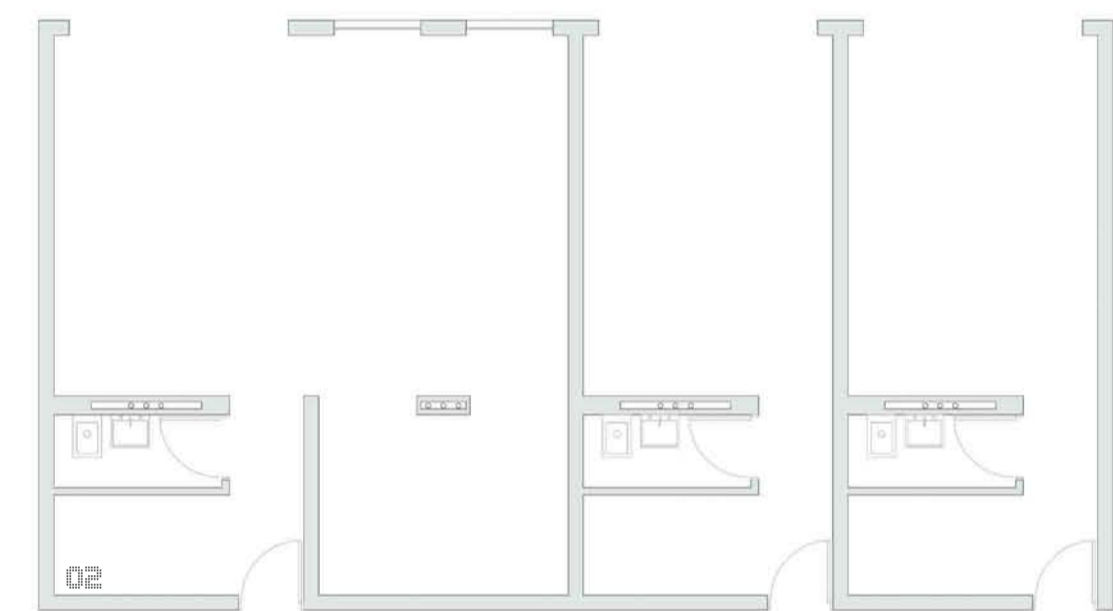
THE FACADES ARE MADE
OF PLASTIC PANELS THAT
ROTATE MANUALLY, REGULATING
THE VENTILATION AND
PROTECT FROM SUNLIGHT



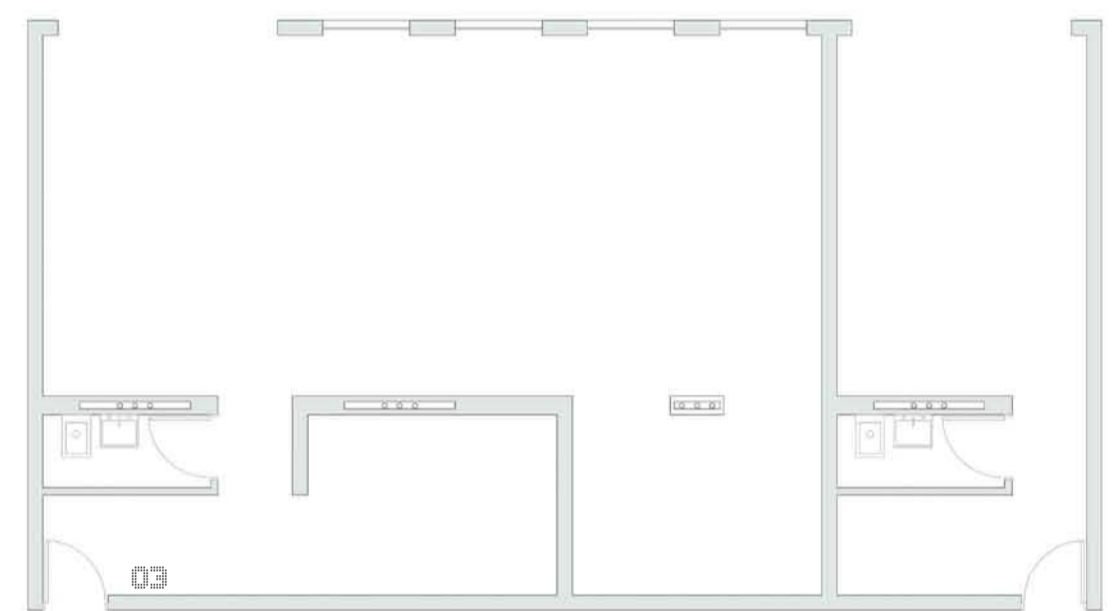
ALL THE APARTMENTS HAVE
A DOUBLE-FACING, NORTH
AND SOUTH IN ORDER TO
ENCOURAGE NATURAL
VENTILATION



COMMERCIAL 01
24 SQM
SECTION 1 : 100



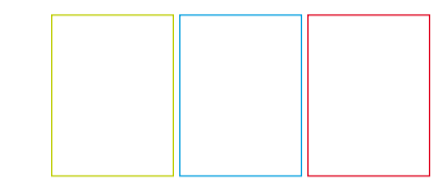
COMMERCIAL 02
48 SQM
SECTION 1 : 100



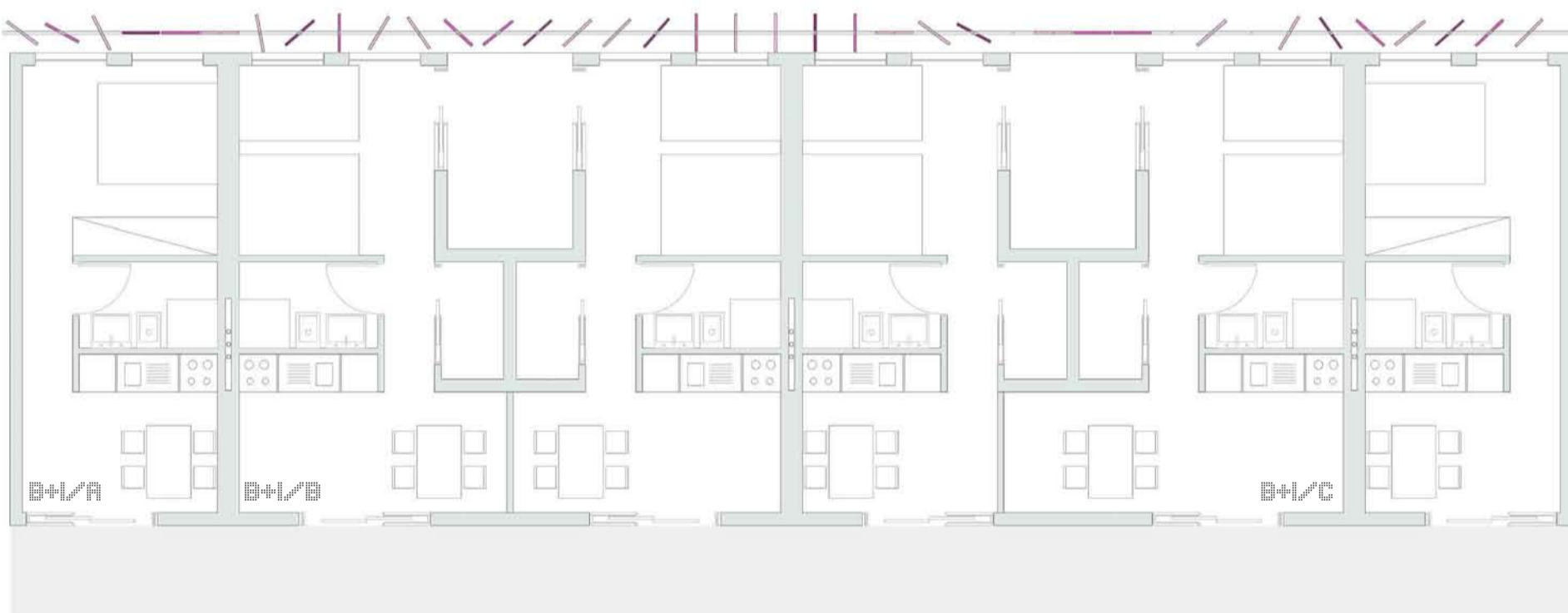
COMMERCIAL 03
72 SQM
SECTION 1 : 100



SHOPS ARE MODULES
SPACE THAT CAN BE
EXPANDED, DOUBLING OR
TRIPLING THEIR SIZE



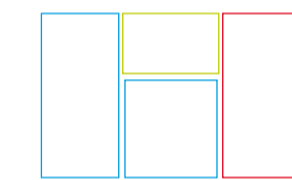
SHOPS ARE THE SAME SIZE
OF THE APARTMENTS AND
CAN BE CONVERTED



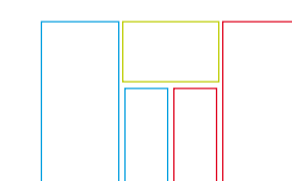
TYPOLGY B+H/A
TYPOLGY B+H/B
25 SQM + 6 SQM OF FLEXIBILITY
TYPOLGY B+H/C
29 SQM + 6 SQM OF FLEXIBILITY
SECTION 1 : 100



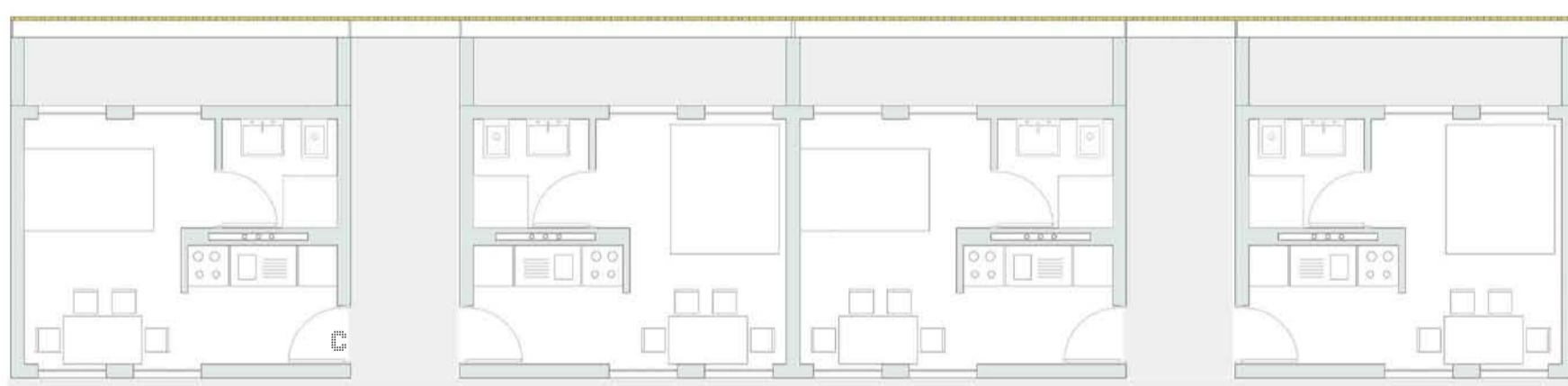
TYPOLGY B/A
21 SQM
TYPOLGY B/B
25 SQM + 6 SQM OF FLEXIBILITY
TYPOLGY B/C
29 SQM + 6 SQM OF FLEXIBILITY
SECTION 1 : 100



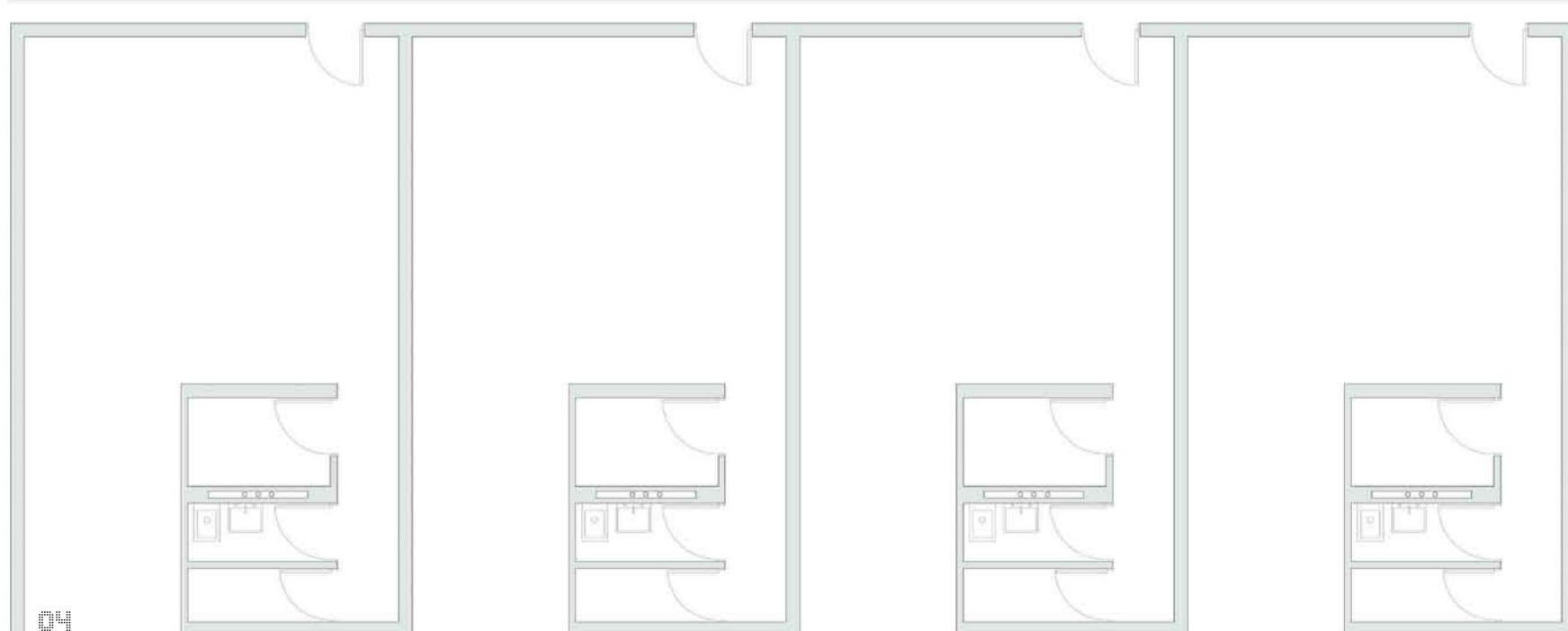
PART OF THE APARTMENT
IS FLEXIBLE AND CAN
BE RENTED



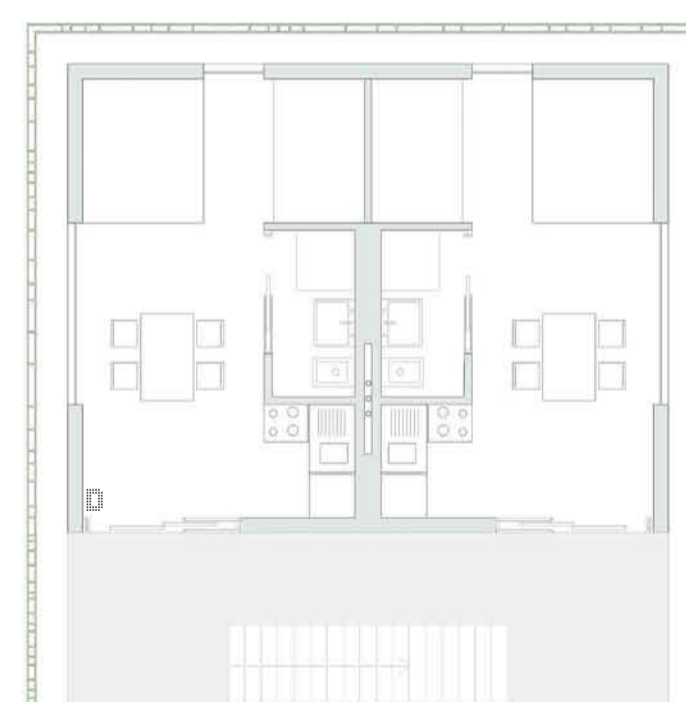
THE FLATS HAVE A FLEXIBLE
SPACE THAT CAN SHARE OR
RENT



TYPOLGY C
21 SQM + 6 SQM OF FLEXIBILITY
SECTION 1 : 100



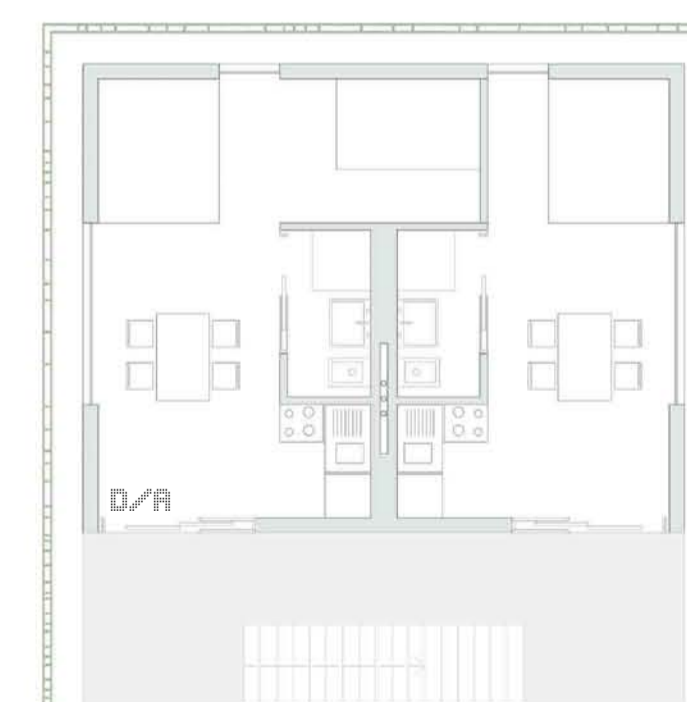
COMMERCIAL 04
46 SQM
SECTION 1 : 100



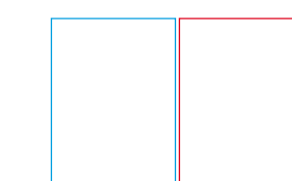
TYPOLGY D
21 SQM
SECTION 1 : 100



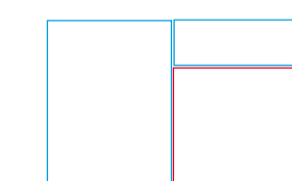
TYPOLGY D/A
24 SQM
SECTION 1 : 100



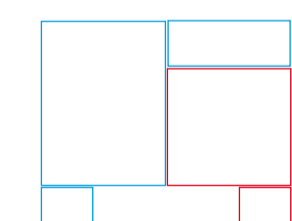
TYPOLGY D/A
24 SQM
SECTION 1 : 100



ALL THE TENANTS BUY
APARTMENTS, THEY ALL
HAVE THE SAME SIZE



PART OF THE APARTMENT
IS FLEXIBLE AND CAN
BE RENTED



DISTRIBUTION SPACE IS
DESIGNED IN ACCORDANCE
WITH A POSSIBLE EXPANSION
OF THE APARTMENT

ARCHITECTS MUST DESIGN BUILDINGS THAT HELP PEOPLE TO CREATE NEW COMMUNITIES, EXPERIMENTING WITH COURAGE, NEW HOUSING TYPES SUITED TO CONTEMPORARY NEED OF LOW-INCOME PEOPLE.

SPACE SHOULD BE FLEXIBLE, TO ADAPTING TO THE DIFFERENT NUMBER OF PEOPLE WHO IN THAT MOMENT LIVE THE HOUSE, CUSTOMISABLE, SO THAT EACH HOUSE CAN ADAPT TO EVERY ONE ACCORDING TO HIS OWN NEEDS

THE HOUSE SHOULD NOT BE CONSUMERISM, BUT MUST ENDURE OVER THE YEARS AND THUS DESIGNED SO THAT IT CAN ADAPT TO DIFFERENT INDIVIDUAL NEEDS, BECAUSE INHERENT IN THE IDEA OF HOME IS THE CONCEPT OF HAPPINESS

- 1 ALUMINIUM SHEETING WITH 5° GRADIENT,
FOLDED FIVE TIMES
FIXING ELEMENT FOR STEEL SHEETING
TIMBER PIECE OR LAMINATED PLYWOOD
PANEL 19 MM
- 2 VEGETATION 80 MM
SEPARATION LAYER
THERMAL INSULATION 100 MM
BITUMINOUS SHEETING, DOUBLE LAYER
REINFORCED CONCRETE SLAB WITH GRADIENT
- 3 JOINT SEALANT TAPE
- 4 STAINLESS-STEEL HANDRAIL
- 5 GALVANIZED FLAT STEEL POST 50 X 12 MM
- 6 RE-CYCLING PLASTIC PIXELS 400 MM HIGH
PLACED ON A JOINTED TUBULAR BAR
- 7 SUPPORTED IN GALVANIZED STEEL, BOLTED
TO SUPPORT THE HANDRAIL AND FACADE
- 8 STEEL CEILING TO CONTAIN PLANTS
- 9 INSULATED GLAZING IN STEEL CASEMENT
- 10 PRECAST REINFORCED CONCRETE
ELEMENT 300 MM
THERMALLY SEPARATED STEEL
REINFORCEMENT CONNECTION
- 11 PREFABRICATED CONCRETE FLOORING 20 MM
CONCRETE SCREED 60 MM
SEPARATION LAYER
SOUND ISOLATION 30 MM
- 12 ARTIFICIAL (CAST) STONE 350 X 350 X 40 MM,
IN GRAVEL BED
- 13 GALVANIZED STEEL GUTTER

