

**THE TECHNICAL REPORT OF THE COMPETITION OF DESIGNING THE STRATEGIC PLAN OF THE MACKIE'S SITE
(TAKE BACK THE CITY)**

**RESEDENTIAL BUILDINGS PLANTED IN A PLAZED PARKED
FOREST**

THE DOUBTS AND THE REASONS

OUR AIME FOR IS TO ESTABLISH A PLAZED PARK RESEDINTIAL SITETO BE A PART
FROM

THE NATURE MADE BY HUMANS EFFICIENT IN ITS FUNCTIONALITY

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THE SHAPES INDEX

THE INTRODUCTION

IN OUR MAIN AIM AND PROPOSE FOR DESIGNING THE NEIGHBORHOOD WE TOKE IN CONSIDERATION THE ROLE OF THIS NEIGHBORHOOD TOWARDS IT'S RESIDENCE ,IT'S USERS ,VISITORS AND THE SURROUND NEIGHBOR HOODS, AND HOW TO DO ITS FUNCTIONS .

FROM THE ABOVE SENTENCE WE STARTED OUR DESIGN, IN OUR VISION FOR HOW TO CREATE A DESIGN FOR THE PLOT, WITH ITS IRREGULAR SHAPE WHICH WAS A CHALLENGE HOW TO MAKE A FRIENDLY DESIGN WHO CAN HOST THE WANTED

NO. OF RESIDENTIAL UNIT WITH NEGLECTING ITS EFFECT ON THE SARROUNDS TAKING IN CONSIDERATIONS THE URBAN EFFECT, THE COMMUNITY EFFECT, THE ENVIRONMENTAL EFFECT , THE FORM EFFECT AND THE SUSTAINABLE EFFECT.

WE HAVE A DIFFERENT VISION FOR THE RESIDENTIAL PROJECT YOU CAN AGREE OR DISAGREE BUT WE DO HAVE OUR STRONG REASONS IN WHY IT WILL BE PRODUCED LIKE THAT.

WE DIDN'T NEGLECT THE HUMAN SIDE REASONS WHICH LEADS TO BE PRODUCED LIKE THAT.

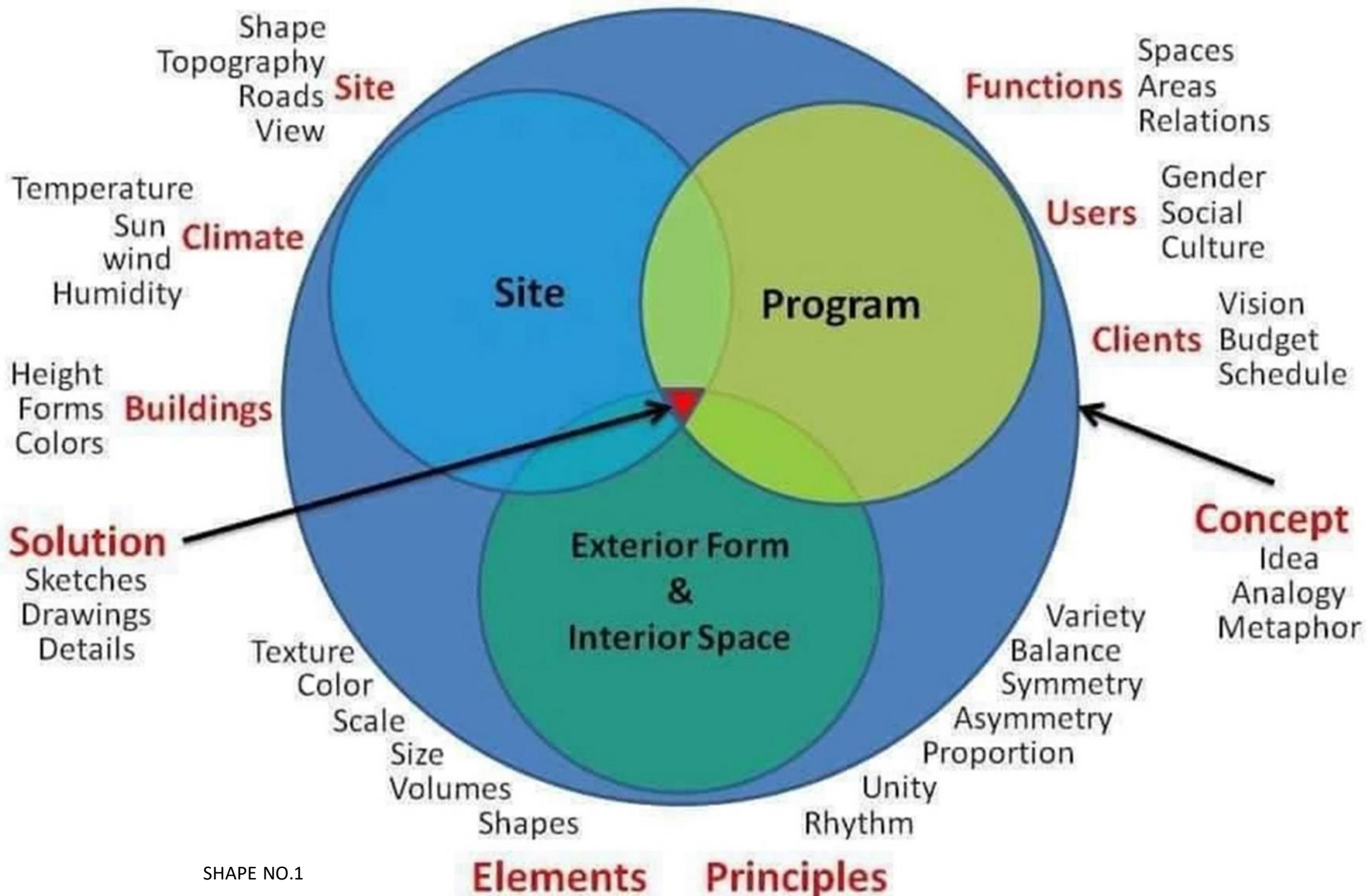
AT THE END WE HOPE TO BE SUCCEDED TO GIVE AN ADDITION TO THOSE PEOPLE WHO NEEDS A SHELTER IN FACING HOW CRUEL IS THE LIFE, HOW STRONG IS THE CIRCUMSTANCES IN ORDER TO SUPPORT THEM IN THEIR FIGHT IN THE LIFE

ONE MORE WORD EVERY ONE OF US HAVE FACED SOME OF THIS CIRCUMSTANCES, SO IN THIS PROJECT WE HAVE AVOIDED WHATEVER WE FACED IN ORDER TO DO OUR ROLE TO IMPROVE THE PEOPLE LIFE

THANKS A LOT

THE ARCHITECT

The Concept



1st THE PROJECT CALCULATIONS

THE PAPULATION DENISTY AND THE STRUCTURAL DENISTY STUDIES

PAPULATION DENSITY IS 250 PERSON/ FEDDAN

FEDDAN =4168.27 SQM

AREA OF PLOT =127463.82SQM

$127463.82/4168.27=30.6$ FEDDAN

PAPULATION DENSITY = $250*30.6=7650$ PERSONS IN THE PROJECT

FAMILY =5 PERSONS, $7650/5=1530$ FAMILY=1530 RESIDENTIAL UNIT (THE WANTED
ACCORDING THE COMP. MANUAL 940

A RESIDENTIAL BUILDING =G+9, $1530/18=85$ RESIDENTIAL BUILDING (WHAT WE REACHED
IS 74 RESIDENTIAL BUILDING)

$127463.83*.35=44612.3$ SQM (SERVICES AREA) =STREETS OPEN SPACES AND GREEN AREAS,
SERVICES ETC.

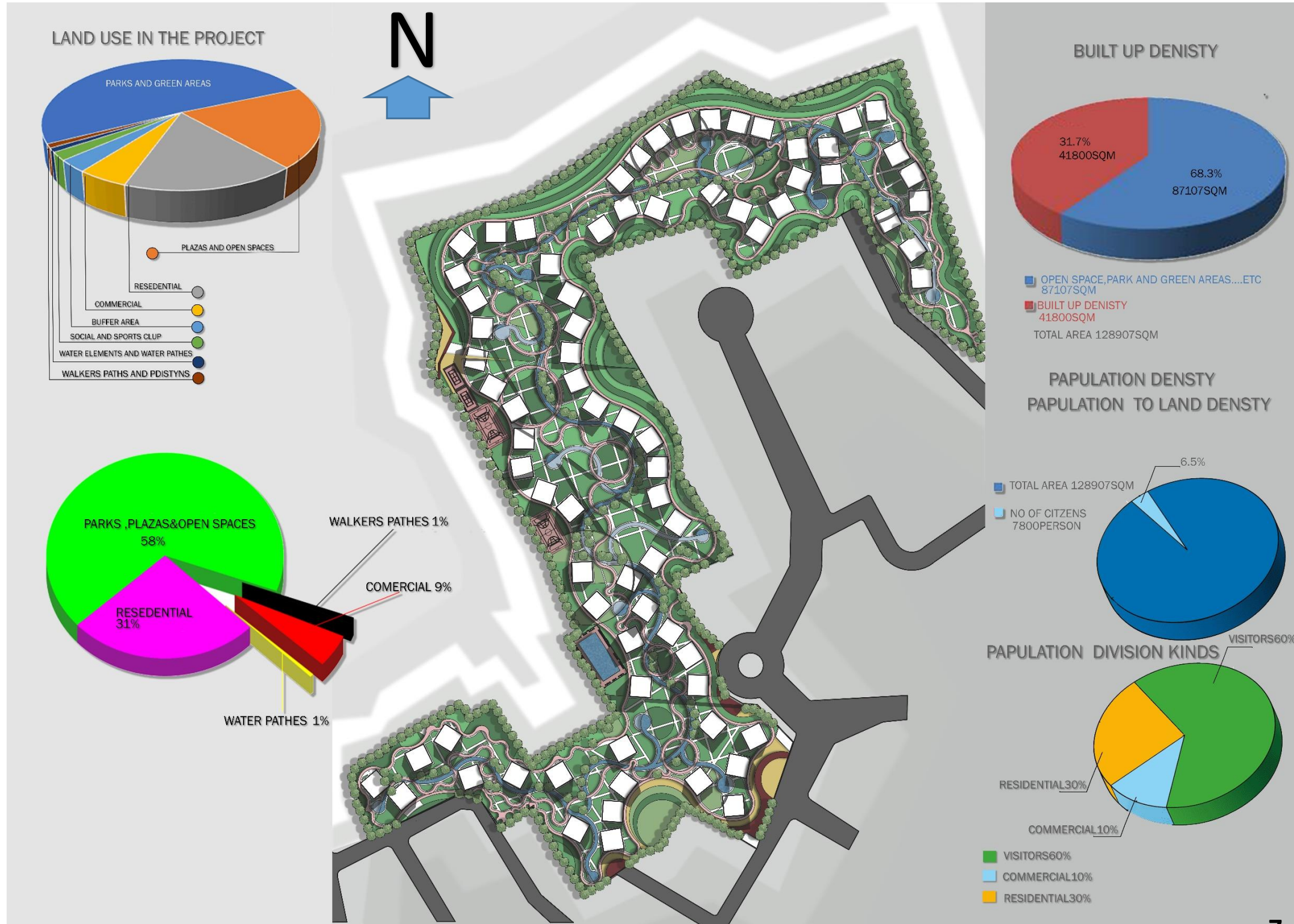
82851.48 RESIDENTIAL AREA

$78*500$ (STEP FOOT PRINT FOR ONE BUILDING) =37,000 TOTAL STEP FOOT PRINT AREA

$37000/128907=0.28$ BUILT UP DENSITY

1st THE PROJECT CALCULATIONS

RESEDENTIAL BUILDINGS PLANTED IN A PLAZED PARKED FOREST



SHAPE NO.2

1st THE PROJECT CALCULATIONS

WHEN WE STARTED WORKING FOR THE PROJECT AND ACCORDING TO THE CALCULATIONS AND THE INFORMATION'S FROM THE COMPETITION'S COMITY WE STARTED TO IMAGINE WHAT WE WANT FROM THE PLOT: WE WANTED 3 THINGS POPULATE THE ENOUGH NO. OF PEOPLE AND CREATE A LAND MARK TO THE CITY OF BELFAST (URBAN DENSITY, OPEN SPACE ACTIVITIES,.....ETC.) AND INTEGRATION WITH THE URBAN AROUND.

2ND THE DEMOGRAPHIC STUDY FOR THE PROJECT

IN OUR VISION FOR THE PROJECT WE DIDN'T NEGLECT TO STUDY THE DEMOGRAPHIC COMPONENT FOR THE PROJECT AND IN THE FOLLOWING THE STUDY:

WE DIVIDED THE COMPONENT INSIDE THE PROJECT INTO 3 DIVISIONS:

1-THE RESIDENT WHICH WILL TAKE A RESIDENTIAL UNIT TO BE AS A SHELTER FOR HIM AND IT HAS TO BE EFFECTIVE TO HIM TO DO ITS ROLE FROM RESIDENTIAL ROLE TO A SOCIETY ROLE IN ORDER TO CONVERT THE LIFE OF THOSE WHO HAVE NO SHELTER AND CONVERT THEIR LIFE FROM A CRUEL PROBLEMATIC LIFE TO A LIFE FULL OF SUCCESSION AND FLOURISH

2-THE TENANT WHICH IS ONE WHO WILL RENT THE SHOW ROOMS IN THE GROUND FLOOR AND THE SHOPS IN THE MALL WHICH WILL ACT AS A POINT OF ATTRACTION TO THE VISITORS IN ORDER TO BE ONE OF MANY REASONS OF UNISOLATING THE NEIGHBOURHOOD FROM IT'S SURROUNDING AND TO BE PART OF THE INTEGRATION PLAN WITH IT'S SURROUND .

3-THE VISITOR WHICH WILL VISIT THE PROJECT FOR ALLOT OF REASONS SUCH AS USING THE CYCLE PATH, JUGGING ENJOYING THE PARKS, THE RECREATION AND THE SHOPPING.

4-THE USER WHICH IS USING THE PROJECT IN ALL THE LEVELS EITHER BY PASSING THROUGH IT, OR USING THE COMMERCIAL PART ,OR USING THE SPORTS PART OR THE HUMANELY PART, AND HE IS NOT A RESIDENT THERE OR A TENANT OR A VISITOR .

THOSE 4 KINDS WHICH ARE THE COMPONENTS OF THE COMPONENT OF THE DEMOGRAPHIC OF THE NEIGHBOURHOOD SHOULD MELT IN ONE PLATE INTEGRATING IN THE COMMUNITY AROUND AND INTEGRATING WITH THE COMMUNITY AROUND.

WHAT WAS ABOVE IS THE INTRODUCTION TO THE VERY IMPORTANT WHICH IS COMING IN THE FOLLOWING:

IT'S WELL KNOWN THAT BELFAST WAS A PLACE FOR A RELIGIOUS RESIST CONFLICTS BEFORE, IN OUR PROJECT IT'S AN EQUAL COMMUNITY IN ORDER TO MELT THE CONFLICT PARTS IN ONE COMMON FABRIC THESE WILL HAPPEN THROUGH FIRST DEFINE THE FABRIC BY THE MENTIONED 4 DIVISIONS AND NEGLECTING ANY OTHER RESIST WORDS STANDING ON THE COLOUR OR THE RELIGION.

THE NEIGHBOURHOOD IS A GOOD OPPORTUNITY TO CONFIRM THE INTERNAL PEACE OF BELFAST TO BE AN EXAMPLE TO BE FOLLOWED NOT ONLY IN BELFAST, BUT ON THE WORLD

WE WANTED TO SHOW THE WORLD HOW GREAT IS NORTHERN IRISH COUNTY, HOW STRONG THEY ARE HOW DEEP THEY ARE.

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RESEDENTIAL BUILDINGS PLANTED IN A PLAZED PARKED
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SHAPE NO.3

SITE

3RD THE PHILOSOPHICAL CONCEPT IN THE PROJECT

RESEDENTIAL BUILDINGS PLANTED IN A PLAZED PARKED FOREST

WHERE ALL THE BOUNDRIES, RASES, LIMITATIONS, CONFLICTS AND DIFRANTIATES
MELTS IN ONE COMMON PLACE

IN OUR VISION TO THE NEIGHBOURHOOD WE HAVE A LOT OF HEADLINES IN OUR
MIND WE WANT TO TRANSLATE IT ON THE LAND OF REALISTIC WHICH IS:

WE WANTED TO HAVE A SERIES OF PLAZAS TO BE A PLACE OF GATHERING AND
DOING ACTIVITIES FOR THE RESIDENTS AND VISITORS, THE PLAZAS WILL GIVE A
PANORAMIC VIEW FOR THE USER IN A VISUAL SEQUENCE ATTRACTS THE USER TO
WALK FORWARD TO EXPLORE WHICH WILL GIVE AN ELEMENT OF ATTRACTION IN
ORDER TO SUPPORT THE WALKABLE CONCEPT RATHER THAN THE ABOUNDED
ENCLOSED CONCEPT FOR THE NIEBOURHOOD ON IT'S RESIDENTS.

WE WANTED TO HAVE A VERTICAL HEIGHT NOT HORIZONTAL IN ORDER TO HAVE
AN EFFICIENT CAPACITY OF RESIDENTIAL AND TO LEAVE AN ENOUGH PART OF THE
PLOT FOR THE OTHER SERVICES AND ACTIVITIES.

WE MENTIONED BEFORE THE BENEFITS OF THE VERTICAL MIDRISE BUILDINGS
AND LOW RISE BUILDINGS AS IT IS THE EFFICIENT SOLUTION FOR THE PROJECT.

WE INTENDED TO HAVE THE THEME OF A PARK IN ORDER TO GIVE A GOOD STYLE
OF LIVING FOR THOSE WHO WILL LIVE HERE EVEN THOUGH THIS IS A HABITATS
FOR THOSE WHO NEEDS A SHELTER ,AS THIS IS THE HAND THAT THE CITY GIVE FOR
THEM.

3RD THE PHILOSOPHICAL CONCEPT IN THE PROJECT

WE INTENDED TO HAVE THE THEME OF A PARK IN ORDER TO GIVE A GOOD STYLE OF LIVING FOR THOSE WHO WILL LIVE HERE EVEN THOUGH THIS IS A HABITATS FOR THOSE WHO NEEDS A SHELTER ,AS THIS IS THE HAND THAT THE CITY GIVE FOR THEM.

WE WANTED TO HAVE AN ATTRACTIVE ELEMENT WHICH WILL ATTRACT VISITORS FOR A LOT OF REASONS LIKE :CREATING JOBS ,MAKES THE PLACE A PLACE OF ACTIVITIES AND CRANVALIC PLACE NOT ABOUNDED OR ENCLOSED ON ITS RESIDENCE WHICH BENEFITS THE RESIDENTS ,THE NEIGHBOURS ,AND THE WHOLE CITY, THIS EXECUTED BY THE SHOW ROOMS DOWN OF BUILDINGS AND THE MALLS INSIDE WHICH IS THE SERVICES FOR THE NEIGHBOURHOOD AND THE SURROUNDS, THIS MAKES US PUT THE MALLS NEAR THE MAIN APPROACH TO HOLD THE TICK FROM THE MIDDLE SOME PEOPLE TAKE THEIR NEEDS WITHOUT ENTERING INSIDE AND OTHERS WALK INSIDE TO ENJOY THE TRIP TO NOT OVER THE LIMITATIONS WHICH LEEDS TO CROWDS

THE DESCENDING STEPS IN THE LEVELS OF THE PLOT LEEDS TO HAVE A PANORAMIC VIEW FROM THE BUILDINGS TOWARDS DOWN AND TOWARDS UP

3RD THE PHILOSOPHAL CONCEPT IN THE PROJECT

THE FORM

ONE OF THE BIGGEST PROBLEMS WHICH WAS FACING THE PROJECT WHICH ALMOST AFFECTS EVERYTHING WAS THE SHAPE OF THE PLOT WHICH IS IRREGULAR, SEPARATED PARTS FROM EACH OTHER'S AS IT IS NOT COMPACTED TOGETHER , SOMETIMES IRREGULAR SHAPE BUT COMPACTED WHICH LETS YOU DEAL WITH THIS IRREGULARITY ,BUT BOTH PROBLEMS GIVES YOU DIFFICULTY IN THE FORM AND PUTTING THE FUNCTION WHICH SHOULD BE TRANSLATED IN THE FORM .

IN ADDITION THE OUTER STREETS NETWORK WHICH IS NOT CONTINUES TO ESTABLISH ON IT BUT CUTE AND STOPPED IN IRREGULAR SHAPE OR ORDER WHICH EVEN GET THINGS WORTH NOT BETTER.

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3RD THE PHILOSOPHICAL CONCEPT IN THE PROJECT

THE FORM

FROM THIS WE STARTED OUR FORM, WE TRIED TO GET THE PREVIOUS POINTS TO BE POINTS OF STRENGTH NOT POINTS OF WEAKS

1ST OF ALL WE STARTED TO GET A FORM FROM THE IRREGULAR SHAPE BY GETTING BACK TO THE PRIMITIVE SHAPES THAT CONSISTS OF THE IRREGULAR SHAPE OF THE PLOT AND THEN WE TRIED TO GET A MESH FOR THESE SHAPES AND THEN AFFECT EACH OTHER'S IN ORDER TO CONNECT EACH OTHER'S .

2ND WE STARTED TO HAVE 2 MESHES WHICH THE PLOT CONSISTS OF: THE 1ST MESH IS THE PERPENDICULAR MESH WHICH FEELS THE MAIN SHAPE OF THE PLOT, THIS MESH IS CONTAINED IN THE OUTER FRAME OF THE PLOT WITH A CURVED MESH TO BE A CONTAINER FOR THE PERPENDICULAR SHAPE

THE CURVED MESH IS THE DOMINANT AND THE PERPENDICULAR MESH LIES BENEATH AND APPEARS AND DISAPPEARS DURING THE FULL SHAPE IN ORDER TO GET ONE HYBRID THE PERPENDICULAR MESH APPEARS AND DISAPPEARS IN BETWEEN THE CURVED MESH AFFECTS THE PERPENDICULAR MESH IN ALLOT OF PLACES THIS IS PLUS THE EFFECT ION OF THE FIRST MESH PRIMITIVE SHAPES TO GET AT THE END ONE FINAL INDIVIDUAL SINGULAR SHAPE MESH FROM THIS POINT OUR PROJECT GOT READY TO BE SETTLED, THE PERPENDICULAR MESH REPRESENTS REPRESENT THE CHRISTIAN CATHOLIC AND THE CURVED OUTLINE MESH REPRESENTS THE CHRISTIAN BRUTOSTANT AND THE NEW CONNECTED MESH REPRESENTS THE SOCIAL FABRIC WHICH IS PLEXUSES, THOSE BOTH GRIDS ARE PLEXUSES WITH EACH OTHER BY A WAY YOU CAN'T SEPARATE THEM AND EFFECTED BY THE MESHES OF THE BUILDINGS AND THE SHAPE OF THE PLOT SITE FORM IN A WAY OF UNSEPARATED SOCIAL LAND FABRIC REPRESENTS THE NORTHERN IRISH SOCIAL FABRIC.

3RD THE PHILOSOPHICAL CONCEPT IN THE PROJECT

THE RESEDENTIAL UNIT

WE DESIGNED THE PROJECT AS MENTIONED IN URBAN STUDY AS A MID-RISE PROJECT CONTAINING FROM 2 FLATS IN FLOOR EACH FLAT CONSISTS OF A RECEPTION FOR THE PUBLIC ACTIVITIES IN THE FLAT AND 3 BED ROOMS INCLUDING ONE MASTER AND THIS IS GOOD AND ENOUGH AND GIVES THE RESIDENTS A HEALTHY GOOD LIFE .

WE DESIGNED THE BUILDINGS WITH THE SHAPE AND THE SAME CONCEPT OF THE SITE WHICH IS ORGANIC SUSTAINABILITY WE PLANTED THE SHIELD WHICH GIVES THE DEEP EFFECT OF THE PLANTED BUILDINGS ON THE SITE BY PUTTING THE SEED OF THE BUILDING AND LET IT GROWS UP.

WE USED THE CIRCLE HOLES TO PUT THE WIND TURBINES IN IT THE SHAPE OF THE CIRCLE IS CONTINUATION OF THE CURVED LINES AND A REFLECTION TO THE CIRCULATED BRIDGE AND CYCLING PATH THE OUTLINES OF THE BUILDING IS A CONTINUITY OF THE LINES AS THERE IS SOME FORCE LET THE LINES LEFT UP TO GIVE THAT SHAPE

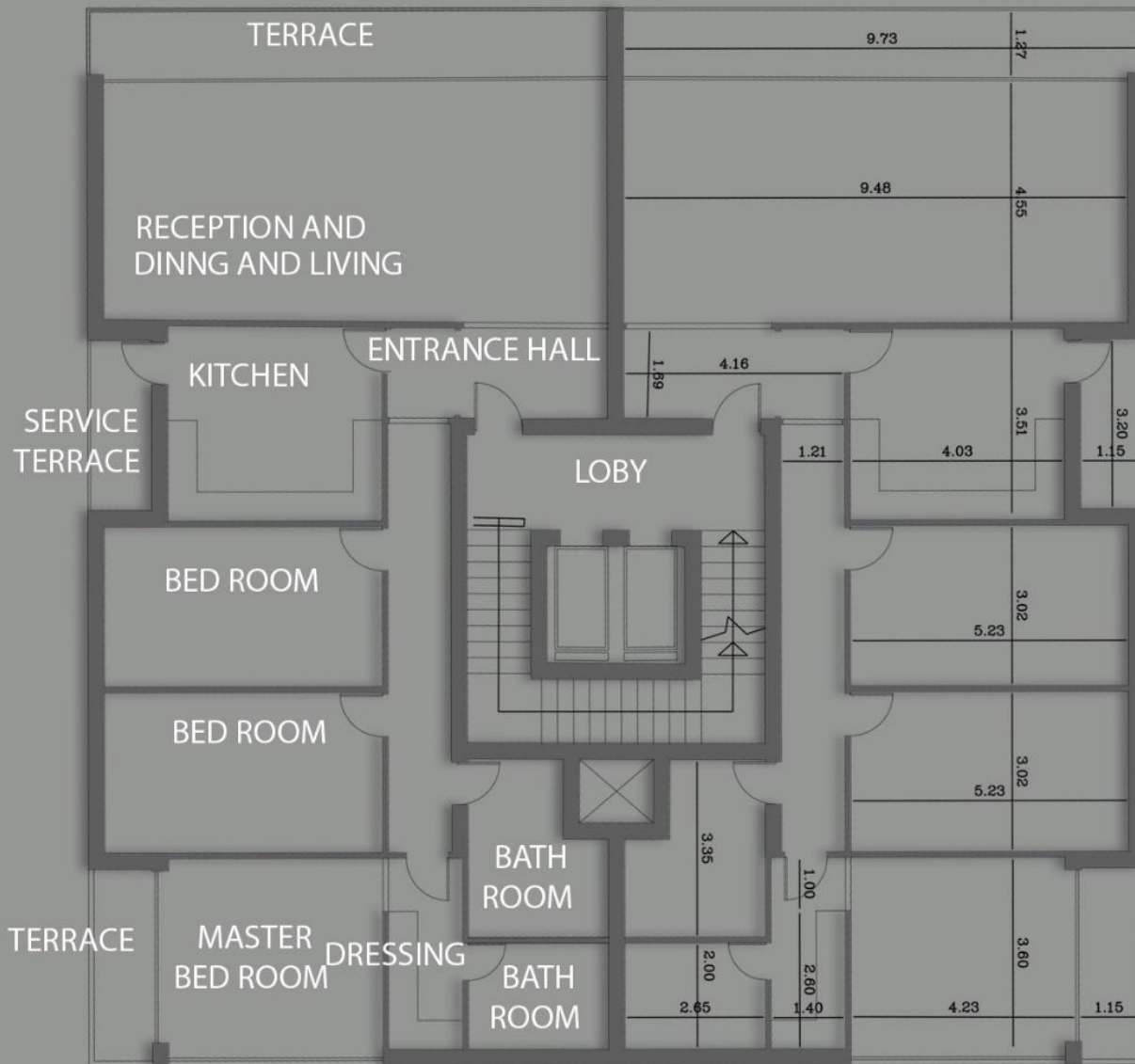
SOME PEOPLE WILL SAY THERE IS NO BACK YARD OR FRONT YARD BUT THERE IS BACK YARD NEAR EVERY BUILDING TO SUPPORT THE CONCEPT OF GROUPING, ALSO WE WERE IN CHOOSING EITHER SINGLE STORY HOMES WITH BACK YARDS BUT LITTLE OR NO URBAN SUPPORT OR A MIDRISE WITH LITTLE A LESS A FEW INDIVIDUAL HOME ACTIVITIES AS TO MORE URBAN ACTIVITIES AND URBAN SPACE GIVES A PLACE FOR ACTIVITIES.

WE MAXIMIZES THE VALUES OF GROUPING TO THE VALUES OF INDIVIDUALITY ,THE VALUES OF INTEGRATION TO THE VALUES OF DIFFERENTIATION INSPIRED WHAT WE NEED FROM THE PAST BUT CREATED WITH MODERNITY ,WE TRIED TO MAKE THIS PROJECT A CROWNING FOR THE EFFORT OF MORE THAN 20 YEARS OF PEACE ,IN A COUNTRY WAS ONCE AN ICON OF RACES RELIGIOUS CONFLICTS,WE WANTED TO SHOW THE WORLD HOW GREAT THIS COUNTRY IS THAT OVERCOMES IT'S CONFLICTS AND GAVE A HAND TO IT'S SONS

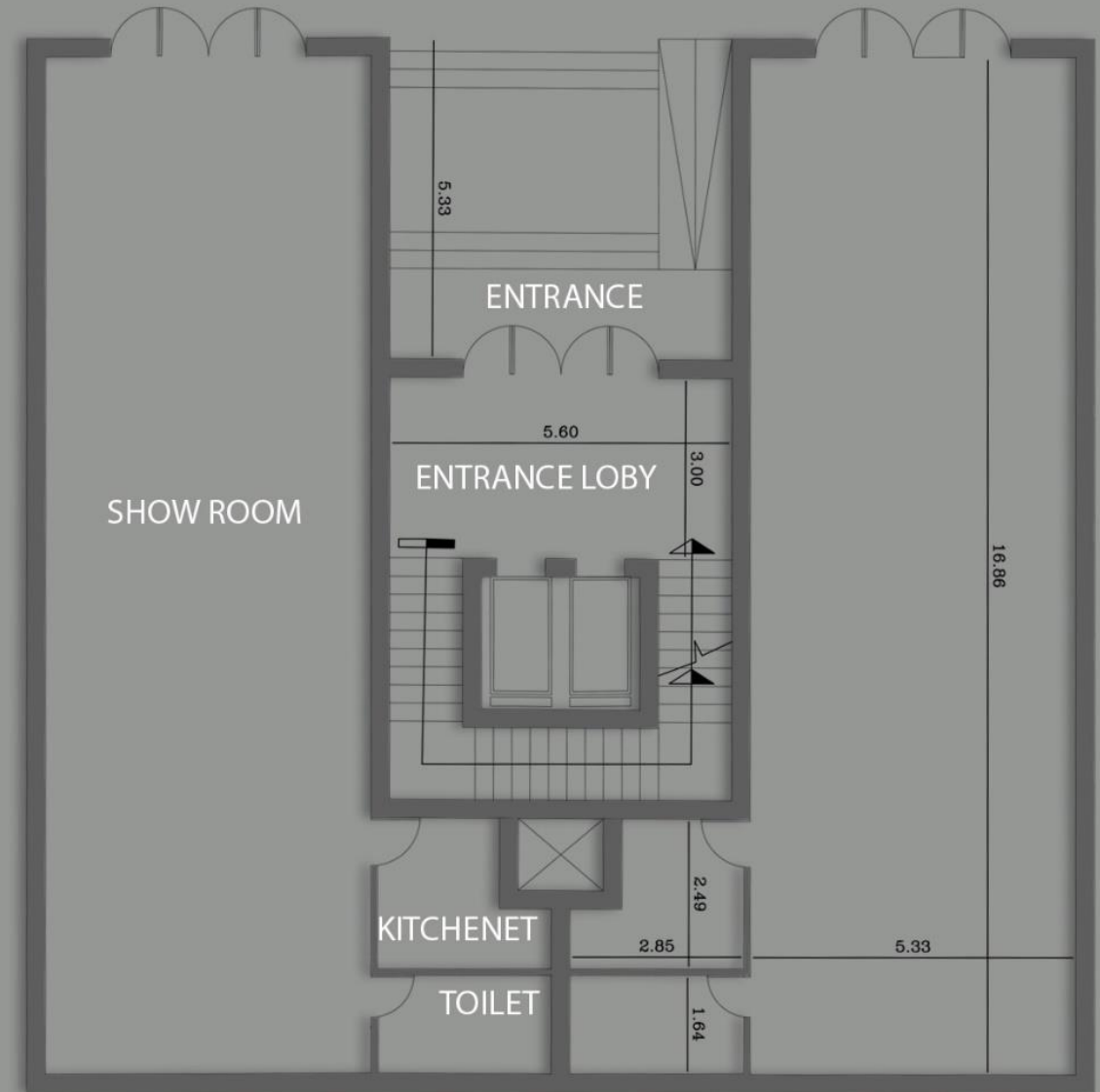
3RD THE PHILOSOPHAL CONCEPT IN THE PROJECT

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**GROUND FLOOR PLAN
1/250**

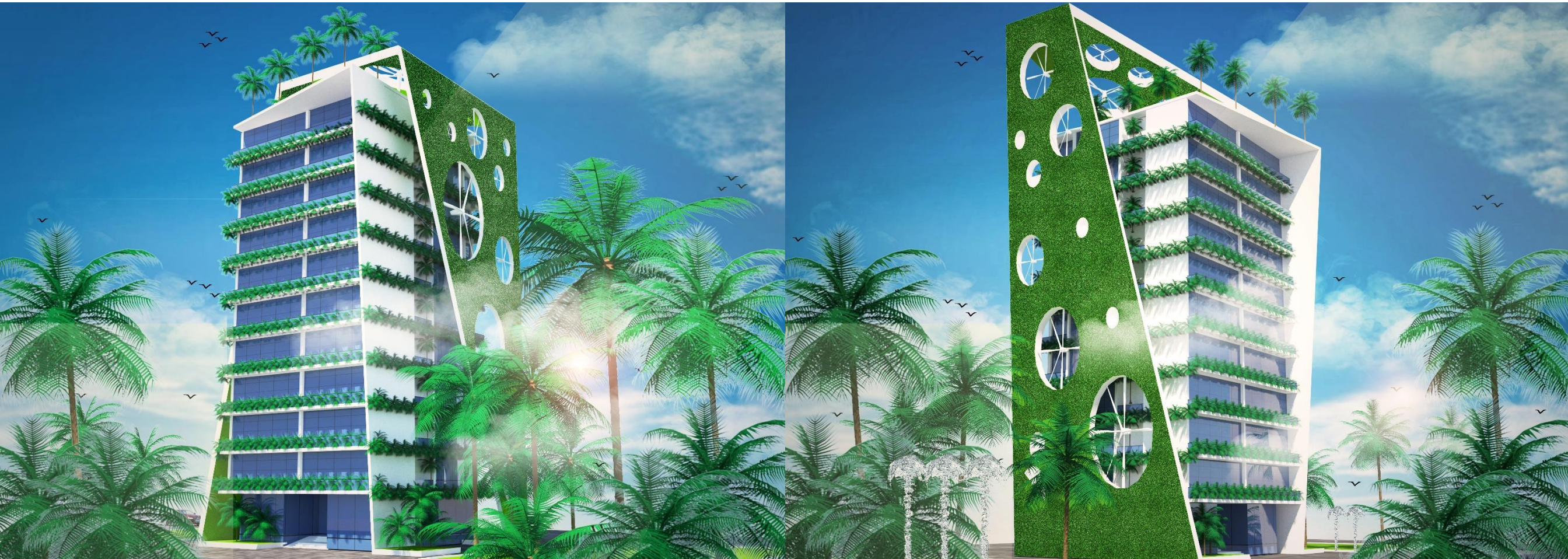


**1ST FLOOR PLAN
1/250**

3RD THE PHILOSOPHAL CONCEPT IN THE PROJECT

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SHAPE NO.5

3RD THE PHILOSOPHAL CONCEPT IN THE PROJECT

THE F.A.R

WE USED ANOTHER F.A.R OTHER THAN THE PROPOSED F.A.R (AND WE HAVE OUR STRONG REASONS FOR THAT) AS WE USED THE VERTICAL F.A.R RATHER THAN THE HORIZONTAL F.A.R IN ORDER TO ALLOW FOR MORE FACILITIES AND MORE ACTIVITIES EITHER RECREATIONAL OR ECONOMICAL A MID-RISE BUILDINGS IN ORDER TO HOST THE NEEDED NO. OF RESIDENTS IN THE MINIMAL AREA STEP FOOT PRINT AS THE WANTED RESIDENTIAL NO IS VERY BIG COMPARED TO THE PLOT AND THE FACILITIES SHOULD BE IN THE PLOT SO INSTEAD OF THAT WE USED A MID-RISE BUILDINGS G+9 IN ORDER TO SOLVE HIS PROBLEM AND TO HAVE AN EXTRA OPEN SPACE FOR THE USE OF THE ACTIVITIES FOR THE RESIDENTS AND THE VISITORS (MENTIONED IN THE ECONOMIC STUDY SECTOR AND THE ECONOMICAL ACTIVITY OF THE NEIGHBOURHOOD) AND TO GIVE A GOOD WAY OF LIVING FOR THE RESIDENTS AND TO BE A PLACE FOR BIRTH OF ACTIVITIES FOR THE WHOLE CITY WHICH HELPS IN ATTRACTING VISITORS FOR THE PLOT WHICH GIVES A FLOURISH IN THE ECONOMIC ACTIVITY OF THE NEIGHBOUR HOOD .



COMPARSON BETWEEN THE 3 F.A.R
THE F.A.R

THE SITE F.A.R THE REPRESENTED F.A.R. FROM OUR
SIDE

THE DESIRED F.A.R FROM THE COMITY
IN A HORIZONTAL FORM

A COMPERSON FOR THE DESIRED F.A.R
FROM THE COMITY IN A HORIZONTAL
FORM AND THE REPRESENTED F.A.R. FROM
OUR SIDE BUT IN GATHERED COMPACTED

A COMPERSON FOR THE REPRESENTED F.A.R
TO SHOW HOW MANY HOMS ARE SAVED IN
ONE MID RISE BUILDING

4TH THE TOBOGRAPHIC STUDY FOR THE PROJECT

IT IS WELL KNOWN THAT THE LAND IS ON A SLIDING PART OF THE LAND ON A LEVELLED LAND WITH DIFFERENT CONTOUR LINES.

WE REFORMED THESE LEVELS INTO 3 LEVELS IN ORDER TO GIVE ORDER ON THE PLOT AND IN ORDER TO REFORM THE PLOT TOWARDS THE VIEW AND TO GIVE THE PROJECT A DESCENDING ORDER TOWARDS DOWN AND THE VIEW.

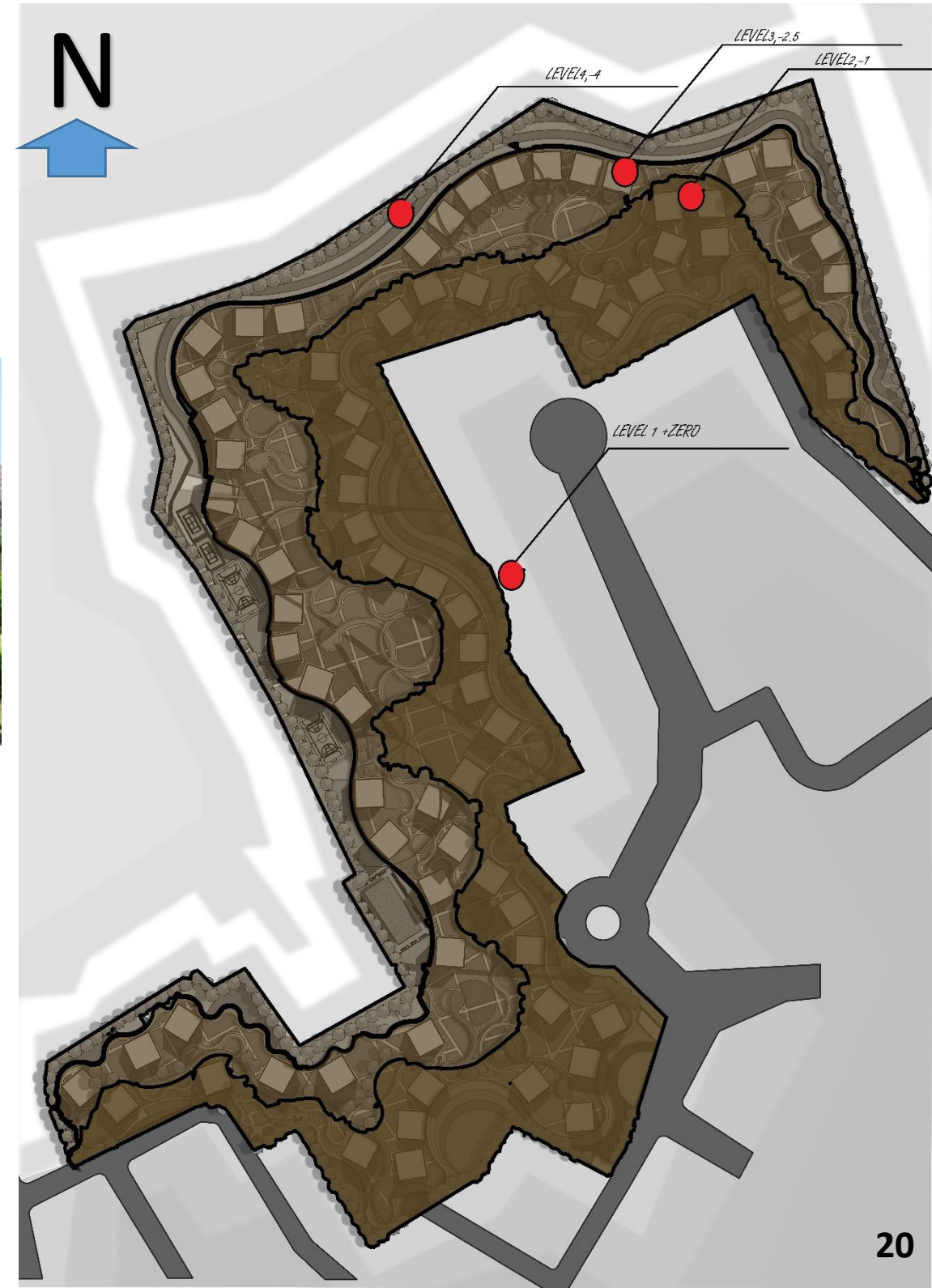
THESE ARE THE LIMITATIONS ON THE TOPOGRAPHY OF THE LAND WE INTENDED TO ALLOW THE MAXIMUM DAY LIGHT TO ENTER THE OUTDOOR SPACES AND THE RECREATIONAL AREAS.

WE LET A SPACE IN-BETWEEN THE URBAN FABRIC TO ALLOW THE MOVEMENT OF THE AIR IN THESE SPACES TO GIVE A GOOD VENTILATION FOR THE URBAN SPACE AND URBAN FABRIC.

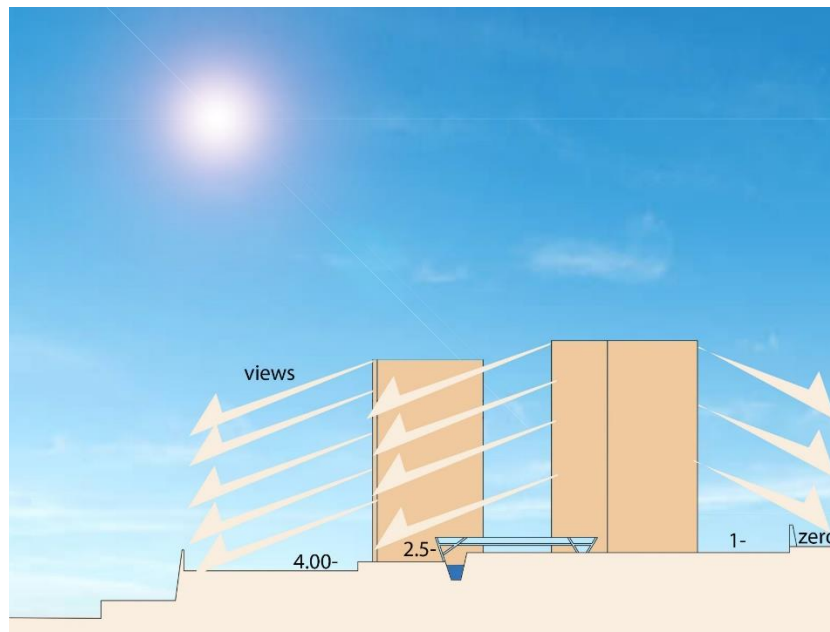
THE DESCENDING ORDER WILL GIVE THE PROJECT THE FEELING OF STEP DOWN WELCOMING FEELING FROM THE GATE OF THE PROJECT TOWARDS THE EDGE OF THE PLOT

BY THESE LEVELS WE AIMED TO HAVE A DIFFERENT LEVELS OF BALCONIES TO ALLOW AN INCREDIBLE INTERNAL VIEW, AND TRANSFORMED THE POINT OF WEAKNESS TO A POINT OF STRENGTH IN THE PROJECT.

4TH THE TOBOGRAPHIC STUDY FOR THE PROJECT



SHAPE NO.7 -B



SHAPE NO.7 -A

5TH THE SITE ANALYSIS

IN LOOKING CLOSER TO THE SITE ANALYSIS WE FIND THAT THE NORTH IS UP AND THIS LEADS US TO DIRECT ALL THE PLAZAS TOWARDS THE NORTH TO HAVE A GOOD VENTILATION AND GOOD NATURAL LIGHTING ALL THE PATHS ARE DIRECTED FROM SOUTH TO NORTH FOR THE GIVEN REASONS.

ALL THE UNITS ARE DIRECTED TOWARDS THE PLAZAS WHICH IS DIRECTED TOWARDS THE NORTH FOR THE ABOVE MENTIONED REASONS.

ALL THE RESIDENTIAL UNITS HAVE AN OPENING IN THE NORTH DIRECTION FOR THE RECEPTION FOR THE DAILY ACTIVITIES TO HAVE GOOD NATURAL LIGHTING.

ALL THE RESIDENTIAL UNITS THE BEDROOMS ARE EITHER DIRECTED TOWARDS EAST OR WEST FOR THE LIGHTING

FOR THE SOUTH AND DUE TO THE BAD LIGHTING IN A PART OF THE DAY WE DIRECTED A SECONDARY OPENINGS IN ORDER TO COLLECT LIGHTING AS AN ADDITION BUT NOT ESSENTIAL ALSO WE BUT THE UNNEASSRY NEEDS OF NATURAL LIGHTING AND VENTILATIONS ON IT .

IN THE ABOVE WE ARE SPEAKING ON AN ORDINARY GOOD SUNNY DAY.

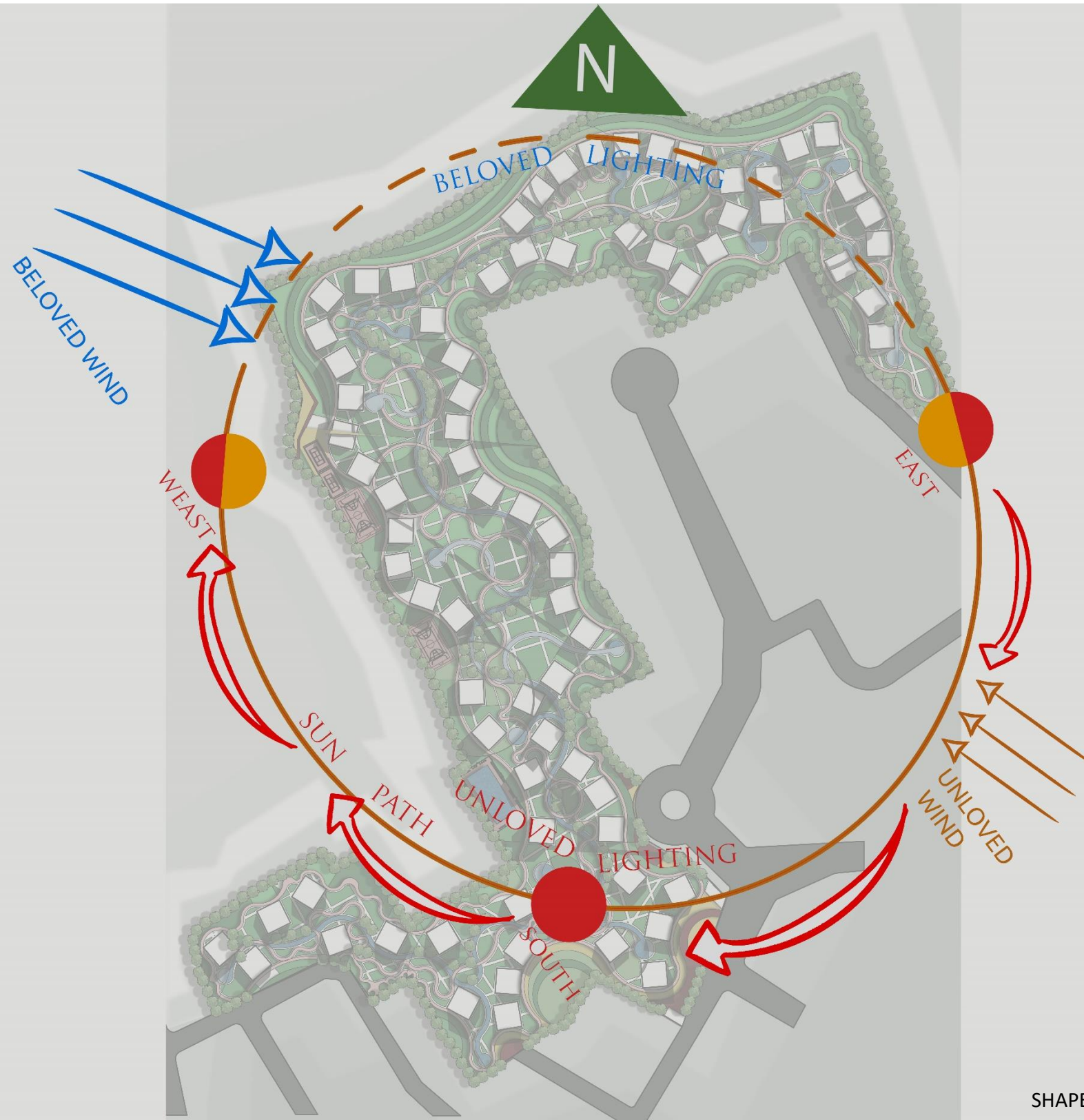
BUT WHAT ABOUT A CLOUDY FOGY DAY IN THE FOLLOWING THE SCENARIO:

THE NORTH AND EAST WEST ARE WIDE FULL WALL OPENINGS IN ORDER TO COLLECT THE MAXIMUM LIGHTING IN WINTER MAXIMUM NATURAL VENTILATION IN SUMMER.

FOR THE SOUTH IT WILL ACT AS AN ADDITION TO MAXIMIZE NATURAL LIGHTING IN WINTER AND NATURAL VENTILATION IN SUMMER

5TH THE SITE ANALYSIS

RESEDENTIAL BUILDINGS PLANTED IN A PLAZED PARKED
FOREST



6TH THE FUNCTIONAL STUDY OF THE PROJECT

WHEN WE STARTED PUTTING OUR VISION FOR THE PROJECT WE LOOKED FOR THE FUNCTIONALITY AS IT WAS NO1 FOR US AND IN THE FOLLOWING OUR ASPECTS AND DESIGN DECISIONS:

DUE TO THE ABOVE CALCULATIONS WE DESIGNED THE PROJECT AS A MIDRISE PROJECT G+9

WE BANNED THE CAR MOVEMENT INSIDE AS ALL THE MOVEMENT INSIDE THE PROJECT EITHER WALKING OR CYCLING OR ELECTRIC GOLF CAR AND THE SIMILAR TO IT AND WE DID SO FOR MANY REASONS (MENTIONED IN THE URBAN STUDY)

THE ENTRANCE TO THE PROJECT THROUGH AN UNDERGROUND PARKING TO PARK THE CAR AND USE THE PROJECT THROUGH PROJECT EITHER WALKING OR CYCLING OR ELECTRIC GOLF CAR AND THE SIMILAR TO IT

WE DESIGNED THE PROJECT WITH 4 APPROACHES 2 ARE MAIN WHICH LIES ON THE WITH 2 ENTRANCES IN EVERY APPROACH AND 2 SECONDARY APPROACHES EACH OF THE 4 APPROACHES ARE LEADING TO PLAZAS THE 2 MAIN APPROACHES LEADS TO 2 MAIN PLAZAS CAN LEAD TO THE 2 SERVICES HUBS WITH 2 MALLS IN IT TO SERVE AND COVER THE WHOLE AREA.





6TH THE FUNCTIONAL STUDY OF THE PROJECT

THE FUNCTIONAL SEQUENCE IN THE PROJECT THE CIRCULATION PATH PASSES FROM A MAIN PLAZA TO ANOTHER MAIN PLAZA THROUGH A SECONDARY PLAZA IN A SEQUENCE ALLOWS THE FLOW OF PEOPLE AND THE FLOW OF THE VISUAL SEQUENCE.

WE DESIGNED THE PROJECT WITH THE OLD CONCEPT WHICH IS THE COMMERCIAL STREETS, WE KNOW THAT THIS IS AN OLD CONCEPT BUT WE HAVE OUR REASONS AND THEY ARE THE FOLLOWING

WE WANTED TO GIVE SOME SIMILARITIES BETWEEN THE OLD CITY AND THE NEW NEIGHBOURHOOD TO GET INTEGRATION IN THE CONCEPT AND THE HIDDEN LINES IN THE MIND OF THE USER.

WE INTENDED THE PROJECT TO BE AN OPEN WALKABLE AREA FROM THE RESIDENTS AND THE VISITORS AND IN ORDER TO DO SO WE NEED AN ELEMENT OF ATTRACTION TO CATCH THE EYE OF THE USER TO KEEP WALKING AND THIS IS AN ELEMENT OF THEM.

THE COMMERCIAL ACTIVITY IN THE SHOW ROOM WILL KEEP THE INTERNAL INDIVIDUAL SECURITY BY KEEPING A LOT OF VISITORS IN THE STREET WHICH KEEP THE SECURITY.(MENTIONED IN DETAILS IN THE SECURITY STUDY)

ALSO IT IS A WAY A FUNDING THE ESTABLISHMENT AND CONSTRUCTION OF THE PROJECT BY GIVING A CASH FLOW THROUGH SELLING THE RIGHT OF USE OF THESE SHOPS (MENTIONED IN DETAILS IN THE ECONOMIC STUDY)

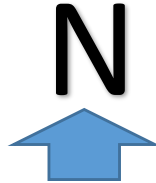
WE DESIGNED IN THE FUNCTIONALITY TO HAVE A SPORTIVE AXIS THROUGH THE SOCIAL AND SPORTIVE CLUB WHICH IN ORDER FOR THE RESIDENTS TO HAVE A PLACE OF DOING A SPORTIVE ACTIVITIES AND TO HAVE A PLACE OF SETTING AND ENJOYING THE VIEW.

WE DESIGNED A PEDISTRYNE THROUGH THE CIRCUMFERENCE OF THE PROJECT TO BE LIKE A BALCONY OR TERRACE TO ENJOY THE VIEW AND SETTING AND EXPLORING THE PROJECT.

WE DESIGNED A WATER CANAL TO BE A NATURAL RESERVOIR FOR WATER AND AN INTERNAL VIEW AND TO DO THE ACTIVITIES OF SAILING AND FISHING AND DESALINATION AND RECYCLING OF WATER (MENTIONED IN DETAILS IN SUSTAINABILITY)



6TH THE FUNCTIONAL STUDY OF THE PROJECT



RESEDENTIAL BUILDINGS PLANTED IN A PLAZED PARKED
FOREST



7TH THE URBAN STUDY

WE DESIGNED THE URBAN OF THE PROJECTS ACCORDING TO SOME ASPECTS WE BELIEVE IT'S VERY ESSENTIAL TO THE PROJECT AND WE HAVE OUR REASONS IN IT AND IN THE FOLLOWING WE WILL SHOW IT:

WE DESIGNED A WALKABLE PROJECT NO PLACE IN IT FOR THE CARS TO BE A HEALTHY SAFE PROJECT WE DIDN'T NEGLECT THE CAR BUT THE USE OF THE CAR IS FROM AND TO THE PROJECT BUT INSIDE THE PROJECT EITHER WALKING OR CYCLING OR ELECTRIC GOLF CAR AND THE SIMILAR TO IT IN ORDER TO KEEP THE ENJOYMENT AND THE RECREATIONALLY INSIDE AND THE VISUAL ENJOYMENT INSIDE FOR BOTH THE VISITOR AND THE RESIDENT.

WE DESIGNED AN ACCESSIBLE AND UN ACCESSIBLE PROJECT, ACCESSIBLE IS UNDERSTOOD AS IT IS ACCESSIBLE FROM THE VISITORS AS IT IS OPEN AND UN ACCESSIBLE AS THE ACCESSIBILITY IS CONTROLLED FROM THE GATES ONLY TO CONTROL AND SECURE THE WHOLE PROJECT, THIS IS THE SAME CONCEPT IF WE REPLACED THE GATES WITH STREETS ENTRANCES, WE USED THE FUNCTION AND THE OPERATION BUT WE CHANGED THE SHAPE AND THE PERFORMANCE

THE ACCESSIBILITY LEADS TO THE INTEGRATION WITH THE SURROUNDS AND MELTS WITH THE SURROUND URBAN WITHOUT LOSING ITS IDENTITY, INTEGRATION AND MELTING IN THE CORE AND THE CONCEPT BUT SINGULARITY IN THE SHAPE AND THE PRINCIPLE

SHAPE NO.12



6TH THE URBAN STUDY

WE DESIGNED THE URBAN ACTIVITY AS A RESIDENTIAL COMMERCIAL AND WE KNOW THAT THIS IS AN OLD CONCEPT BUT WE WANTED TO GET THE SPIRIT OF THE HERITEGOUSE URBAN WHICH WE INSPIRED THE CONCEPT FROM IT AND WE DEVELOPED IT AND THIS FOR SO MANY REASONS:

1-TO MAKE THE PROJECT AS ONE BIG MALL WHICH GIVES A TASTE AND A SPRITE FOR THE PROJECT.

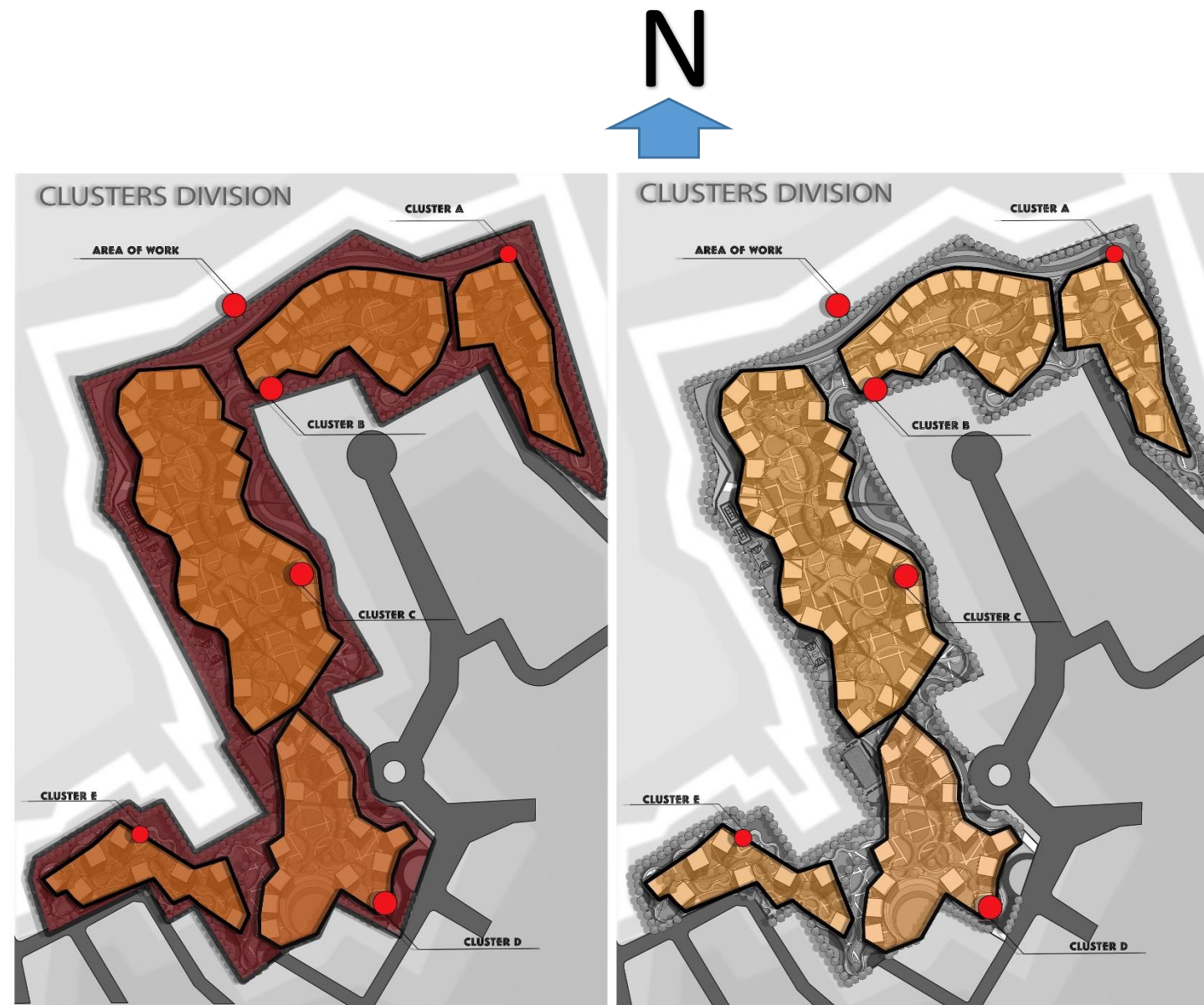
2- GIVES A TOUCH FOR THE PROJECT AS IT IS LARGER THAN LIFE AND ALWAYS HAVE LIFE AS THE COMMERCIAL ACTIVITY IS ATTRACTIVE FOR THE RESIDENTS.

3-SELF SECURITY BY THE CROWDS 24 HOURS 7 DAYS A WEEK

4-THE PATH FOR THE WALKING AND SHOPPING IS SEPARATED FROM THE PATH OF THE CYCLING AND JUGGING WHICH MEANS IT DOESN'T HAVE ANY EFFECT ON THE OTHER ACTIVITIES.

5-OPPENS JOBS FOR THE RESIDENTS WHICH DECREASE THE POLLUTION INCREASES THE INCOME FOR THE FAMILY

6- A WAY OF FUNDING THE CONSTRUCTION OF THE PROJECT AS THE SHOPS WILL BE SELLED AND THEN RENTED WHICH HELPS IN FUNDING THE CONSTRUCTION OF THE 9 FLOORS ABOVE 7



SHAPE NO.13

7TH THE URBAN STUDY

WE DESIGNED THE PROJECT CONSISTS OF PLAZAS, AN APPROACH PLAZA TAKES THE USER THROUGH THE SECONDARY PLAZA TO A MAIN PLAZA WHICH ALL THIS PLAZAS CAN BE A PLACE FOR ACTIVITIES FOR THE RESIDENTS AND VISITORS

IT IS NOT ONLY A PAVED PLAZA BUT A GREEN PLAZA OR SMALL PARK WHICH ADDS A VALUE TO THE PLACE AND THE ENVIRONMENT AND THE URBAN FABRIC OF THE WHOLE CITY

IN OTHER WORDS WE DIDN'T DESIGN AN ORDINARY NEIGHBOURHOOD, WE DESIGNED A PARKA PLAZAA PLACE FOR GATHERING THE WHOLE CITY AND A LUNG FOR A WHOLE CITY TO GET ITS BREATH FROM IT, TO DO ITS ACTIVITY FROM IT TO GIVE A HAND FOR THOSE WHO HAVE NO SHELTER

THE CLUSTERS WE DIVIDED THE PROJECT AS A CLUSTER CONTAINED IN A NEIGHBOURHOOD INTO 5 CLUSTERS WITH A CONFIGURATION OF 2 ESSENTIAL CLUSTERS OF THE APPROACH WITH THE SERVICES IN IT (MALL, GATES, PLAZAS,...ETC.) AND 2 SECONDARY CLUSTERS IN THE WINGS OF THE PROJECT WITH A LESS SERVICES (SECONDARY GATES, PLAZAS,...ETC.) AND THEY ARE LESS IN SIZES ALSO AND LESS IN REPRESENTATION BY THE VOLUME ,AND ONE MAIN CLUSTER BIG IN SIZE BIG BIG IN SERVICES (SOCIAL SPORTS CLUB, MAIN PLAZAS, OBSERVATION BRIDGES ...ETC.) TO ACT AS A CONNECTION BETWEEN THE TWO WINGS OF THE PROJECT IN AN ATTEMPT TO OVERCOME THE IRREGULAR SHAPE OF THE PLOT WHICH MAKE BANES TO THE CONNECTION AND THE FUNCTION OF THE PROJECT.

THE MAIN CLUSTER IS SINGULAR BY THE VOLUME SINGULAR BY THE SHAPE SINGULAR BY THE ROLE WHICH LEADS ALL THE WAYS TO IT MOST OF THE ACTIVITIES IN IT THE MAIN THEME IN IT THE MAIN CAPACITY IN IT.

ALSO THE ABOVE DIVISION IS THE FORCED DIVISION DUE TO THE SHAPE AND THE ASPECTS OF THE PLOT AND THE DEMANDS OF THE PROJECT AND IT IS THE BEST WAY TO MAKE THE PROJECT EFFICIENT IN THE FUNCTION OF IT AND TO DO ITS ROLE IN EFFICIENT WAY

THE SPUNG NEIGHBER HOOD

WE WILL REMIX THE SOIL TO HAVE WHAT IS CALLED THE SPONGE CITY WHICH TRANSMITS THE RAIN WATER AND THE STORM WATER INSIDE THE SOIL TO THE UNDERGROUND RESERVE THE AIM OF THIS IS TO SAVE AN UNDERGROUND WATER FOR THE FUTURE GENERATIONS, THIS WILL HAPPEN BY USING PREAMBLE PAVEMENTS WHICH ALLOWS WATER TO PENETRATE LAND SOIL AND BY MIXING THE SOIL OF THE LAND WITH THE NESSACRY COMPONENTS WHICH ALLOWES WATER TO REACH UNDER GROUND

7TH THE URBAN STUDY

THE SPUNG NEIGHBER HOOD

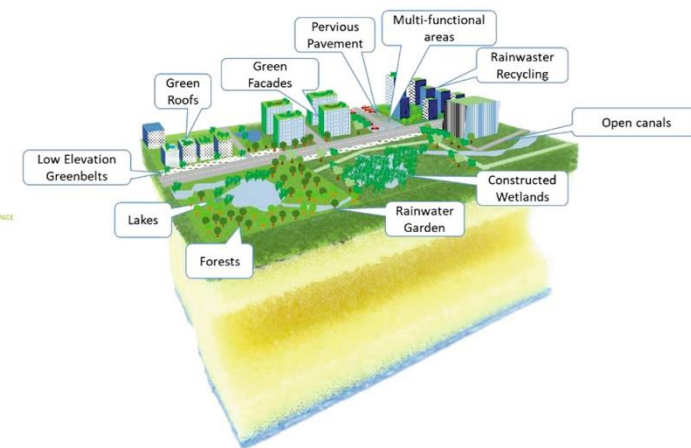
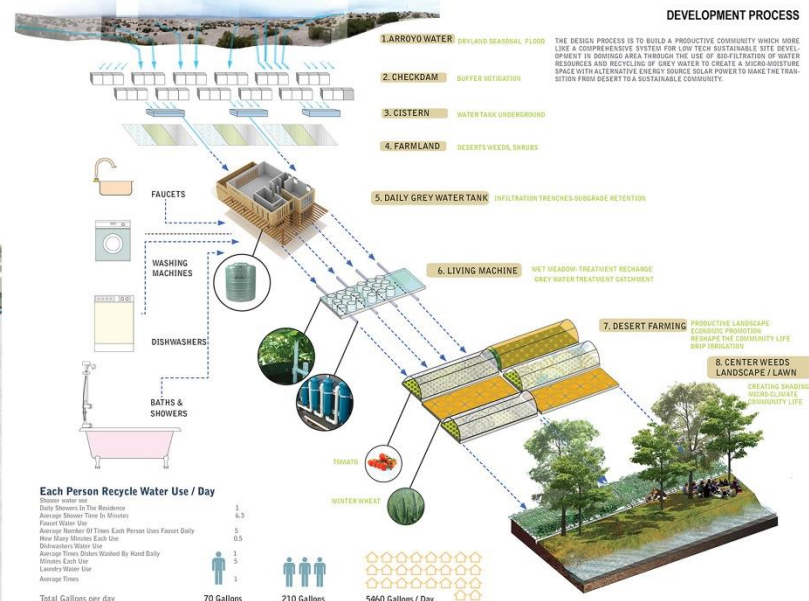
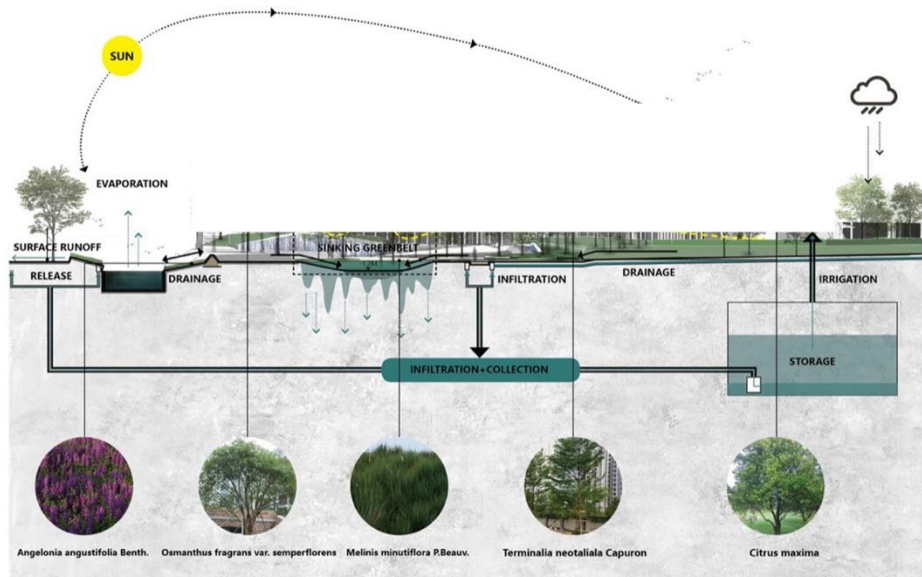
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SPONGE CITY AND PLANT ANALYSIS

This sunken green space adopts the sponge city design concept.

Through various technical approaches such as "infiltration, storage, utilization and drainage",

It realizes the benign hydrological cycle of the city.



THE SPONGE CITY STRATGY IN THE NIEGHERBERHOOD

8TH THE LAND SCAPING STUDY

THE LAND SCAPING STUDY WILL SHOW THE AIM OF THE LAND SCAPE IN THE PROJECT AND IN THE FOLLOWING THE STUDY:

OUR AIMED FOR THE LANDSCAPING IS TO ESTABLISH A PLAZED PARK TO BE A PART FROM THE NATURE MADE BY HUMANS EFFICIENT IN ITS FUNCTIONALITY

FROM THIS PHRASE WE STARTED OUR PROJECT WE STARTED LOOKING TO THE SITE WITH ITS IRREGULAR SHAPE,

A-WE STARTED TO DESIGN A CANAL IN THE MID OF THE PLOT PENETRATING IT CONNECTING IT WITH EACH OTHER THE CANAL WILL HAVE A FUNCTION TO BE A NATURAL RESERVE FOR THE RAIN WATER AND A NATURAL RECYCLED WATER WHICH WILL BE TREATED NATURALLY (MENTIONED IN THE SECTION OF RECYCLED WATER IN DETAILS) WE AIM TO HAVE NATURAL MARINE LIFE IN IT FROM THE REVERS IN BELFAST FOR THE ENVIRONMENTAL BALANCE, ENVIRONMENTAL INTEGRATION AND FOR THE HUMAN HEALTH.

ALSO THE CANAL WILL HAVE A FUNCTIONAL ROLLS FOR THE FISHING RIVER SPORTS AND PUBLIC VIEW, AND TO HAVE A BEAUTIFUL INTERNAL VIEW.

B-WE THEN REACHED THE GREEN COVERAGE WE USED TO KINDS OF GRIDS THE PERPENDICULAR GRID AND THE CURVED GRID AND THEY BOTH HAVE A MEANING (MENTIONED IN DETAILS IN THE CONCEPTUAL STUDY) THOSE BOTH GRIDS ARE PLEXUSES WITH EACH OTHER BY A WAY YOU CANT SEPARATE THEM AND EFFECTED BY THE MESHES OF THE BUILDINGS AND THE SHAPE OF THE PLOT SITE FORM, THIS GIVES AN INTEGRATION BETWEEN THE PROJECT SITES AND CORNERS AS THIS WAS ONE OF THE MAIN PROBLEMS IN THE PROJECT TO BECOME A POINT OF STRENGTH

IN BETWEEN THE GREEN COVERAGE STARTED TO BE CREATED GRADUALLY WE USED A NATURAL PLANTS FROM THE SURROUND ENVIRONMENT TO MATCH WITH NATURE TO HAVE A CARPET FROM THE GRASS INCLUDE A HIGH BIG LEAVES FOR THE SHADOWS IN SUMMER AND A SHELTER IN WINTER .

C-WE THEN REACHED TO 2ND PART OF THE FORM THE WALKERS PATHS WHICH IS REFORMED FROM THE UNITY AND INTEGRATION OF THE TWO GRIDS OR THE PLEXUSES OF THE TWO MESHES MENTIONED ABOVE , THOSE MESHES HAVE ALLOT OF PROPOSES :

8TH THE LAND SCAPING STUDY

1-TO CONNECT THE CORNERS OF THE PROJECT WITH EACH OTHER'S

2-TO FACILITATE THE TRANSPORTATION THROUGH THE PROJECT AND BETWEEN ITS PARTS.

3- TO CREATE A PUBLIC SPACE FOR THE PUBLIC ACTIVITIES LIKE JUGGING, CYCLING, WALKING ...ETC.

4-TO FACILITATE THE SECONDARY PURPOSE WHICH IS A COMMERCIAL WALK PATH.

5-TO CREATE A SUSBENSABLE PATH ATTRACTS THE USER TO EXPLORE THE PROJECT WHICH IS MOSTLY THE VISITOR, AND TO KILL THE BORING BY THE CONTINUITY IN THE PROJECT, AND BY LIVING IN THE SITE WHICH ALWAYS HAPPENS AS THE YEARS GO FORWARD AND BY THE TIME PASSING.

D-THE PLAZAS WHICH REPRESENTS THE CONTAINED SHAPE WHICH CONTAINS ALL THE ABOVE WHICH ACTS AS A GATHERING AREA AND AN OPEN SPACE TO CONTAIN THE ACTIVITIES IN THE PROJECT AND CONTAIN EVERY CLUSTER

THE LEVELS OF THE LAND

WE USED THE CONTOUR IN THE PROJECT TO GIVE THE FEELING OF LEVELS IN A FOREST AND TO SUPPORT THE CONCEPT OF PLANTATION OF THE WHOLE PROJECT FROM THE LAND IN A WAY TO SUPPORT THE ORGANIC CONCEPT IN THE PROJECT

8TH THE LAND SCAPING STUDY

THE OUTLINE FRAME TREE WALL

WE DESIGNED A FRAME OUT LINE TREE WALL TO BE A NATURAL BAN FOR THE WIND TO REDUCE ITS VELOCITY IN THE WINTER AND AS A NATURAL FILTER IN THE SUMMER.

THE AIM OF THESE FRAME IS TO SERVE AS A NATURAL FENCE AND TO ADD THE AREA USED AS A SHELTER IN WINTER AND SHADOWS AND FILTRATION IN SUMMER FROM PARTICLES AND DUST IN SUMMER

NATURAL WATER TREATMENT

THE WAY THAT WE WILL SHOW WAS A RESEARCH AND EXPERIMENTED AND APPROVED BY THE MINISTRY OF WATER AND IRRIGATION IN EGYPT IT'S A NATURAL WATER TREATMENT EVEN FROM THE TOXIC AND CHEMICAL COMPONENTS :

WE USE 2 ELEMENTS IN IT REED PLANT AND EICHHRONIA PLANT BY THE FOLLOWING WAY:

WE DIVIDE THE SECTOR WHICH IS USED FOR TREATMENT INTO 4 SECTORS:

WASTE WATER: A PLACE TO COLLECT THE WASTED WATER AND THE WANTED TREATED WATER

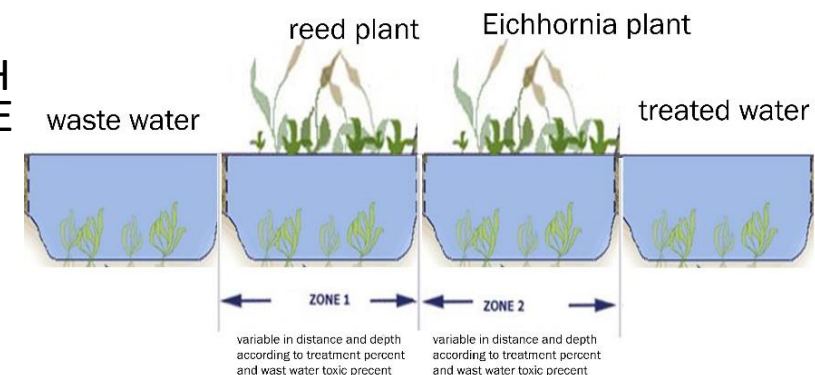
THEN A PLACE TO PUT THE REED PLANT WHICH BY IT'S LONGITUDINAL LENGTH AND DEPTH THE BACTERIA WHICH IS CREATED ACTS ON EATING AND DECOMPOSING THE TOXIC AND CHEMICAL COMPONENTS IN WATER.

THEN THE 3RD SECTOR IS THE EICHHRONIA PLANT SECTOR BY IT'S LONGITUDINAL LENGTH AND DEPTH THE BACTERIA WHICH IS CREATED ACTS ON EATING AND DECOMPOSING THE TOXIC AND CHEMICAL COMPONENTS IN WATER, IT WILL ACT AS A 2ND FILTRATION FOR THE WATER .

THE EICHHRONIA AS IT IS FLOATING OVER THE WATER IT IS SUPPORTED TO THE BOTTOM OF THE BASIN BY STEEL BARS TO HOLD IT FROM FLOATING AND SWIMMING WITH THE FLOW.

THE 4TH SECTOR IS THE TREATED WATER OR THE RECYCLED WATER THIS PLACE IS THE CANAL

THE PLACE THAT ALL THE MENTIONED ABOVE PROCESS WILL TAKE PLACE IS IN THE CIRCULAR COLLECTIVE BASIN



SHAPE NO.15

8TH THE LAND SCAPING STUDY

NATURAL WATER TREATMENT

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FOREST



8TH THE LAND SCAPING STUDY

THE STREET FURNITURE

WE USED A NEW CONCEPT IN THE STREET FURNITURE THE SEATS WHICH IS THE LAND SCRAPERS CONCEPT STREET FURNITURE IN ORDER TO DO THE INTEGRATION BETWEEN ALL THE ELEMENTS OF THE PROJECT.

THE LIGHTING PILLARS

WE ARE GIVING A NEW CONCEPT WHICH IS LIGHTING BY THE GENERATORS OF THE SPORT TO GIVE A NATURAL LIGHTING AND IT IS CLEARFIELD IN THE DRAWINGS

THE USING OF SOLID WASTE AND BLACK WATER IN EXTRACTION OF BIO GAS

THE SOLID WASTE AND THE BLACK WATER WILL BE COLLECTED AND BIO GAS WILL BE EXTRACTED THROUGH THE NON AIR DIGISTION TECHNOLOGY WHICH IS SIMPLY GATHERING ALL THIS SOLID WASTE UNDER VERY HIGH PRESUUR AND NO AIR

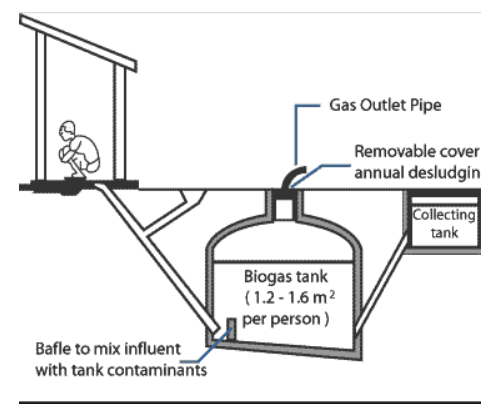
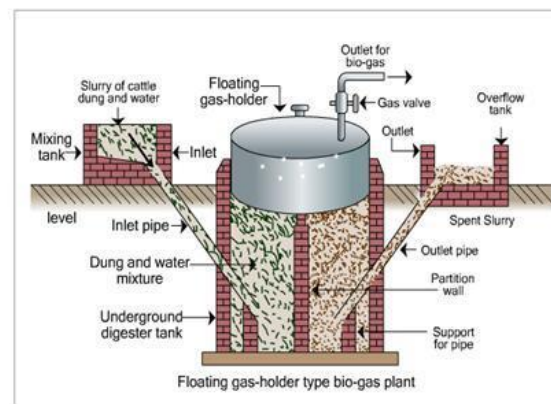
IT TRANSFORMS INTO BIO GAS METHAN GAS

THE EXTRACTED GAS WILL BE REVERSED AND SENT TO HOMES AGAIN TO BE USED IN COOKING AND HEATING.

THE WASTE COLLECTOR WILL BE UNDER GROUND AND THE PIPES OF SENDING WASTE AND GAS ALL UNDER GROUND IT WILL BE HIDDEN FROM VISUAL TO AVOID DISTURBANCE

Biofuels: how Bio Gas is Generated.

Floating gas holder type of plant. The diagram below shows the details of a floating gas holder type of bio gas plant.



SHAPE NO.17-B

THE TECHNICAL REPORT OF THE COMPETITION OF DESIGNING THE STRATEGIC PLAN OF THE MACKIE'S SITE (TAKE BACK THE CITY)

RESEDENTIAL BUILDINGS PLANTED IN A PLAZED PARKED FOREST



SHAPE NO.17-A



8TH THE LAND SCAPING STUDY

THE AIR PURIFIER

TO KEEP THE LIMITS OF THE CO₂ IN MINIMALIST WE USED BY THE ALGAE AIR PURIFIER IT IS CLEARFIELD IN THE DRAWINGS ,THE AIM IS TO SUPPORT THE PROJECT IS A WHOLE LUNG TO BELFAST IN THE FAR RANGE AND THE SURROUND IN THE NEAR RANG AND THE RESIDENCE IN THE NEAREST RANG

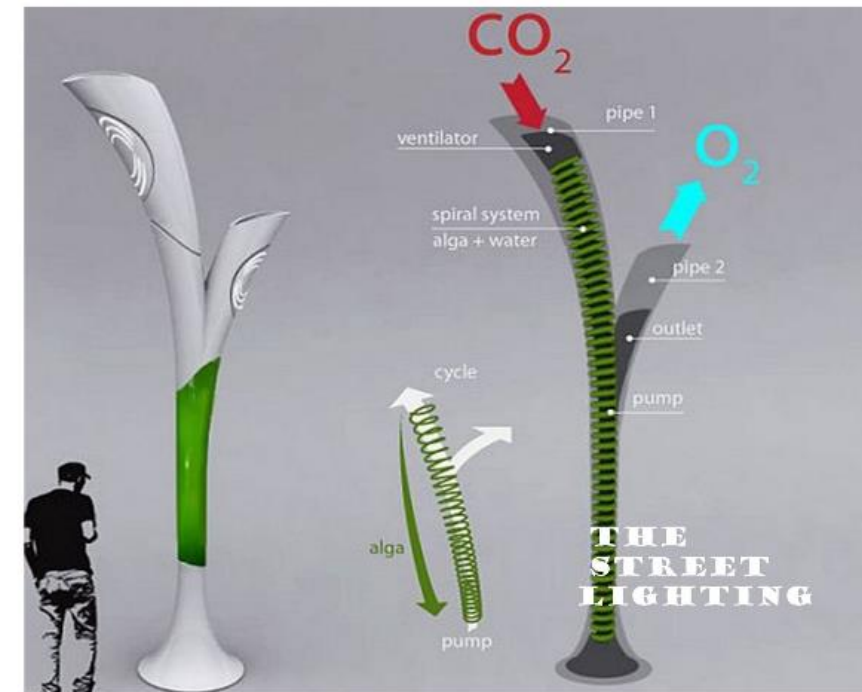
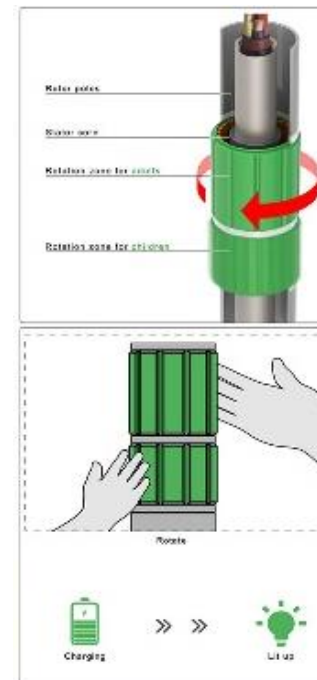
THE BRIDGE

IT IS THE OBSERVATION BRIDGE WHICH IS IN THE MIDDLE OF THE LAND IT FLYING ON SUPPORTS TO GIVE THE PROJECT THE FEELING OF THE FLYING CARPET IT'S AIM IS TO FACILITATE THE TRANSITION BETWEEN THE 2 BOARDS OF THE CANAL AND TO GIVE A FULL VIEW FOR THE PROJECT AND THE PARK

IT'S AN ADDITION TO THE PROJECT AND THE PARK

FROM ALL THE ABOVE WE REACHED OUR AIM

THE LANDSCAPING IS TO ESTABLISH A PLAZED PARK TO BE A PART FROM THE NATURE MADE BY HUMANS EFFICIENT IN ITS FUNCTIONALITY



SHAPE NO.18

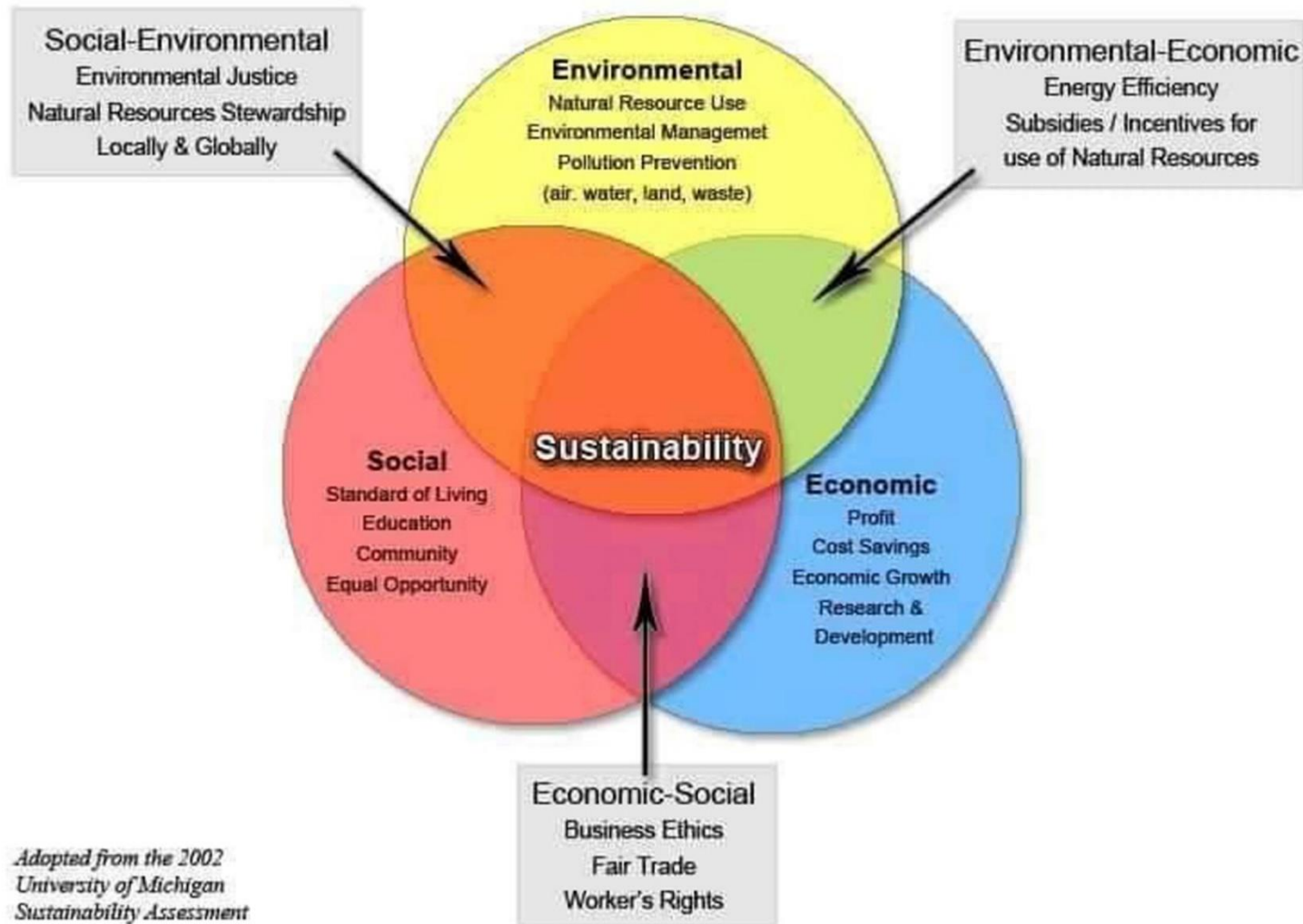
8TH THE LAND SCAPING STUDY

THE SUSTINABILTY IN THE PROJECT

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FOREST

The Three Spheres of Sustainability



*Adopted from the 2002
University of Michigan
Sustainability Assessment*

SHAPE NO.19



SHAPE NO.20

8TH THE LAND SCAPING STUDY

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THE SUSTAINABILITY IN THE PROJECT

RESEDENTIAL BUILDINGS PLANTED IN A PLAZED PARKED
FOREST

WE AUTHORIZED THE SUSTAINABILITY AS A MAIN THEME IN THE PROJECT AND IN THE FOLLOWING HOW DEEP IS SUSTAINABILITY AND HOW DEEP ITS ROOTS IN THE CONCEPT OF THE PROJECT

ROOF GARDEN TO DEACRESE THE HEATING LOD THROUGH THE NATURAL INSULATION ,AND BY SEQUANCE roof garden to decrease the reflction of the sun rays and the heat island effect also to be a natural heat insulation to decrease the cooling load and by sequanse decrease the heat island effect as the heat goes downen which will effect area of work

the ban is a structur it's function to decrease the effect of wind on building on winter and as a sun ban in summer this will help in giving the building moderait temp which deacrees the relaying on the a.c and by sequanse decrease the useing of energy

the glazing of the facade will be either kept in case of developing or changed to glazing in the case of reenvoting,all the glass will be insulating double glass in order to make the function including all the area of fare effect and also .to make all the area in harmony with one thaim also to it will also decrease the cooling load and to decrease the leacage of , cooling from inside to outside which will also decrease cooling load by sequanse decrease the heat island effect as the heat goes downen which will effect area of work

green wall to deacrees the exposed glassed racade ,which will decrease the reflected sun light which by sequanse will decrease heat island effect , it will also decrease the heating load and to decrease the leacage of heating from inside to outside which will also decrease heating load ,by sequanse decrease the heat island effect as the heat goes downen ,which will effect area of work the plantation will be from the sarounded area irrigation will be iether from water from air condation,or from the gray water from the buildings also it will be a natural insulation from the coold in winter out side to warm inside,in summer from hot out side to cool inside leading to decrease energy used

the shield is a shieled around the building which we supported the wind turbins in it the shieled will act as an outer skien with plantation,which will have more than a benifet such as deccres the carbon foot print,and to reduce the heating or cooling lood through making the temp around the building moderait by acting as a shield in winter and sun ban in summer through the plantation the water for the plantation will come from the gray water or the wast a.c. water

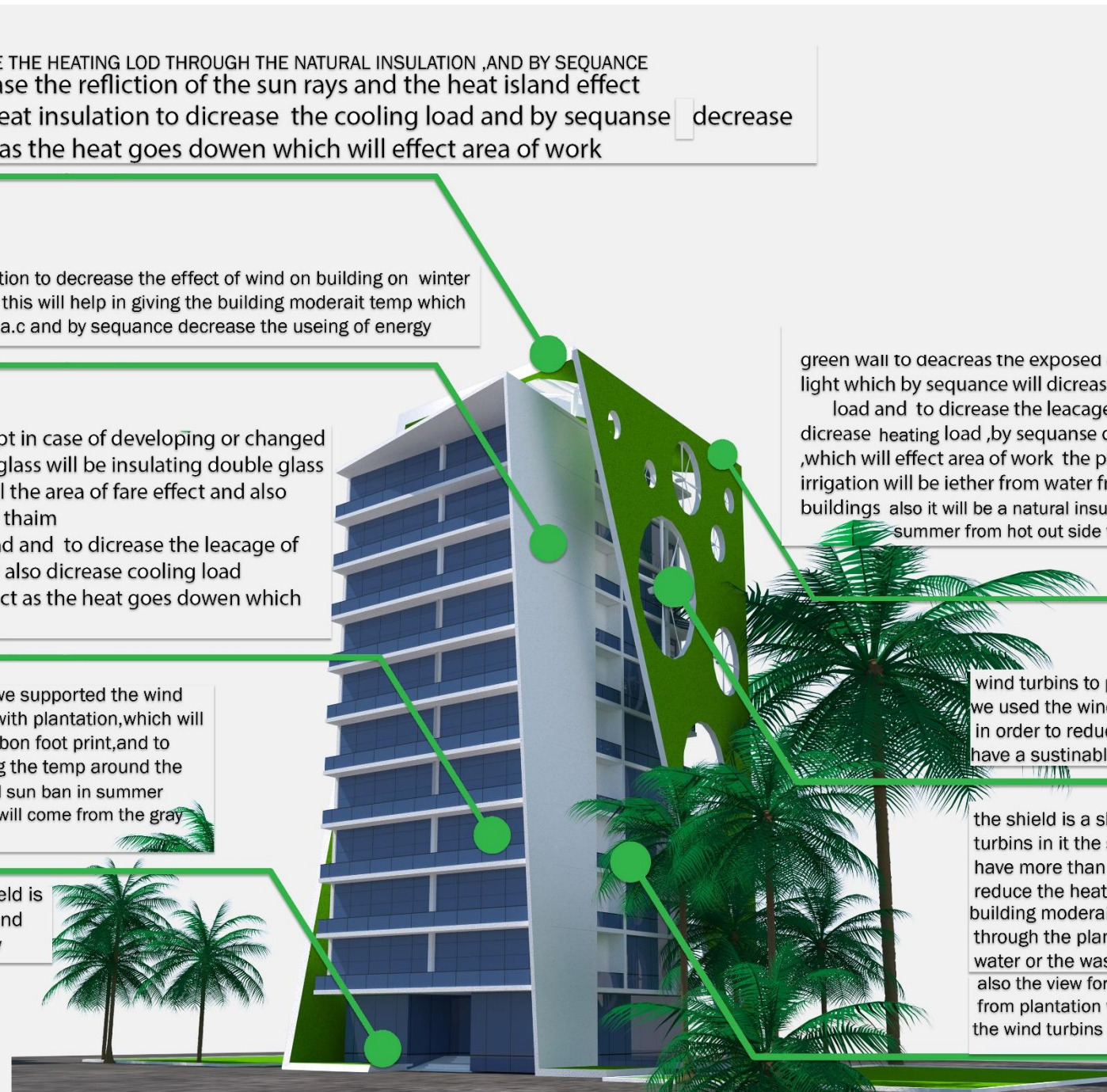
wind turbins to produce elec. from wind as the sun is not rising all the year we used the wind turbins insted to produce the elec needed for the building in order to reduce the use of fosil fuel and to reduce wast after ,in order to have a sustinable building

also the view for the internal resedints the shield is from plantation which allows to look through and the wind turbins hools allows to reciev the view

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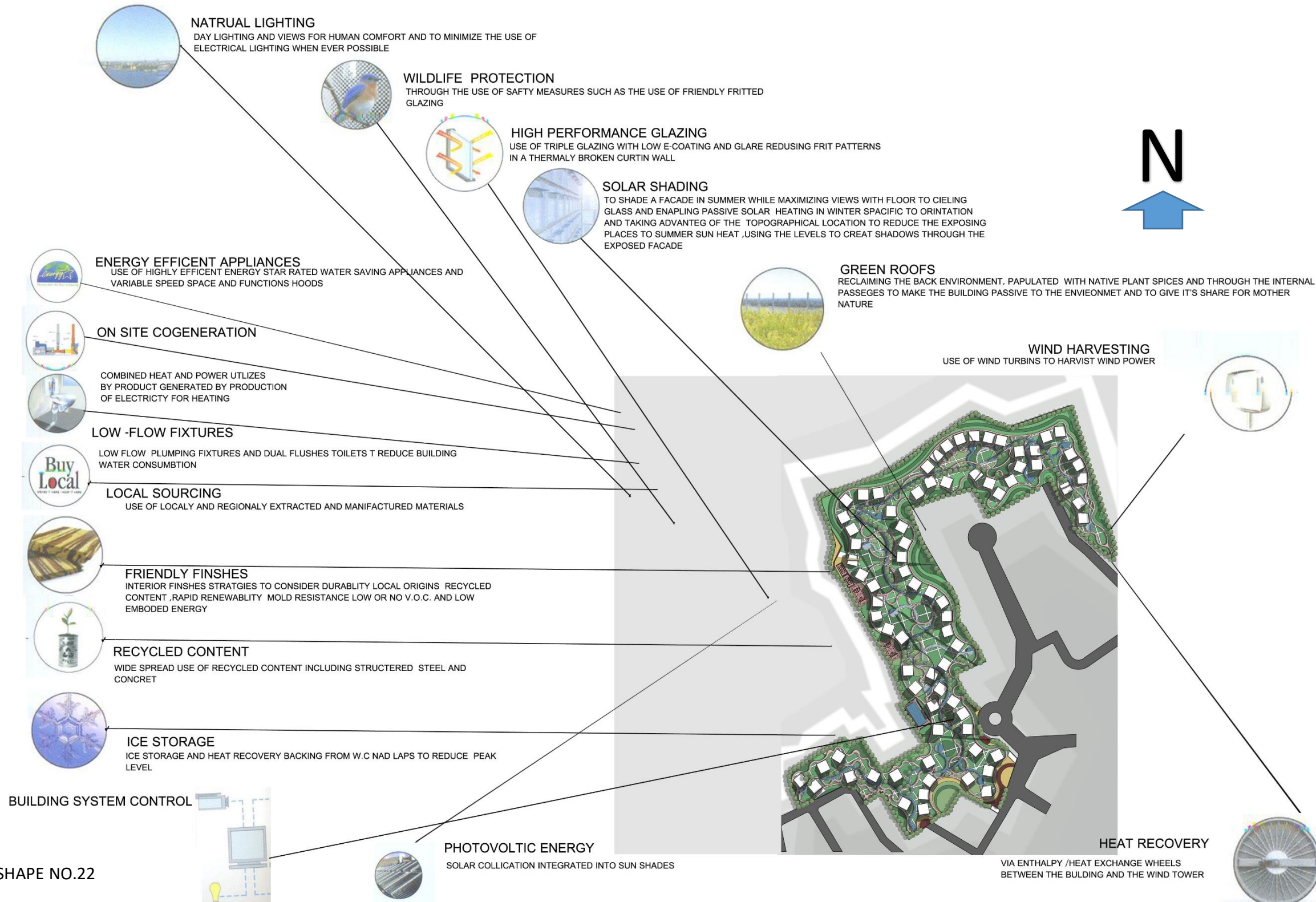


8TH THE LAND SCAPING STUDY

THE SUSTAINABILITY IN THE PROJECT

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8TH THE LAND SCAPING STUDY

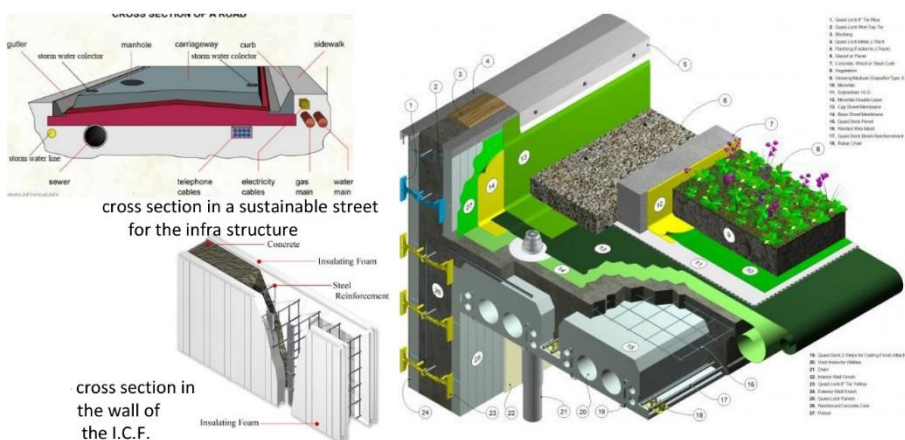
THE SUSTINABILTY IN THE PROJECT

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FOREST

THE SUSTINABILTY STUDY

- 23-THE CONTAINER HIGH RISE :** in order to keep the identity of the harbour and to reduce the waste and increase the recycled content we use the recycled containers in the high Rise towers
 - 24-DISTRECT HEATING AND COOLING :** in order to reduce the CO2 input which reduces the green house effect we used the distract heating and cooling for the quality of life and the best control ,and as the co2 inputs is fare from the site
 - 25-WASTE WATER TREATMENT PROCESSE :** we will use the waste black water in a treatment process in order to be treated and reused in the watering process for the green area and the gardens.
 - 26-RECYCLING THE WATER:** by using of gray water waste from the buildings in the recycling of water as non potable water for the non human uses such as the toilet flushing .
 - 27-THE USE OF RENWABLE ENERGY :** as the use of energy from renewable sources like plantation .
 - 28- HOME AUTOMATION :** as the use of home automation will decrease the demand on energy and reduce the waste from the energy and increases the Indore environmental quality.
 - 29-SOLLAR URBAN LIGHTING :**the expanding in the urban solar lighting and the use of solar systems in civil applied systems .
 - 30- THE USE OF STORM WATER IN WATERING :** the reuse of storm water in watering the gardens after filtration and in the non potable uses .
 - 31-THE USE OF WHITE AND LIGHT COLORS IN THE FACADES OF THE BUILDINGS :** in order to reflect the sun light which will decrease the cooling load inside as there is a decrease in the heat permeability inside the space which will decrease the demand on energy and by sequence will decrees the CO2 emissions and the heat emissions from the A.C. machines which will act in the life quality inside
- And at the end we tried to got the best benefit from the site and to integrate with environment around it In order to reduce the expected effect and the expected pollution print for the site**



SHAPE NO.23

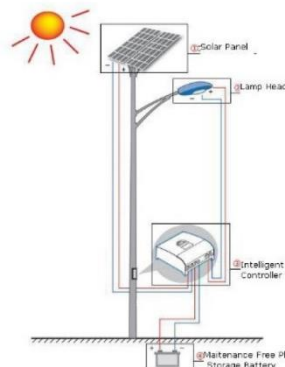
isometric section for the roof slab garden in the I.C.F. techniques

the use of solar lighting in the streets

THE SUSTINABILTY STUDY

In our vision for the development plan we looked to the future as the future for the sustainability either in the economy or the architecture and in the following we will show the sustainably in the project:

- 1-WIND HARVISTING :** the use of turbines to harvest wind power .
- 2-GREEN ROOFS :** populated with native spices
- 3-HEAT RECOVERY :** via enthalpy/heat exchange wheels.
- 4-SOLAR SHADING :**to shade façade in summer while maximizing views with floor to calling glass and enabling passive solar heating in winter specific to orientation .
- 5-HIGH PERFORMANCE GLAZZING :** use of triple glazing with low e-coating and glare reduce frit patterns in a thermally broken Curtin wall .
- 6-WILED LIFE PROTECTION :** through the use of safety measures such as bird friendly fritted glazing .
- 7-NATURAL LIGHTING :** daylighting and views for human comfort and to minimize the use of electrical lighting when ever possible .
- 8-REGENERATIVE ELEVATORS :** highly efficient regenerative elevators .
- 9-PUBLIC TRANSPORTATION :** proximity to sub way and buss routs .
- 10-PHOTO VOLTIC ENERGY :** solar collection integrated into sun shades.
- 11-ENERGY EFFICIENT APLIANCES :** use of highly efficient energy star rated water savings appliances and variable speed kitchen hoods .
- 12-ON-SITE COGENERATION :** combined heat and power utilizes by product generated by production of electricity for heating .
- 13-LOW FLOW FIXTURES :** low flow plumbing fixtures and dual flush toilets reducing building water's consumption .
- 14-LOCAL SOURCING :** use of local sourcing and regionally extracted and manufactured materials TO DECREASE THE TRANSPORTATION AND THE ACTIVE INPUTE TOWARDS ENVIRONMENT,
- 15-FRIENDLY FINISHES :** interior and exterior finishing strategies to consider durability local origin , recycled content , rapid renewability ,mold resistance ,low or no voc. and low embodied energy.
- 16-RECYCLED CONTENT :** wide spread use of recycled content including concrete and structural steel.
- 17-VEHICLE SHARING :** provide residents access to fuel efficient vehicle sharing program
- 18-BICYCLE STORAGE :** expand options for employee and residents commuting.
- 19-ICE STORAGE :** ice storage and heat recovery from kitchens and bathes to reduce beak loading .
- 20- INSULATED WALLS AND CEILING :**USING INSOLATED WALLS AND CIELING , USING OF SIETE GENERATED ENERGY .
- 21-CONCEPT OF CONNECTING AND DICONNECTING SYSTEM :**TO REDUCE THE WASTE AND TO AVOIDE THE CHANGE OF THE SHAPE OF THE LAND .
- 22-THE I.C.F. TECHNIQUES :** we recommended in order not to control the creativity TO REDUCE THE CONSUMPTION IN HEATING AND SOUND BY 60%.



9TH THE INFRASTRUCTURE AND THE SMART NEIGHBOR HOOD

WE DESIGNED THE INFRA STRUCTURE AND THE SMART NEIGHBOURHOOD WE PUT IN OUR INTENTIONS TO HAVE A MODERN INFRA STRUCTURE EITHER IN SEWAGE OR POTABLE WATER WITH AN ELECTRIC AND INFORMATION'S NETWORK BUT WE DIDN'T STOP AT THIS POINT WE WENT FARTHER THAN THAT AND IN THE FOLLOWING GRAPH THE SMART NEIGHBOURHOOD AND NEW INFRA STRUCTURE

Tourist Information Center

The image shows a website for a Tourist Information Center. The website has a navigation menu with links for HOME, ACTIVITIES, RESTAURANTS, ACCOMMODATIONS, CONVENTION CENTRE, and TRAVEL. Below the menu, there are sections for 'Categories' (Adventure, Water Sports, Nature Trail, Fountain Show), 'Welcome to Information Portal', and 'Latest News'. To the left, there are images of a tablet and a smartphone displaying the center's services.

Telemedicine

Telemedicine:
A desktop based Telemedicine solution from CISCO is commissioned at Apollo Lavasa Hospital. This patient desk will help the Apollo hospital at to leverage the experts/doctors available in Apollo hospitals outside by allowing a real time interaction and data exchange.

Our Infrastructure – Telecom Towers

- 5 Telecom Towers
- For Mobile, Internet and Radio Trunking
- IBS for local coverage improvement.

Seamless connectivity

Security & Surveillance

- UVSS with LPR and Driver Image
- Command Center
- City Security & Surveillance
- Critical Installation access control

Security & Surveillance To Monitor Activity Real Time

Water supply and sewerage

- Water sourcing through unique system eliminates long conveyance
- Sectorwise Centralized treatment and distribution system with 24/7 pressured supply through meters
- Treatment and distribution monitored closely
- STP with three levels of tertiary treatments: Chlorination, Ozonation, and UV
- Zero discharge: Recycled effluent is fully used for flushing, cooling, construction and irrigation.
- Separate ETP for a laundry and hospital; decentralised STPs in future

Solid Waste Management

- 100% collection through 3 bin system
- Segregation at source as well as at collection centre
- Organic waste converted to compost; recyclables given to recycling agencies.
- No landfill site planned at the site
- Hazardous waste is stored in specially designed storage; handed over to authorized agency for disposal at regional facility.
- Liberal provision of dust bins along roadside, footpaths and on the promenade

Public safety and security

- High level of safety and security to residents and public provided by Lavasa security in conjunction with the State Police.
- Strategically installed all-weather digital cameras connected to Central Command Centre.
- Security and patrolling guards equipped with vehicles and independent wireless communication system
- Continuous patrolling to detect and control security and public safety threats
- Mid-sized fire engines equipped with Mist technology suitable for fighting fires in building and in forest.

9TH THE INFRASTRUCTURE AND THE SMART NEIGHBER HOOD

City Management Services

- A dedicated City Management Services team
 - headed by a specialist City Manager to provide enhanced quality of community living to its citizens and visitors
- Deliver on Governance
 - Vision to create a replicable model of City Governance for new cities by bringing world-class standards and innovative governance to Indian urban life
- Emphasis on
 - Public Safety & Security - law and order services, fire and disaster management, etc.
 - Provision of uninterrupted and good quality water & power to all customers; sewerage services and gas distribution.
 - Public transportation, parking and traffic control
 - Value added services connecting citizens to services like housekeeping; garden, street and promenade maintenance; waste management; pest control; property management, etc.

Smart City ICT infrastructure

- In 2006, laid 42-km, 24-core Fiber Optic Backbone for ICT connectivity between Lavasa and the rest of the world
- Laid 170 km of fiber optic network in the 1700-acre first town, Dasve
- GPON (Gigabite Passive Optic Network) in place within Lavasa connecting all homes, businesses and facilities. Multiple services to users from multiple service providers
- Network can provide 100 mbps speed at user end depending on user requirement.
- Established separate SPV, My City Technology Ltd with Wipro and Cisco's participation

Smart City Applications

- Citizens services: providing following Voice, Data and Video services though vendors on a single fiber to home:
 - DTH TV, Cable TV, Telephone, Internet, IPTV,
 - Smart home automation system;
 - Digital security system
- City level applications
 - Citizens contact center management
 - Emergency alarm system for senior citizens
 - CCTV surveillance and command center
 - Water and energy metering
 - Unified billing and on-line payment apps
 - Public Wi Fi in town center area
 - Parking and traffic management
 - Assets management
- Of 65 smart city parameters, 28 implemented, 7 enabled

Power and gas supply

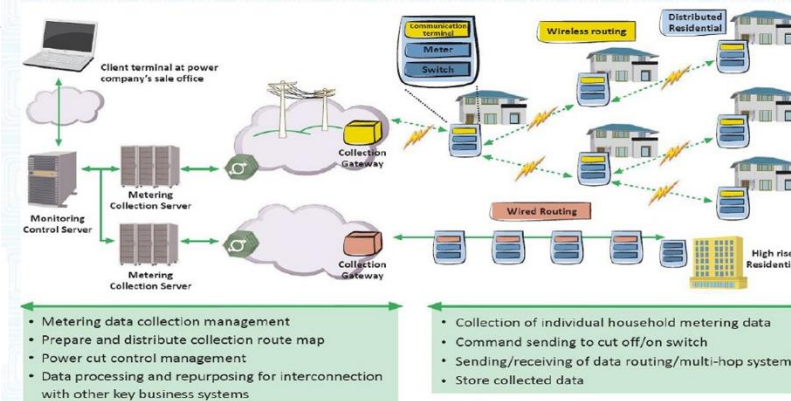
- Complete power distribution network including receiving station, sub stations, distribution cables and lines
- Managing the distribution network
- No load shading in the area.
- Centralized LPG supply to commercial establishments and apartment in the town centre; O& M and safety managed by the City Management Services

SHAPE NO.25

Citizen Contact Center

Citizen Contact Center For Receiving And Handling Large Volume Customer Care Requests

Smart Metering

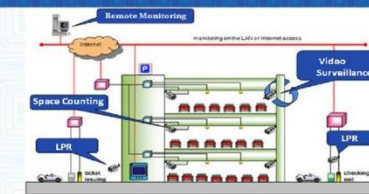


Smart Metering For Centralized Utility Monitoring

Integrated Building Management System



Smart Parking and Traffic Management



Efficient Parking and Traffic Management and Intelligent City Bus Service for Citizens

Technology Supported Transport



SKYBUS

9TH THE INFRASTRUCTURE AND THE SMART NEIGHBER HOOD

e-Governance in a Smart City



Smart Home



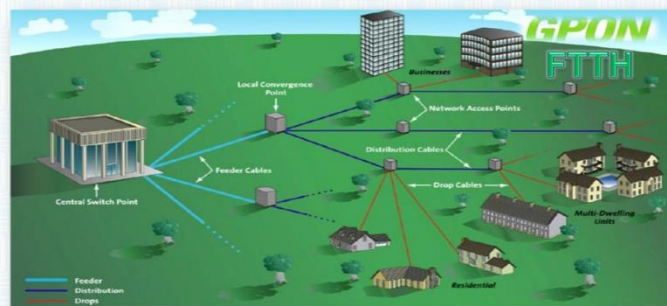
Cashless Cards

will have a Prepaid Payment System - An experience of Shopping with easy and secure forms of payment.

- Single card acceptable at all outlets at Lavasa.
- Single card for multiple uses such as access card, identity card and payments.
- A basket full of loyalty benefits.



Our Infrastructure – GPON Network



- 180km fiber network for Dasve
- GPON Architecture
- 10 year sustenance and scalability

All Services on ONE Network

Tele Presence

Tele Presence:

- A state of art Telepresence facility to improve interaction and information exchange.
- LCL has 5 sets of high end Telepresence equipment from Cisco, installed between Vikhroli (Mumbai) office and Lavasa Town Hall, LEC and LICC and can be used as a Public Room.



Wi – Fi Internet Services

Wi-Fi Internet Services

Centrally administered Seamless Wi - Fi Internet access at Hospitality and Commercial Establishments.:

- Ekaant The Retreat
- Hotel Mercure
- Fortune Select Dasve
- Lavasa International Convention Center
- Will be extended to other properties and the Promenades
- Creation Public and Private Hot Spots.



Mandate – Create a Smart City

- an E-City
 - E-Governance (& integrated service systems)
 - E-Learning
 - E-Health Care
 - E-Commerce
 - E-Homes



Safe, Aware, Interactive, Efficient

10TH THE SECURITY STUDY IN THE PROJECT

WE INTENDED TO KEEP THE SECURITY OF THE RESIDENTS AND THE VISITORS TOO FROM THAT POINT PUT THE PLAN OF SECURITY IN CONSIDERATION:

1-WE COVERED ALL THE PLOT WITH CCTV CAM. FOR THE WATCHING.

2-WE HAVE A CONTROL ROOM FOR THE DETECTION OF DISASTERS LIKE FIRE, EMERGENCYETC. WHICH ALERTS THE CONTROL ROOM TO TAKE THE PERSEDCURES AND THEN ALERTS THE POLICE, FIRE, HOSPITALS....ETC.

3-WE AUTHORISED THE SELF-SECURITY WHICH IS THE PLOT IS SECURED BY THE CROWDS AS IT SELF-SECURITY BY THE CROWDS 24 HOURS 7 DAYS A WEEK AS IT IS ACCESSIBLE AND THERE IS AN ELEMENT OF ATTRACTION WHICH ARE THE SHOPS AND THE ENJOYMENT OF THE RECREATION AND RELAXATION WITH THE SITE

4-THERE IS ONLY 2 MAIN APPROACHES AND 2 SECONDARY APPROACHES ALTHOUGH IT IS ACCESSIBLE AND THE SECURITY IS TO KEEP ORDER NOT DETECT EVERY ONE ENTERING THIS GIVES CONTROL IN THE CASES OF EMERGENCY OR A CALCULATED CONTAINED FLUIDITY

11TH THE FINNANCIAL STUDY

OUR PLAN TO FINANCE THE FUNDS OF THE PROJECT IN ORDER TO REMOVE THE BEAR ON THOSE WHO WILL BE A RESIDENTS IN THESE PROJECT:

THE PROJECT WILL SELL THE SHOW ROOMS DOWN THE RESIDENTIAL BUILDINGS AND THE MALL.

THE PROJECT WILL SELL THE ADVERTISEMENT RIGHTS IN THE PROJECTS.

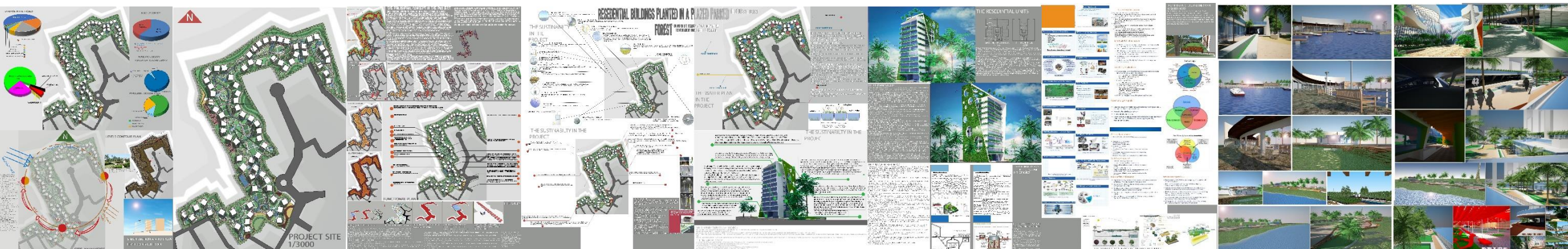
THE COMMUNITY AND THE FUNDS BOXES AND THE CHARITY COMMUNITIES WILL SUPPORT SOME DONATIONS.

THE CITY MUNICIPALITY WILL SUPPORT EITHER FINANCIALLY OR MATERIALISTIC DONATIONS

**THE TECHNICAL REPORT OF THE
COMPETION OF DESIGNING THE STRATEGIC
PLAN OF THE MACKIE'S SITE (TAKE BACK
THE CITY)**

RESEDENTIAL BUILDINGS PLANTED IN A PLAZED PARKED
FOREST

12TH THE FULL PROJECT



A

B

C

D

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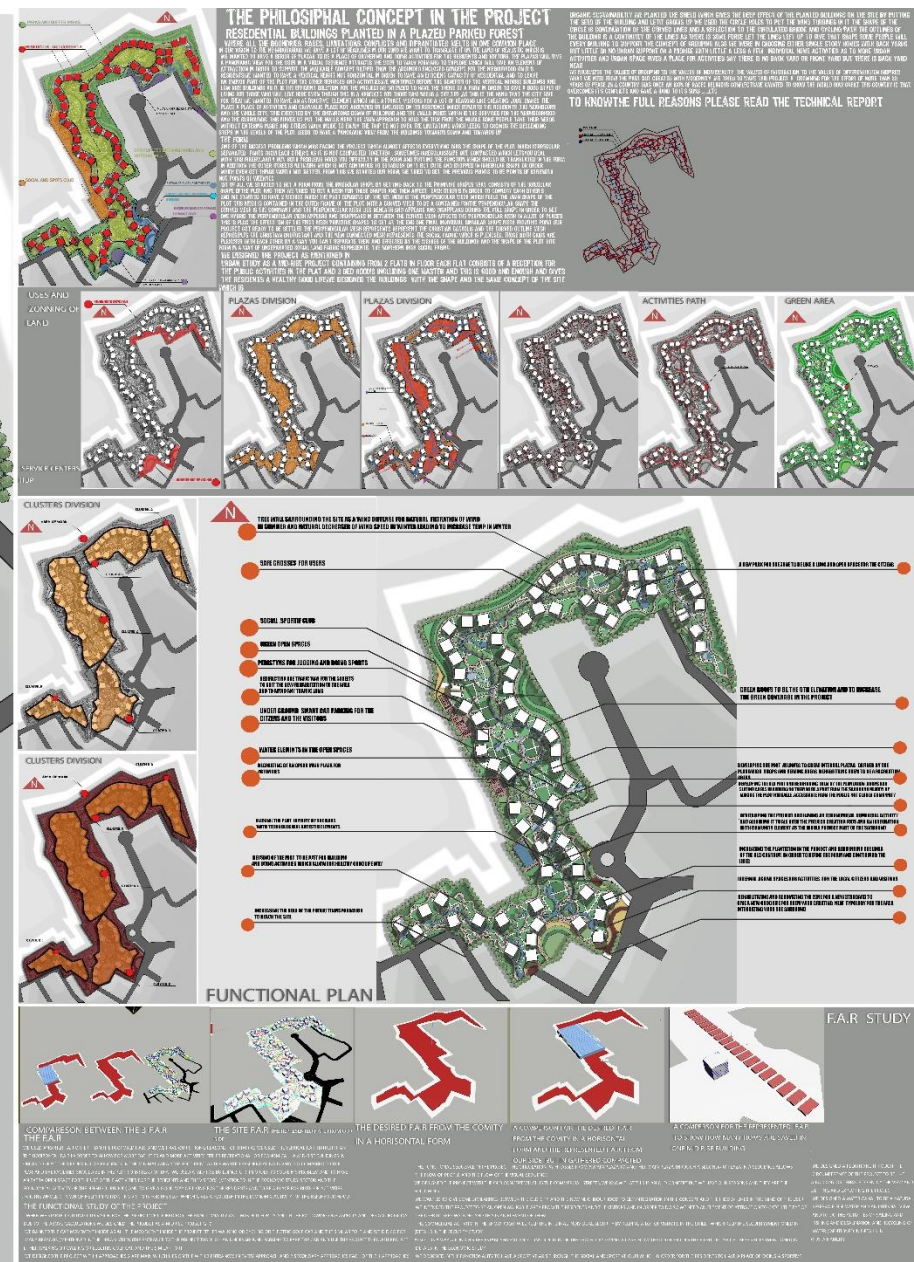
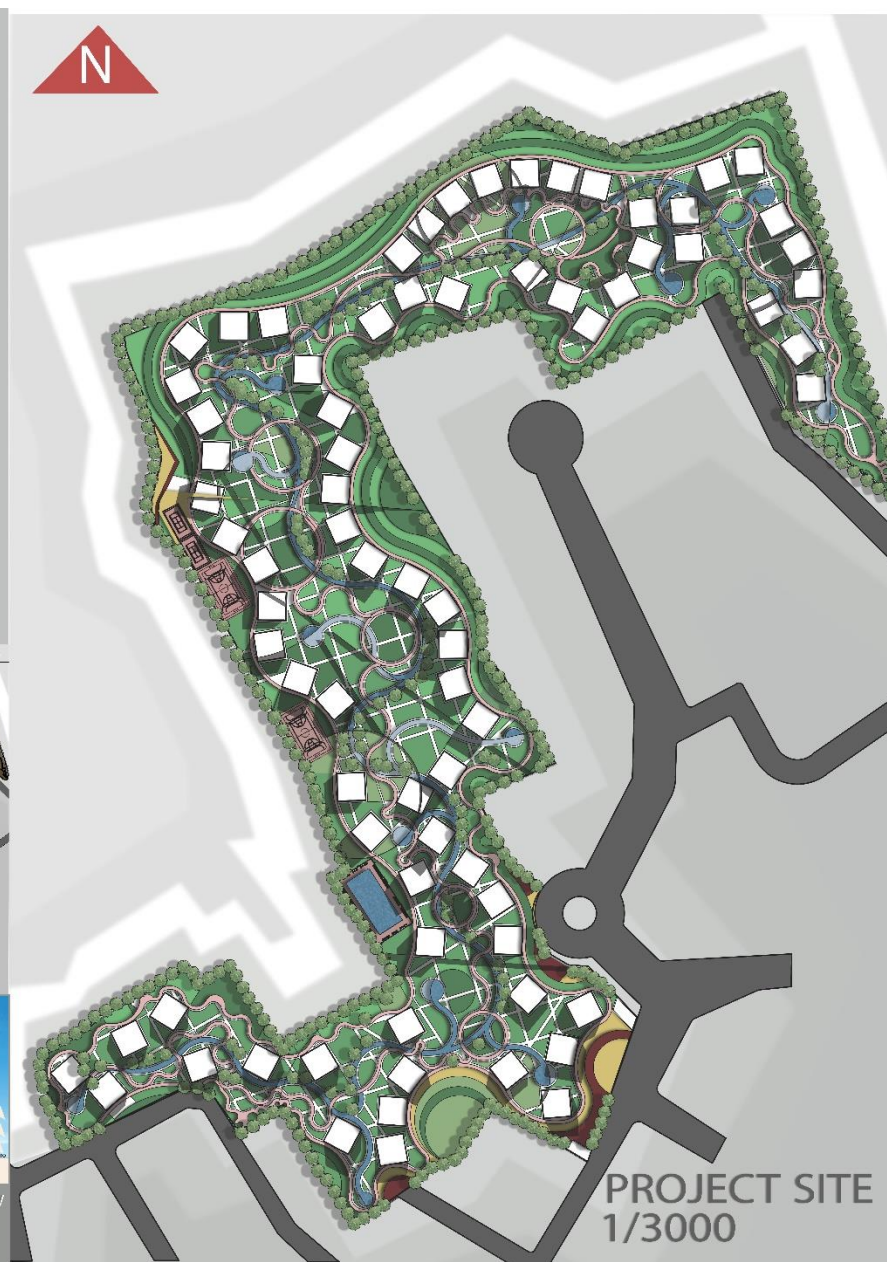
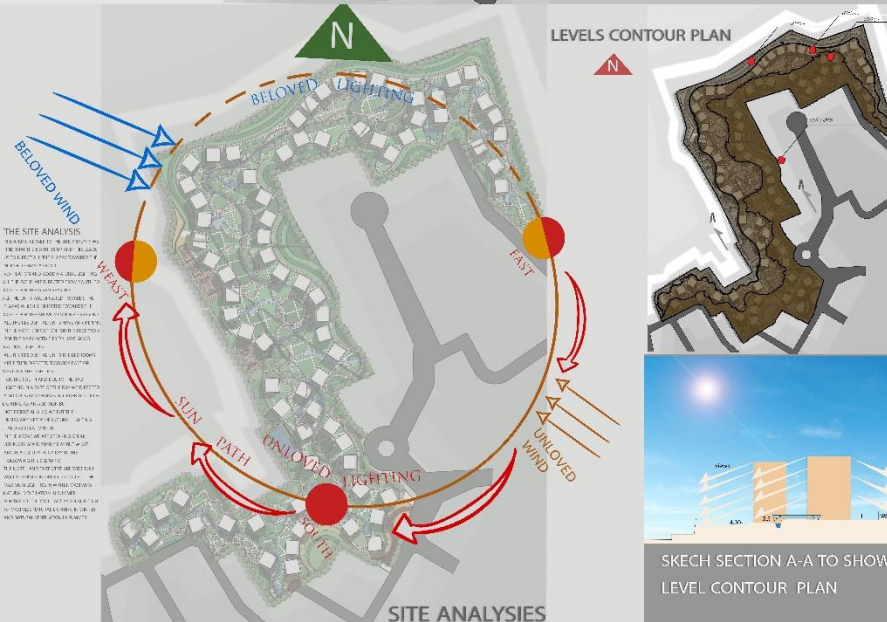
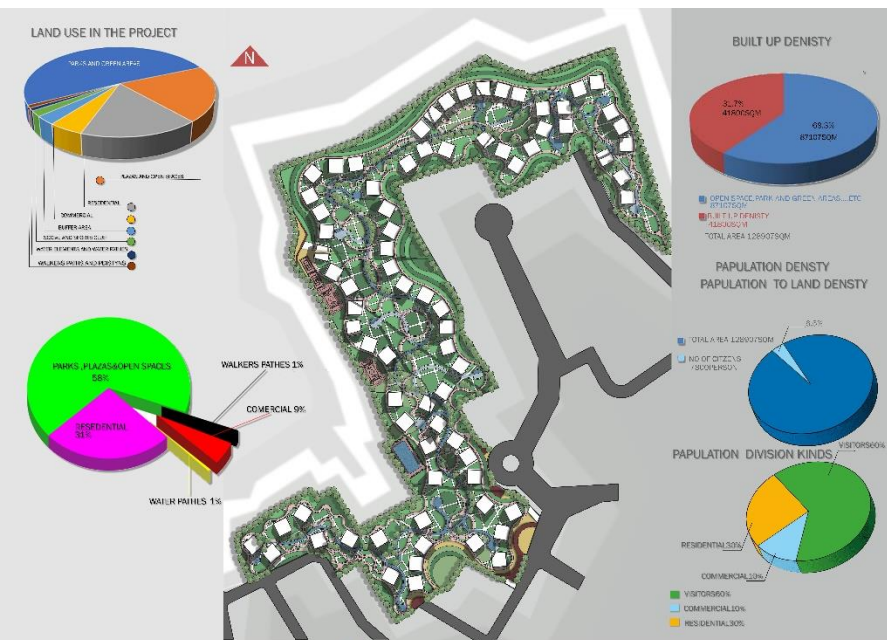
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12TH THE FULL PROJECT

BOARDS A,B,C



A

SHAPE NO.28

B

C

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THANKS ALOTE