



SIMONE DE GALE ARCHITECTS

SGA

ARCHITECT . MASTERPLAN . INTERIOR . INNOVATION

GEO BIM CONFERENCE, ROTTERDAM, NETHERLANDS, 4TH MAY 2023:

BRINGING SUSTAINABILITY INTO BUILDING AND INFRASTRUCTURE DESIGN, CONSTRUCTION & OPERATION

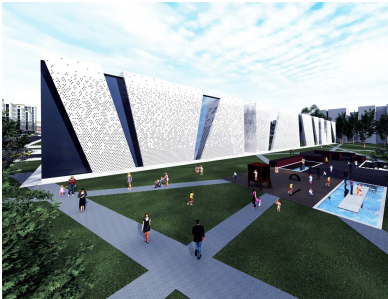
CONTENTS

- 1.0 INTRODUCTION TO SIMONE DE GALE ARCHITECTS
- 2.0 DESIGN AS 'THE SQUARE'
- 3.0 REPETITION, PATTERN, AND RHYTHM – A FOUNDATION FOR SUSTAINABLE DESIGN
- 4.0 SUMMARY – PURE GEOMETRIES

ARCHITECT | MASTERPLAN | INTERIOR | INNOVATION

THROUGH OUR WORK, WE EXPLORE CONTEMPORARY PRACTICES OF ARCHITECTURE WHILE COMBINING FUNCTIONAL SPACES AND STYLE. WE WORK FROM A SET OF THEORETICAL AND MATHEMATICAL PRINCIPLES, DEVELOPING OUR PROJECTS INTO AN EXPLORATION OF RHYTHM, PATTERN AND REPETITION OF FORM AND MATERIAL. OUR INNOVATIVE USE OF THESE CLASSICAL RULES OF ARCHITECTURE INFORM DIRECTION, DISTANCE, TIMING AND USE OF SPACE.

OUR STYLE HAS DEVELOPED OVER A NUMBER OF YEARS WITH THE MOST PROMINENT PROJECTS DEVELOPED FROM OUR THEORIES IN ARCHITECTURE AND TRANSLATING INTO A MASTERPLAN IN TBILISI, GEORGIA, ON WHICH WE ARE WORKING WITH GEORGIAN POLITICIANS AND THEIR LARGEST MANUFACTURING AND DISTRIBUTION FIRM, THE OMEGA GROUP. OUR SPHERICAL ART GALLERY CONCEPT HAS EVOLVED INTO A PATENTED MATERIALS TECHNOLOGY, WHICH IS NOW INCORPORATED INTO DEFENCE ARMOUR, WORKING WITH THE MINISTRY OF DEFENCE UK AND ALLIED FORCES.



COMMERCIAL ZONE IN TBILISI, GEORGIA



DIDI DIGHOMI MINI-CITY MASTERPLAN IN GEORGIA



LUXURY FAMILY APARTMENT IN BATUMI, GEORGIA

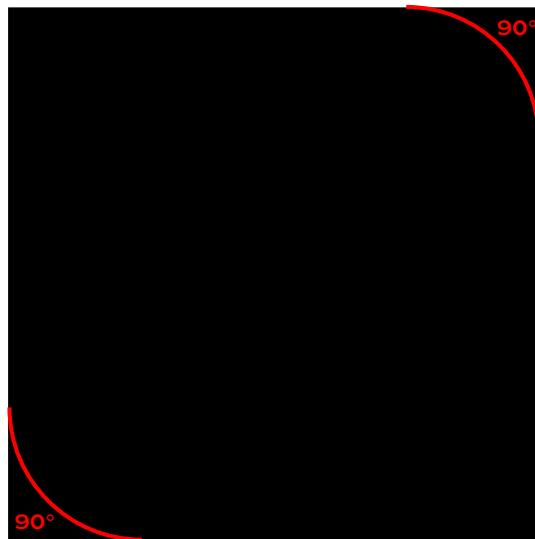


MATERIALS TECHNOLOGY WITH MINISTRY OF DEFENCE UK

THE SQUARE IS THE MOST EFFICIENT FORM TO DESIGN AND DEVELOP INTO AN ARCHITECTURAL LANGUAGE.



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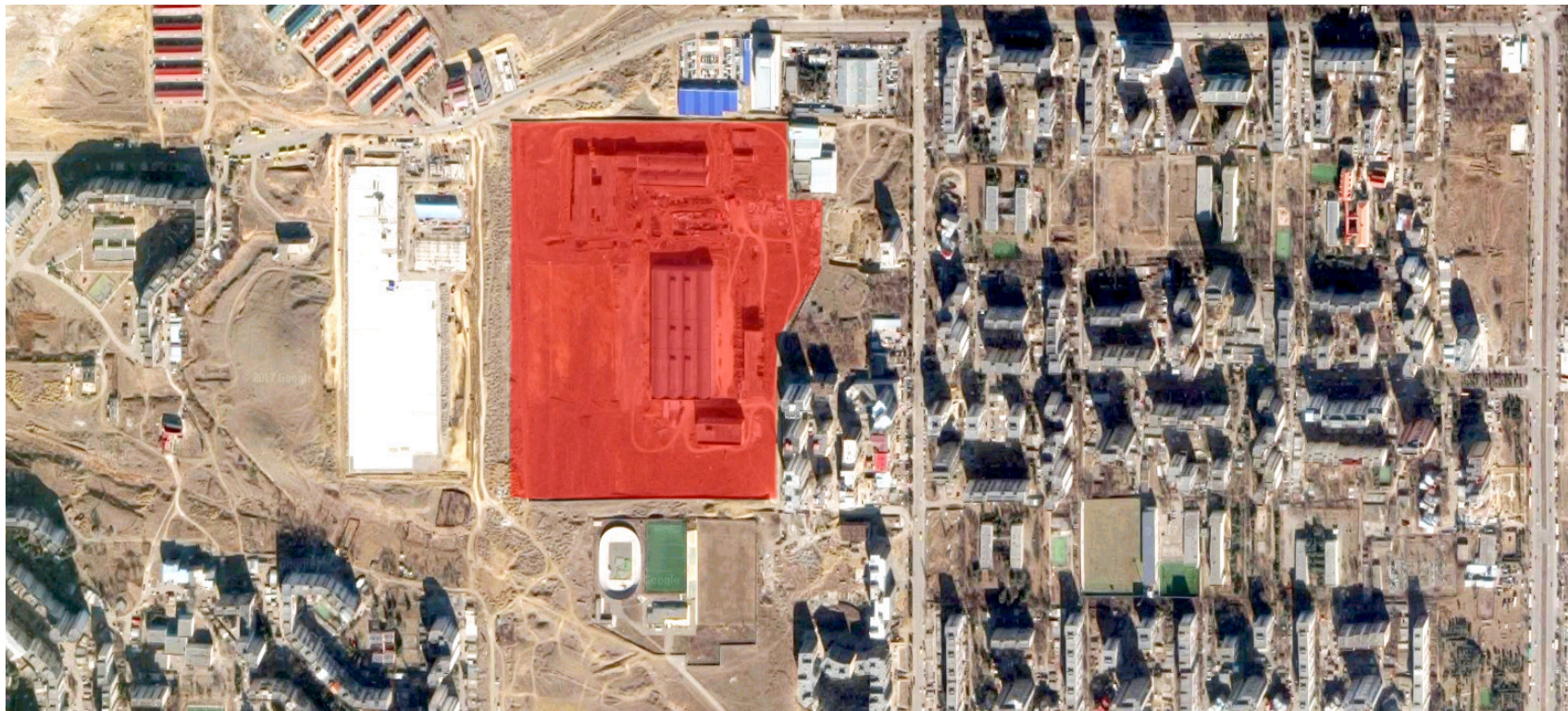


THE SQUARE IS THE MOST EFFICIENT FORM TO DESIGN AND DEVELOP INTO AN ARCHITECTURAL LANGUAGE.



100%
USEABLE
FLOOR SPACE

SITE LOCATION: DIDI DIGHOMI, TBILISI, GEORGIA
SITE FOOTPRINT: 1.7MILLION SQ.FT
BRIEF: MIXED USE DEVELOPMENT



SITE LOCATION:
SITE FOOTPRINT:
BRIEF:

DIDI DIGHOMI, TBILISI, GEORGIA
1.7 MILLION SQ. FT
MIXED USE DEVELOPMENT



PBZ1 - PLANNING REGULATIONS ALLOW EACH BUILDING TYPE TO A MAXIMUM OF 60% OF THE AREA.

REGULATION OPTIONS

K -1	0.5*/0.7	RATIO
K -2	3.5	COEFFICIENT
K -3	0.2	RATIO

RESIDENTIAL DENSITY - UNITS / HA

THE MINIMUM AREA	600/700*	M
THE MINIMUM WIDTH	15/20*	METRES
THE MINIMUM DEPTH	25/30*	METRES
BUILDING MAXIMUM HEIGHT	-	METRES

*NOTE FOR RESIDENTIAL BUILDINGS

RESIDENTIAL DEVELOPMENT

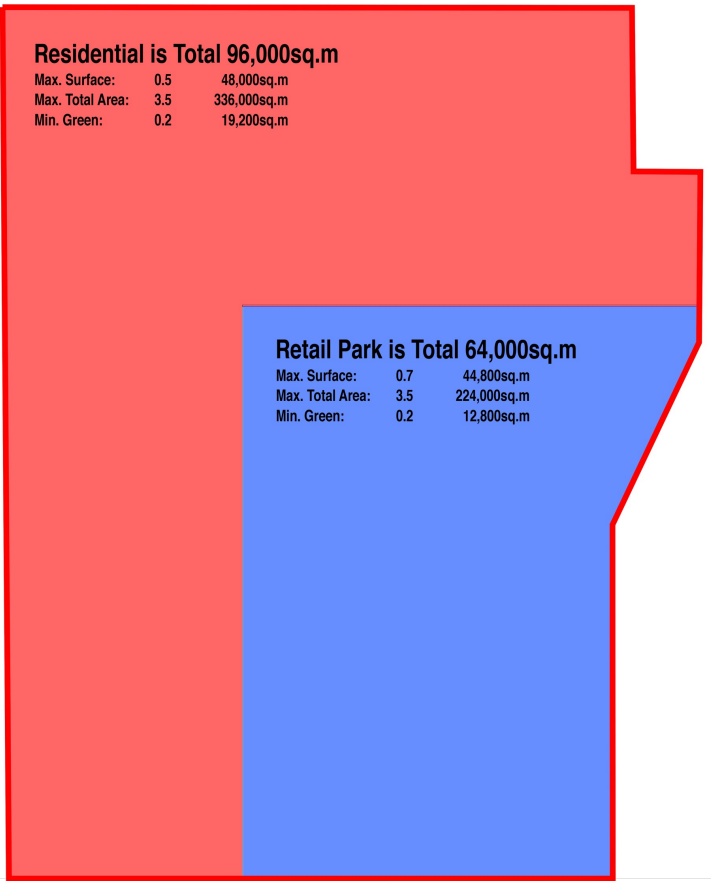
TOTAL OF 96,000SQ.M LAND PLOT = 60% OF THE SITE

MAX. SURFACE AREA:	0.5	48,000SQ.M
MAX. TOTAL AREA:	3.5	336,000SQ.M
MIN. GREEN:	0.2	19,200SQ.M

RETAIL DEVELOPMENT

TOTAL OF 64,000SQ.M LAND PLOT = 40% OF THE SITE

MAX. SURFACE AREA:	0.7	44,800SQ.M
MAX. TOTAL AREA:	3.5	224,000SQ.M
MIN. GREEN:	0.2	12,800SQ.M



TOTAL OF 96,000SQ.M LAND PLOT

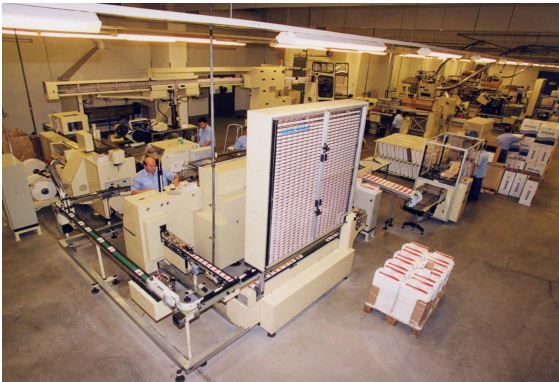
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THE CLIENT’S COMPANY ETHOS, STYLE AND APPROACH TOWARDS MANUFACTURING, WE HAVE SEEN A CONSISTENT PATTERN OF EXCELLENCE, IN THE FORM OF REGULAR, REPETITION, CLEAN, PRECISION PATTERNS; THESE ARE ALL ELEMENTS OF THE CLIENT BRAND. WE DECIDED TO RESEARCH HOW THEIR BRAND RELATED TO ARCHITECTURE TO CREATE A CONCEPT WHICH WOULD TRULY REFLECT THE COMPANY.



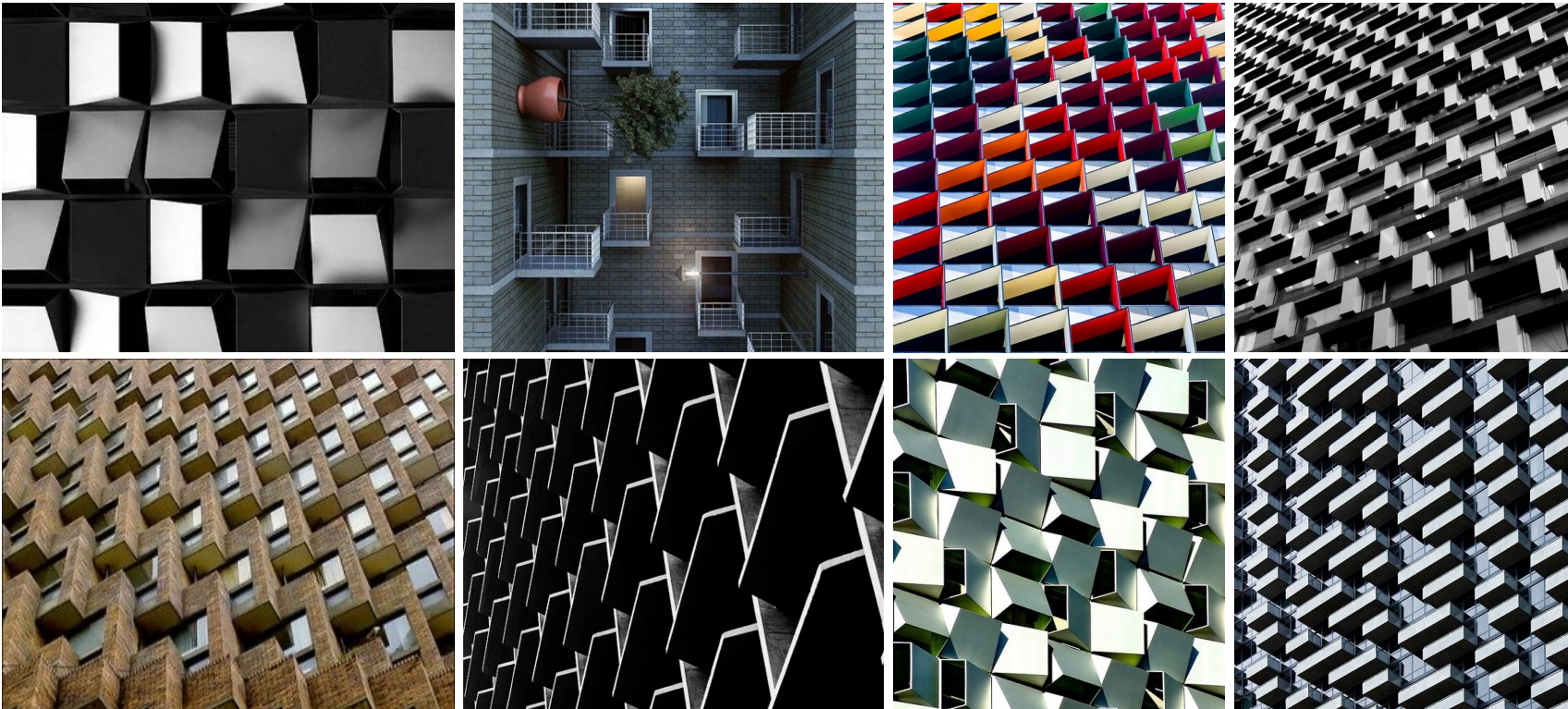
WE LOOKED AT GEORGIAN ARTIST ALEXANDER BERDYSHEFF, AND HIS ABSTRACT WORK ENGAGING CONNOTATIONS OF SURREALISM. HIS ABSTRACT STYLE AT TIMES REFLECTS ASPECTS OF REGULAR UNIFORM COMPOSITION, AND REPETITION OF IMAGE. HIS STYLE INFORMED THE CONCEPT AND PROVIDED A REFERENCE FOR FUTURE CONSIDERATION IN THE DESIGN.



WE LOOKED AT GEORGIAN TRADITIONS AND IN PARTICULAR, PATTERNS IN JEWELLERY, WHERE AGAIN, WE WERE ENLIGHTENED TO THE REGULARITY AND REPETITION OF DESIGNS, INTRICATE DETAILS AND OVERALL BEAUTY WHICH COULD BE ACCOMPLISHED BY TIRELESSLY REPEAT A SINGULAR PATTERN, TO CREATE A WHOLE, AND HOW THIS COULD BE EMPLOYED INTO THE ARCHITECTURAL APPROACH.



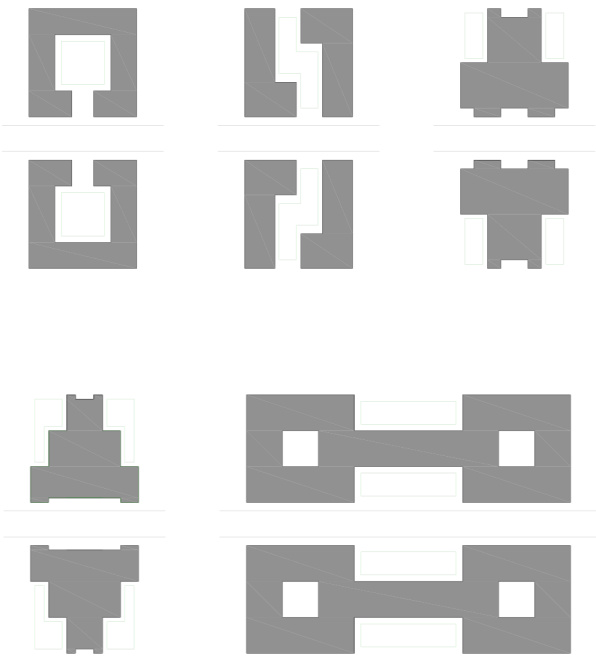
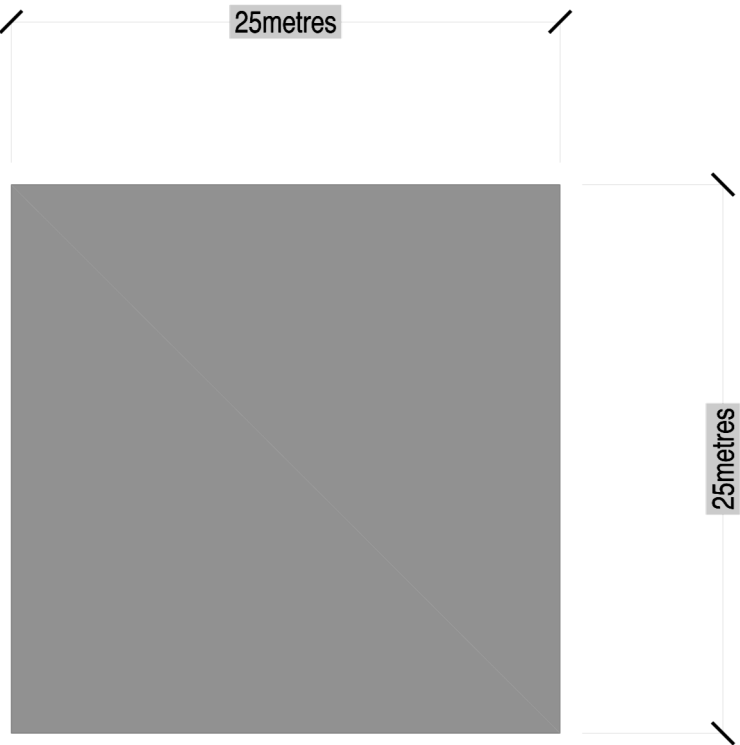
WE TOOK THE INSPIRATION OF THE CLIENT BRAND, CONTEMPORARY AND TRADITIONAL GEORGIAN EXPRESSIONS, AND STARTED TO SEARCH FOR ARCHITECTURAL RULES WHICH WOULD EMBODY THESE SAME CHARACTERISTICS. WE FOUND THAT THE CLASSICAL ARCHITECTURAL RULES OF REPETITION, RHYTHM AND PATTERN, WAS MOST APPROPRIATE TO INCORPORATE INTO THE CONCEPT.



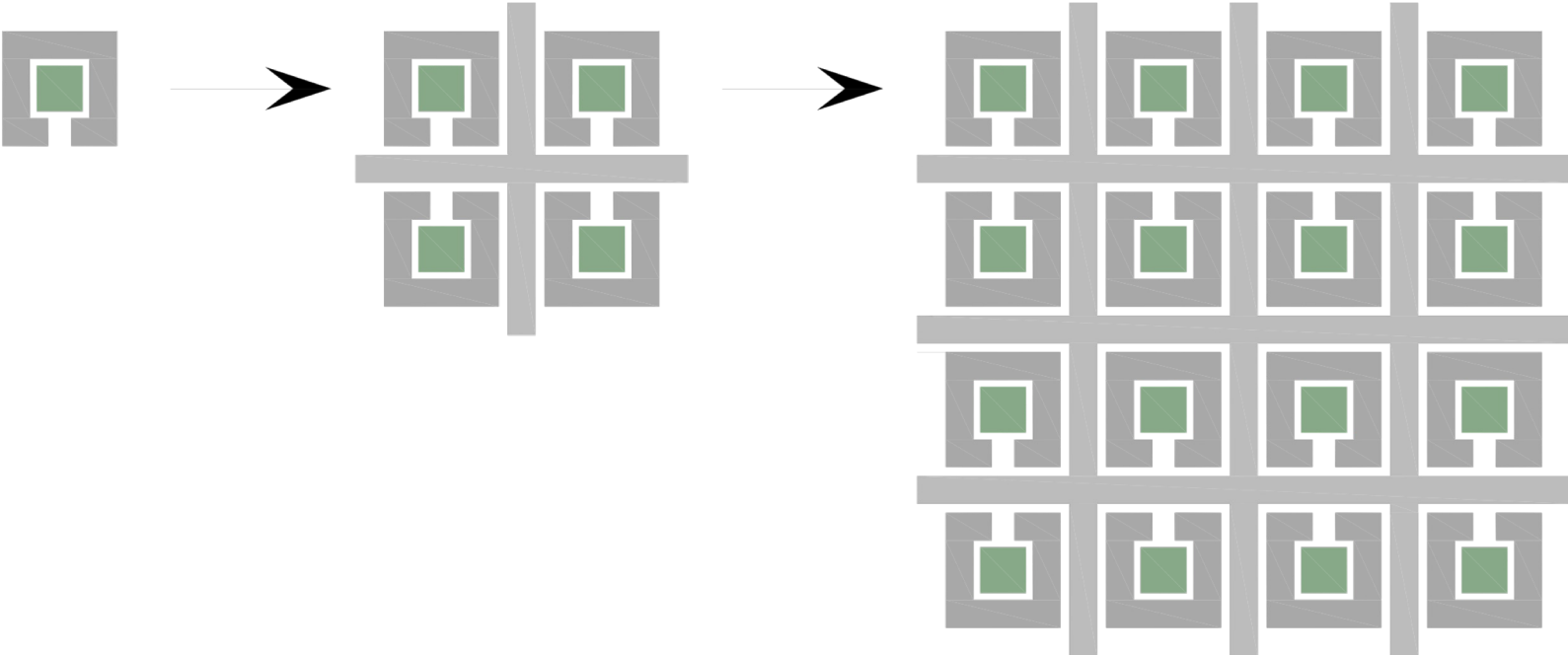
WE FOUND INSPIRATION IN THE DESIGNS OF SUCCESSFUL CITY MASTERPLANS ACROSS THE WORLD; THE GRIDS OF BARCELONA, NEW YORK AND SAN FRANCISCO.



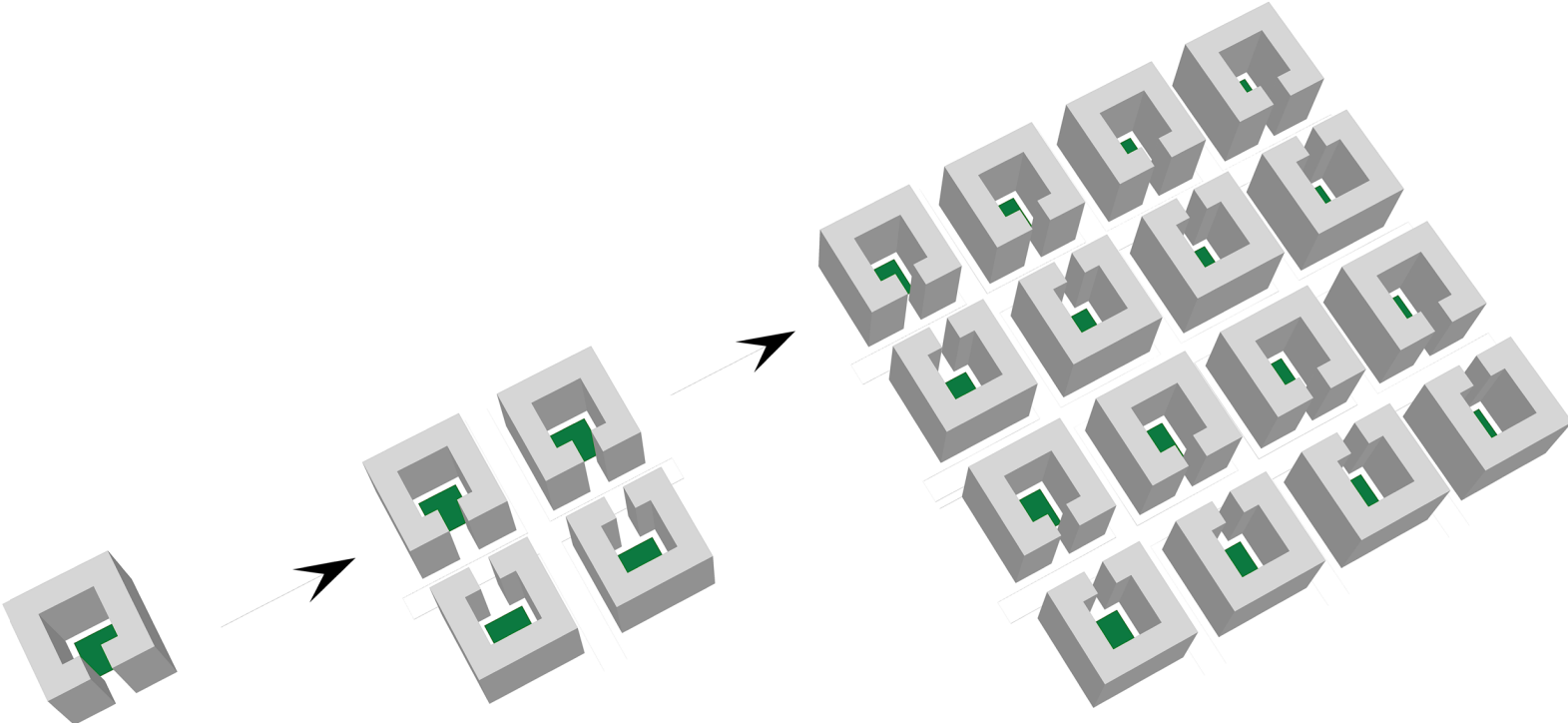
HOW COULD WE APPLY THIS METHOD OF THINKING TO THE SITE? WE DECIDED TO TAKE A SIMPLE SQUARE GRID OF 25M X 25M AS OUR STARTING POINT AND EXPLORE DIFFERENT SHAPES AROUND THIS CONSTRAINT. THE DIFFERENT SHAPES WOULD LEAD TO A REPEATABLE FORM, IDEAL AS A RESIDENTIAL BLOCK, WHICH WOULD MAXIMIZE LIGHT TO SPACES, QUALITY OF SPACE, AND BUILDABILITY.



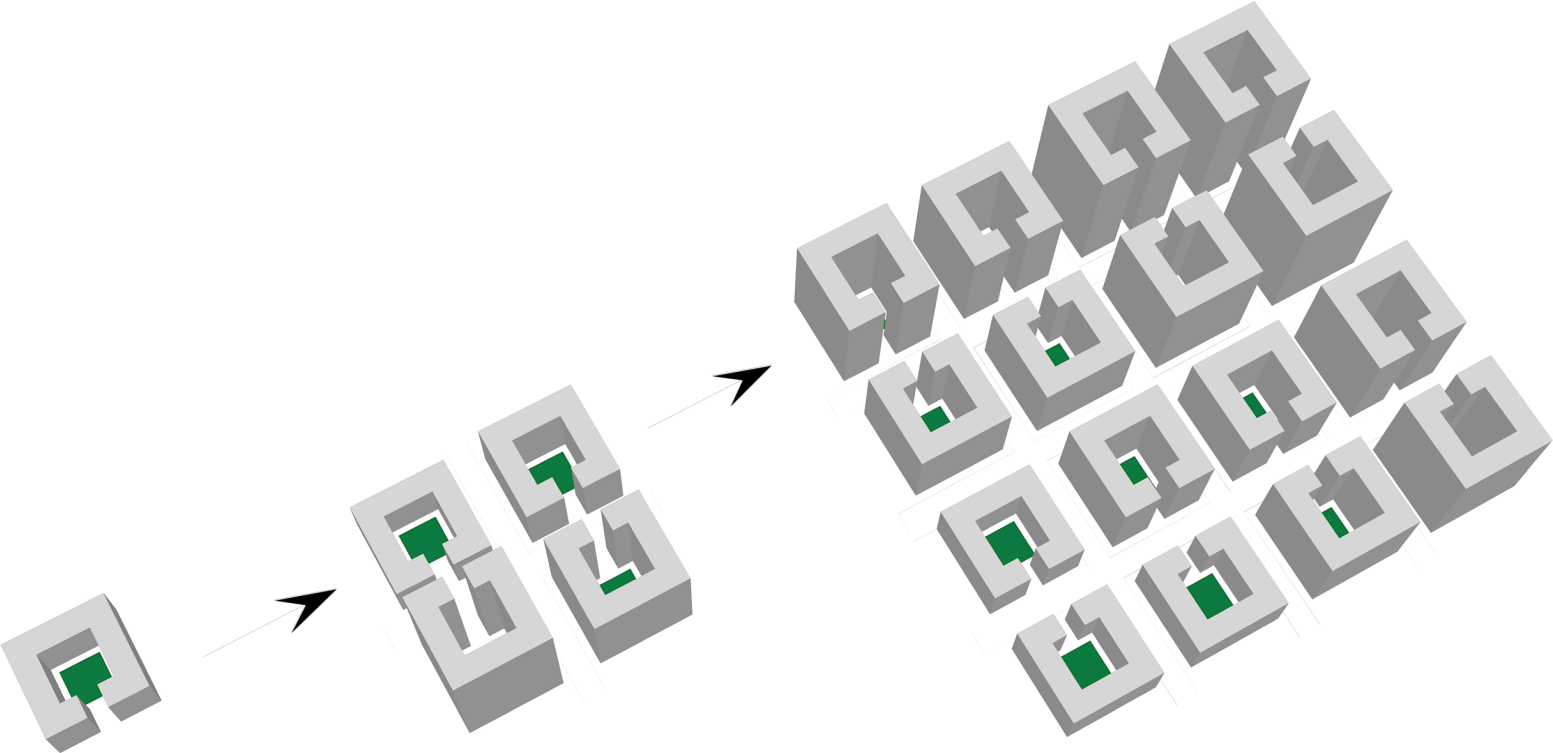
WE THEN LOOKED AT HOW TO MULTIPLY THE BUILDING BLOCK, TO CREATE A REPETITION OF SPACE IN THE FORM OF RESIDENTIAL BUILDING, COURTYARD SPACE, ROAD, AND PAVEMENT, A MULTIPLICATION WHICH COULD BE REPEATED ACROSS THE SITE IN AN ELEGANT AND PRECISE MANNER, REFLECTING THE GEORGIAN INSPIRATION, AND THE GRACEFUL EXCELLENCE OF THE CLIENT STYLE WHICH WE WITNESSED ON VISITING THEIR FACTORIES AND MANUFACTURING DIVISIONS.



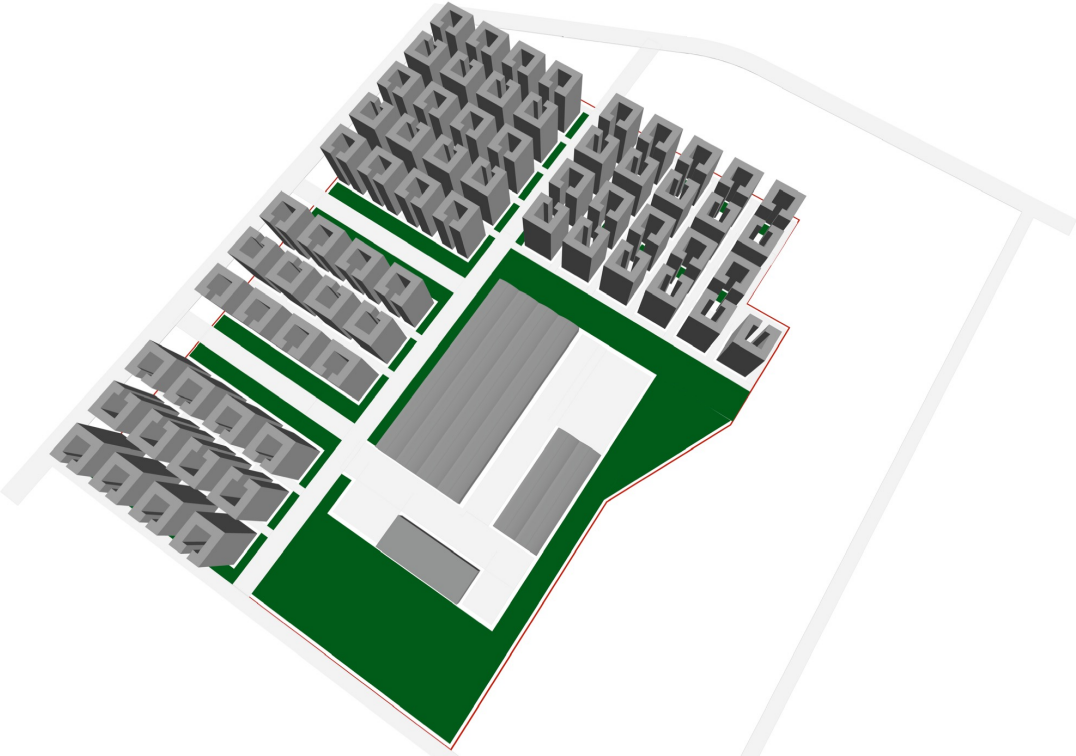
AFTER MULTIPLYING THE BUILDING BLOCKS, THE TASK WAS TO LOOK AT BUILDING HEIGHTS. THIS COULD BE DONE UNIFORMLY, WHICH WOULD STRENGTHEN THE IMPRESSION OF THE OVERALL MASTERPLAN.



OR THE BUILDING BLOCKS COULD VARY IN HEIGHT, TO ENABLE A VARIATION OF THE VIEW TO AND FROM SELECTED BUILDINGS WITHIN THE VICINITY, AND ADDING AN ADDITIONAL INTRICATE FACTOR TO THE CREATION OF THESE RESIDENTIAL FACILITIES, ELEGANTLY THOUGHT THROUGH AND CALCULATED TO MAXIMIZE VIEWS AND CREATE A FURTHER ARTISTIC DETAIL OF THE RESIDENTIAL TECTONIC OF SPACE.

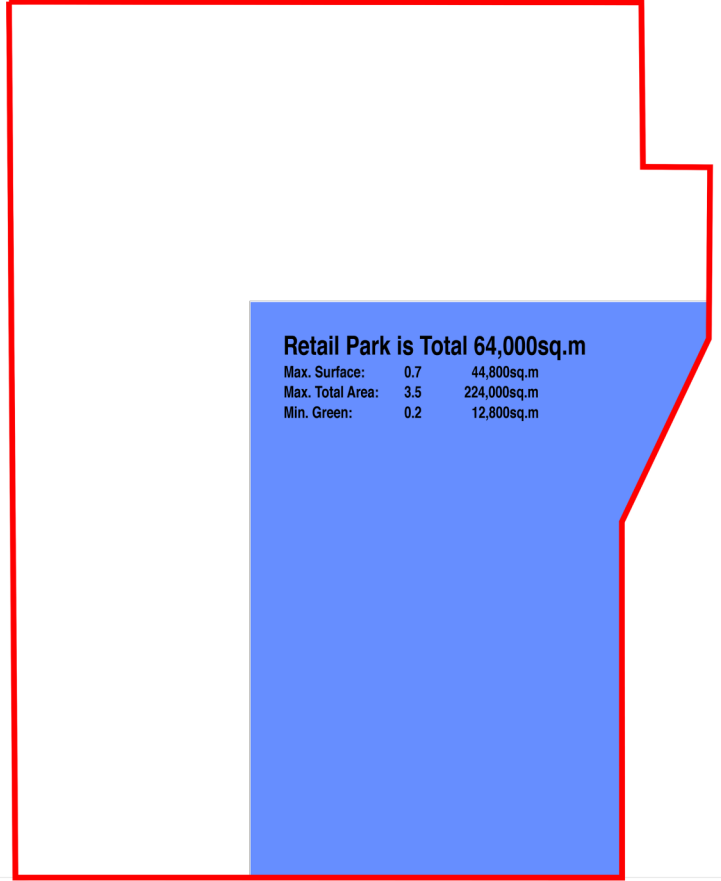


WE MULTIPLIED THE BUILDING BLOCKS AND CREATE A UNIFORM HEIGHT ACROSS THE RESIDENTIAL SPACE, CREATING STRENGTH THROUGH REPETITION OF SPACE, UNIFORMITY IN HEIGHT, EMBODYING GRACE AND ELEGANCE, WITH DISCREET AND INTRICATELY PLACED VARIATIONS IN THE PATTERNS OF THE RESIDENTIAL BLOCKS.



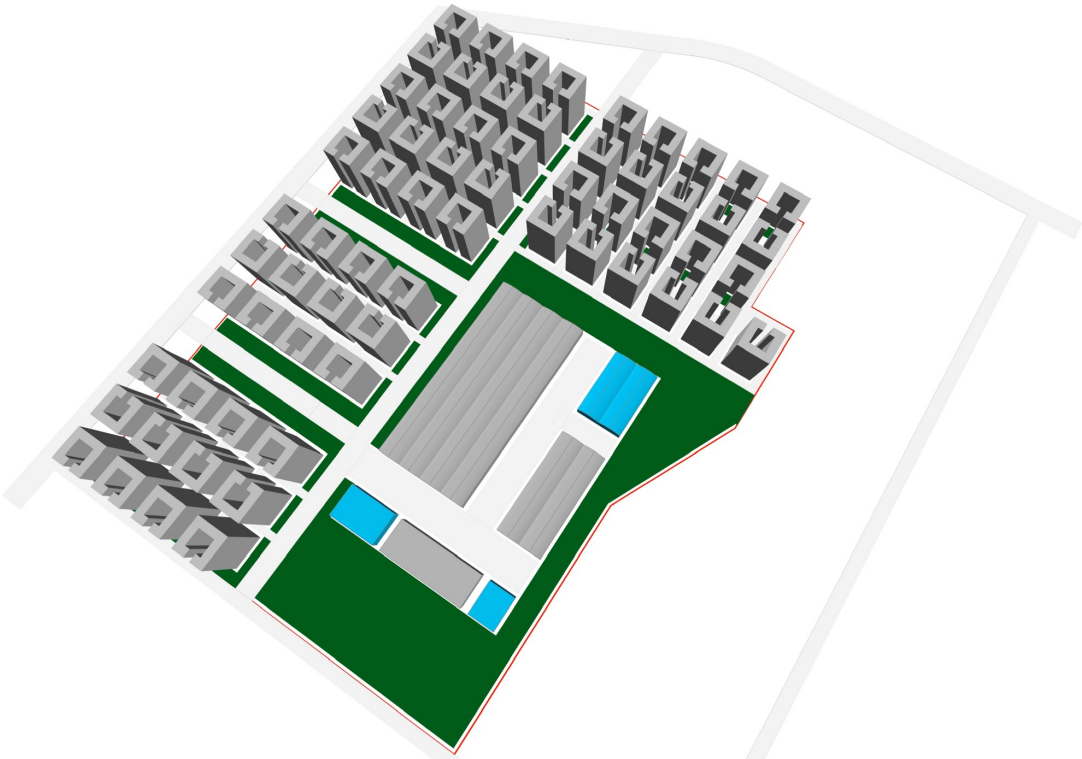
TOTAL OF 64,000SQ.M LAND PLOT 40% OF THE SITE

MAX. SURFACE AREA:	0.7	44,800SQ.M
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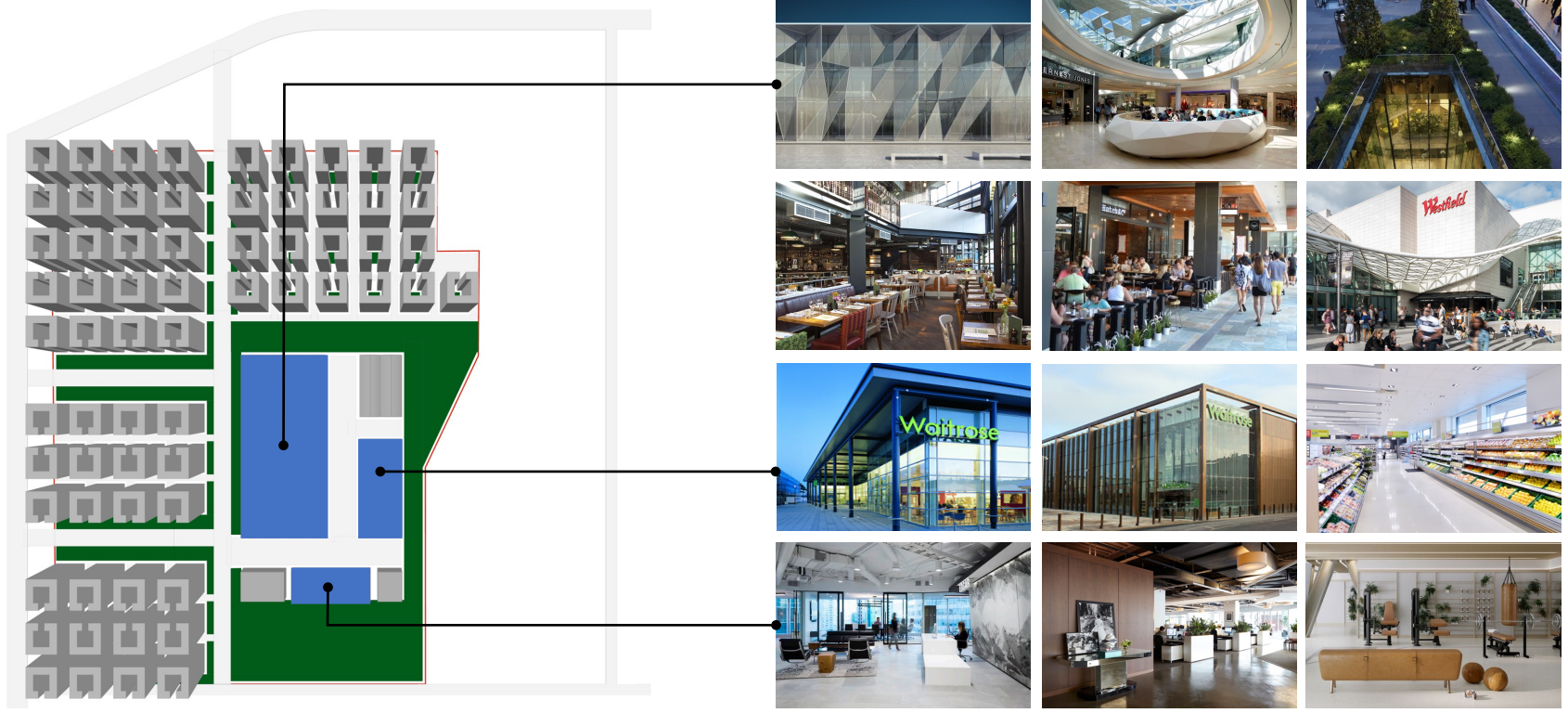


Retail Park is Total 64,000sq.m
Max. Surface: 0.7 44,800sq.m
Max. Total Area: 3.5 224,000sq.m
Min. Green: 0.2 12,800sq.m

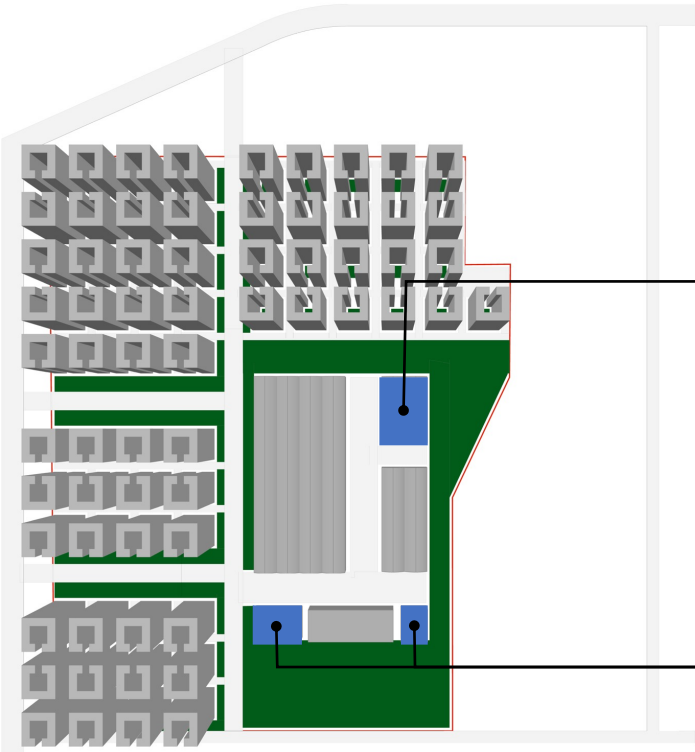
WE PROPOSED THREE NEW BUILDINGS WHICH WILL FORM A MASTERPLAN THAT TIES TOGETHER THE SITE BASED ON THE CONCEPT, A BEAUTIFUL RECTANGLE ON THE PLAN, ENFORCING STRENGTH IN THE PATTERN, ENHANCING THE STYLE, AND CREATING ADDITIONAL FACILITIES AND SPACE WITHIN THE SITE ENVELOPE.



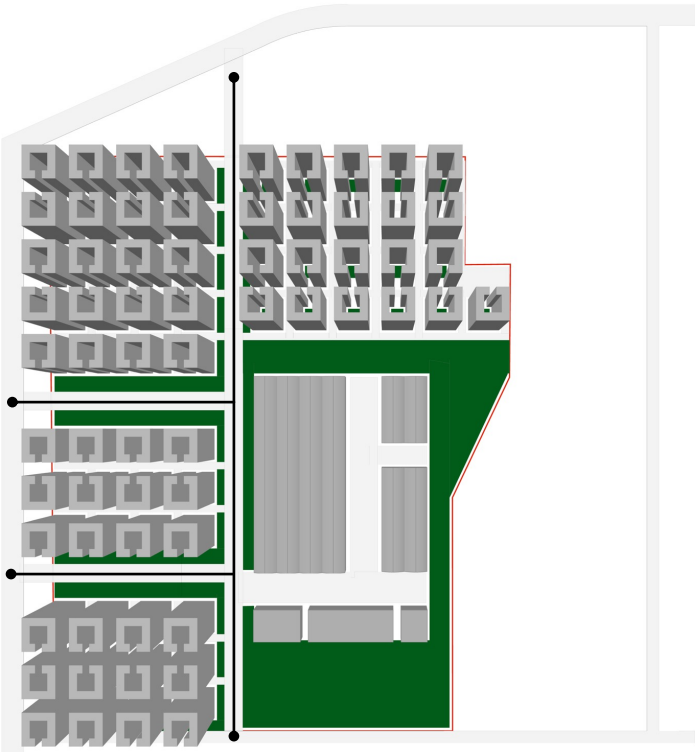
THE RETAIL ZONE WOULD BECOME A PLACE TO STAY ALL DAY. PEOPLE WILL TRAVEL FROM NEAR AND FAR TO SHOP HERE, SPEND TIME HERE, AND CREATE MEMORIES WITH LOVED ONES. THE COMPLEX WOULD PROVIDE A BEAUTIFUL MEMORABLE FAÇADE, INTERIOR RETAILERS THAT ARE SECOND TO NONE, LARGE GREEN PARK AREAS, AND A PLACE FOR PEOPLE TO WORK, AND GET FIT.



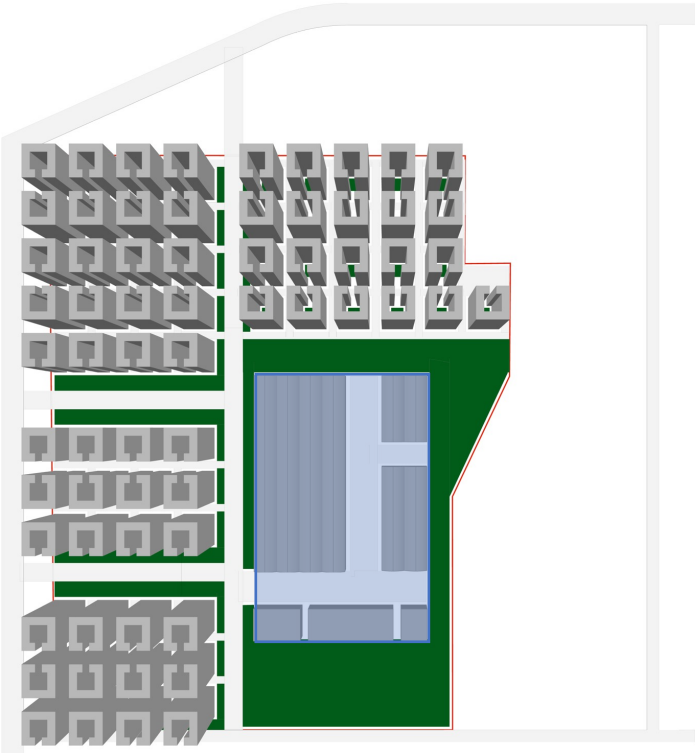
IN ADDITION, LEISURE TIME WOULD EXTEND INTO THE NIGHT, WITH LEISURE ACTIVITIES, WITH WELL-PLANNED LOGISTIC AND ANCILLARY FACILITIES. THE COMPLEX WOULD BE A PLACE WHERE PEOPLE COME TO SPEND THEIR MONEY, AND IMPROVE THEIR LIFESTYLE. PEOPLE WOULD SPEND ALL THEIR TIME HERE.



WE PROPOSING FOUR NEW LARGE CARRIAGEWAYS TO THE COMPLEX FROM BOTH THE NORTH AND SOUTH, AND THE WEST. THE ACCESS WILL SERVE WELL FOR LOGISTICS, CUSTOMER TRAVEL BY BOTH CAR AND PUBLIC TRANSPORT TO BOTH THE RESIDENTIAL AND RETAIL AREAS OF THE SITE. INTRICATE TWO WAY LANES ARE PROPOSED WITHIN THE RESIDENTIAL PARTS OF THE SITE, WITH ABILITY TO PARK ON ROAD.



A LARGE UNDERGROUND PARKING FACILITY IS PROPOSED UNDER THE RETAIL ZONE, WHEREBY CUSTOMERS COULD PARK, WITHOUT IMPOSING ONTO THE EXTERNAL SITE AREAS, WHICH COULD THEN RETAIN FOR LANDSCAPING AND PUBLIC REALM.



OUR CLIENT REQUESTED MORE OPEN GREEN SPACES IN THE RESIDENTIAL ZONES.



OUR CLIENT REQUESTED RETAIL AND COMMERCIAL SPACES UNITS ON THE GROUND FLOOR OF THE RESIDENTIAL ZONES.



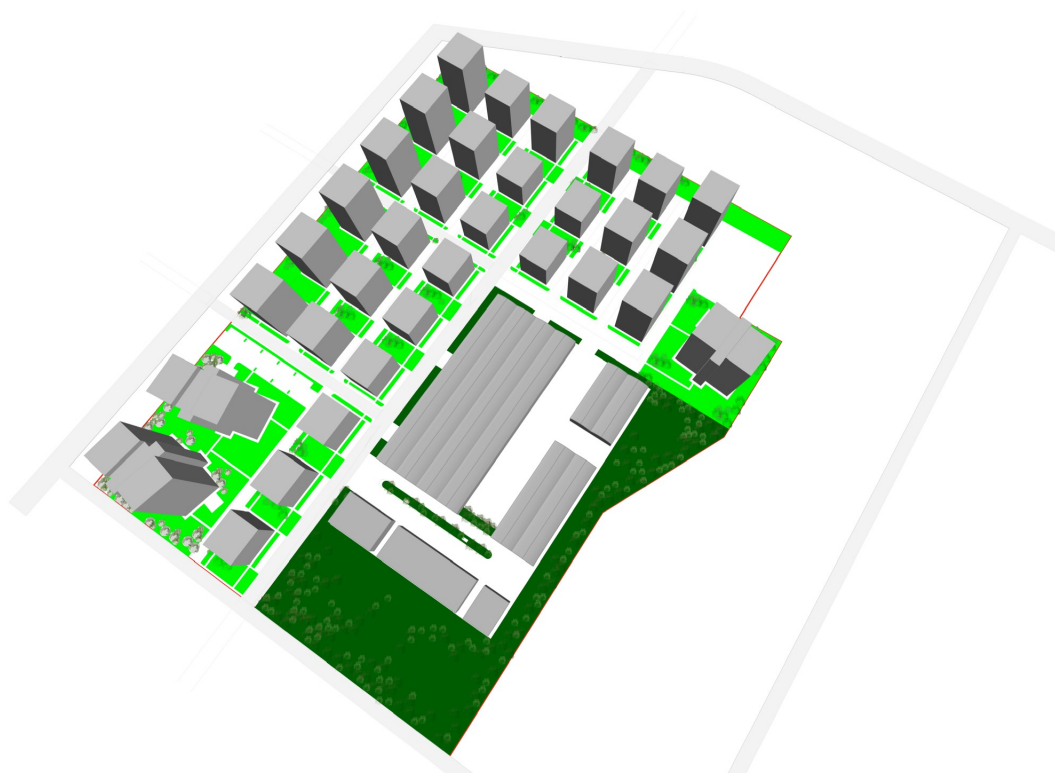
GEORGIAN PLANNING CONSULTANTS DID NOT AGREE WITH THE UNIFORMITY OF HEIGHT AND REQUESTED DIFFERENT HEIGHTS AND COMBINATIONS THROUGHOUT THE RESIDENTIAL ZONES. THEY ALSO DID NOT AGREE WITH THE BUILDING BLOCK SHAPES, AND THEREFORE WE CHANGED THE FORM.



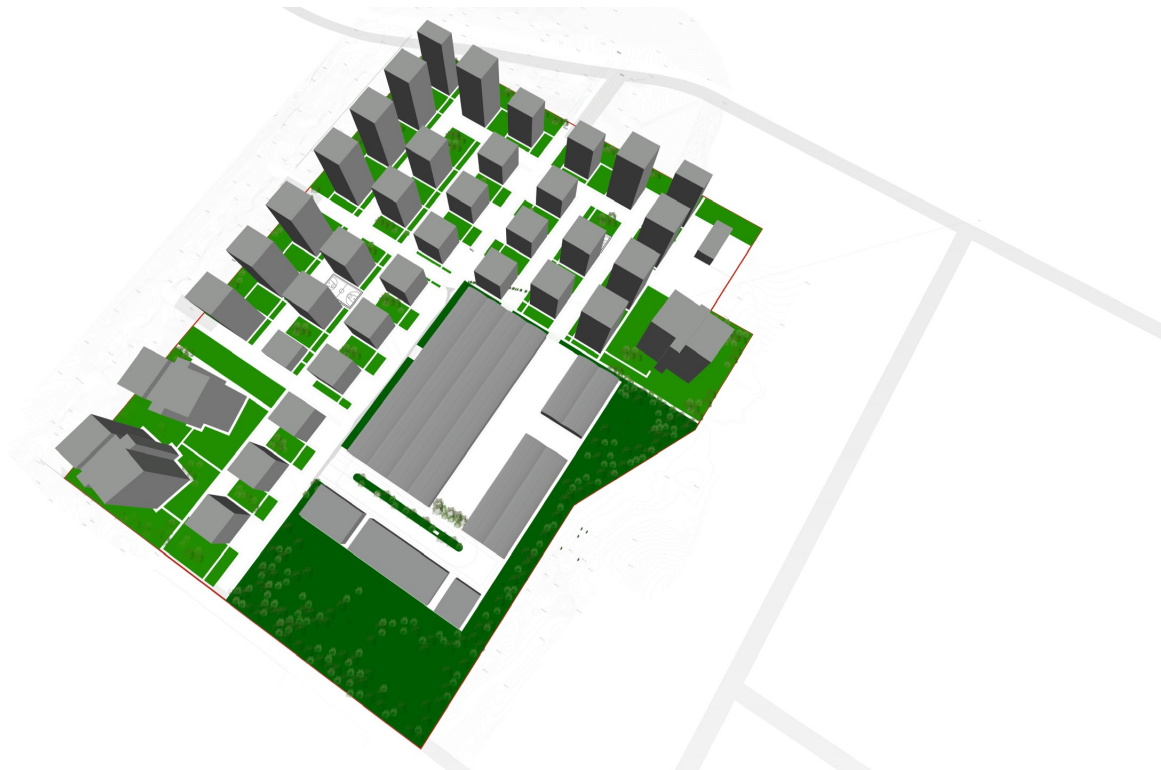
WE FOUND A DESIGN WHICH WAS REPRESENTATIVE OF TIMELESS ELEGANCE OVER THE MASTERPLAN AND HAD THE FLUIDITY AND DIVERSITY OF SPACE AND USES REQUIRED BY OUR CLIENT, GEORGIAN PLANNING CONSULTANTS, AND OURSELVES. WE WORKED UP THIS DESIGN FOR A WHILE.



THE DESIGN WAS PRESENTED TO GOVERNMENT OFFICIALS AND THEY AGREED TECHNICALITIES OF PLANNING LEGISLATION WERE NOT CONFORMED AND DEMANDED MORE DISTANCE BETWEEN BUILDINGS. WE WERE KEEN TO KEEP THE STYLE, AND RESIDENTIAL TOTAL AREA AT 330,000SQ.M SO WE REDUCED THE WIDTHS OF THE BUILDINGS, INCREASED THE DISTANCES AND INCREASED THE HEIGHTS.



THE FINAL DESIGN. WE HAVE RETAINED THE OVERALL CONCEPT OF THE CLASSICAL ARCHITECTURAL RULES OF REPETITION, PATTERN AND RHYTHM WHICH REFLECTS OUR CLIENT BRAND TO THE FINAL DESIGN. WE HAVE WORKED WITH THE REQUIRED PARTIES TO ADD ELEGANCE, FLUIDITY, DIVERSITY OF USE, AND SPACE, TO CREATE WHAT IS CURRENTLY CONSIDERED A BEAUTIFUL MASTERPLAN WHICH WORKS WELL AND COMPLIES WITH PLANNING LEGISLATION. WE ARE FINALISING THE DESIGN, IN LINE WITH OUR ASPIRATIONS AND OFFICIAL RECOMMENDATIONS, AND WE HAVE NOW SUBMITTED FOR GOVERNMENT APPROVAL.

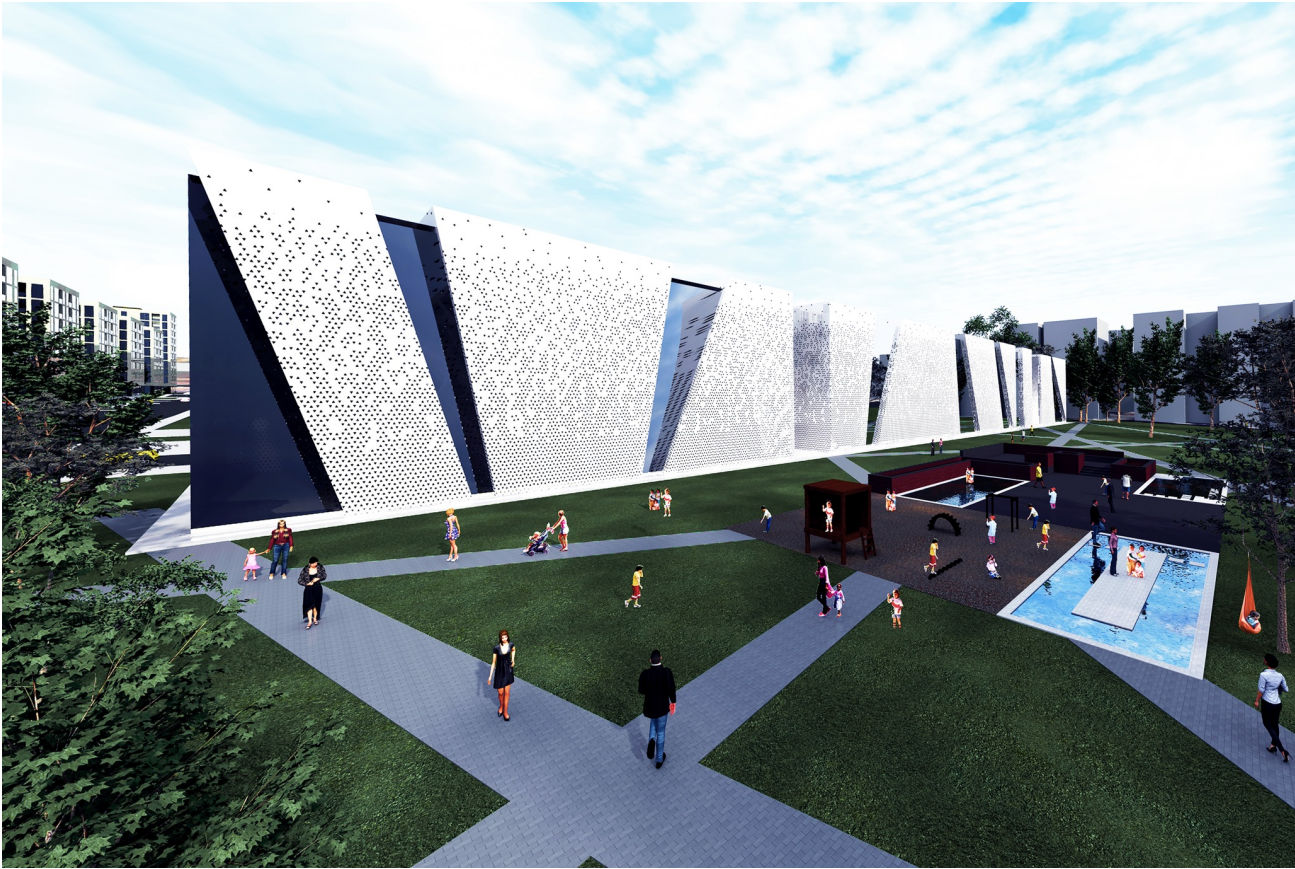


TOTAL LAND PLOT AREA	1,715,450sq.FT
RESIDENTIAL	3,156,300
RETAIL WITHIN RESIDENTIAL BLOCK	161,200
EDUCATION	31,775
TOTAL RESIDENTIAL AREAS	3,349,275sq.FT
RETAIL	372,000
ENTERTAINMENT	41,180
OFFICE (COMMERCIAL)	73,800
TOTAL RETAIL AREA	486,980sq.FT
GREEN SPACE WITHIN RESIDENTIAL	438,050
GREEN SPACE WITHIN RETAIL	93,250
PUBLIC PARK	135,905
TOTAL GREEN AREAS	667,205sq.FT
CAR PARKING FOR RESIDENTIAL	1,994 No.
CAR PARKING FOR RETAIL	567 No.
TOTAL CAR PARKING	2,561 SPACES
TOTAL BASEMENTS	792,180sq.FT
TOTAL INFRASTRUCTURE	360,805sq.FT
<u>TOTAL REDEVELOPMENT</u>	<u>5,656,445sq.FT</u>





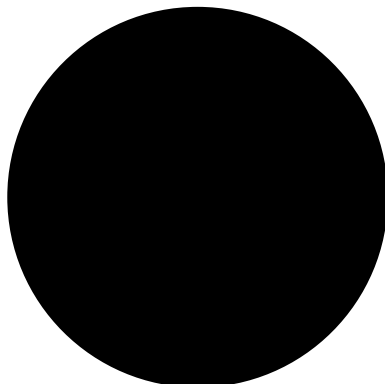




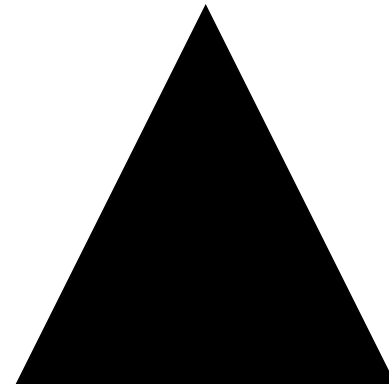




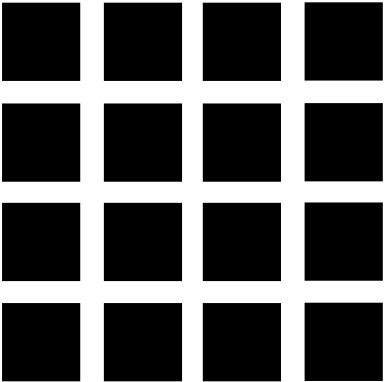
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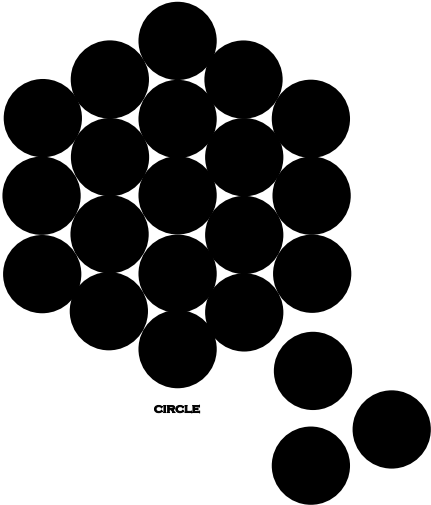
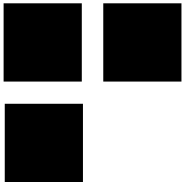
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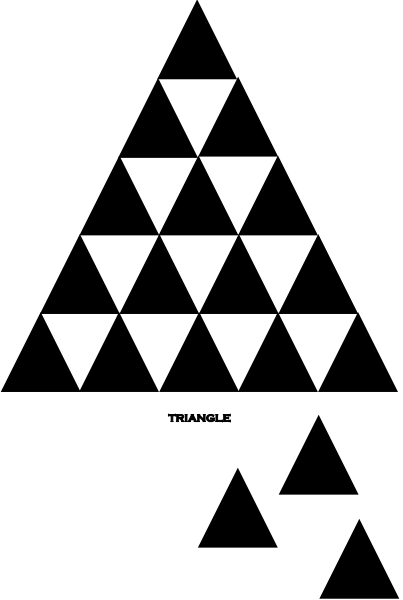
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SQUARE



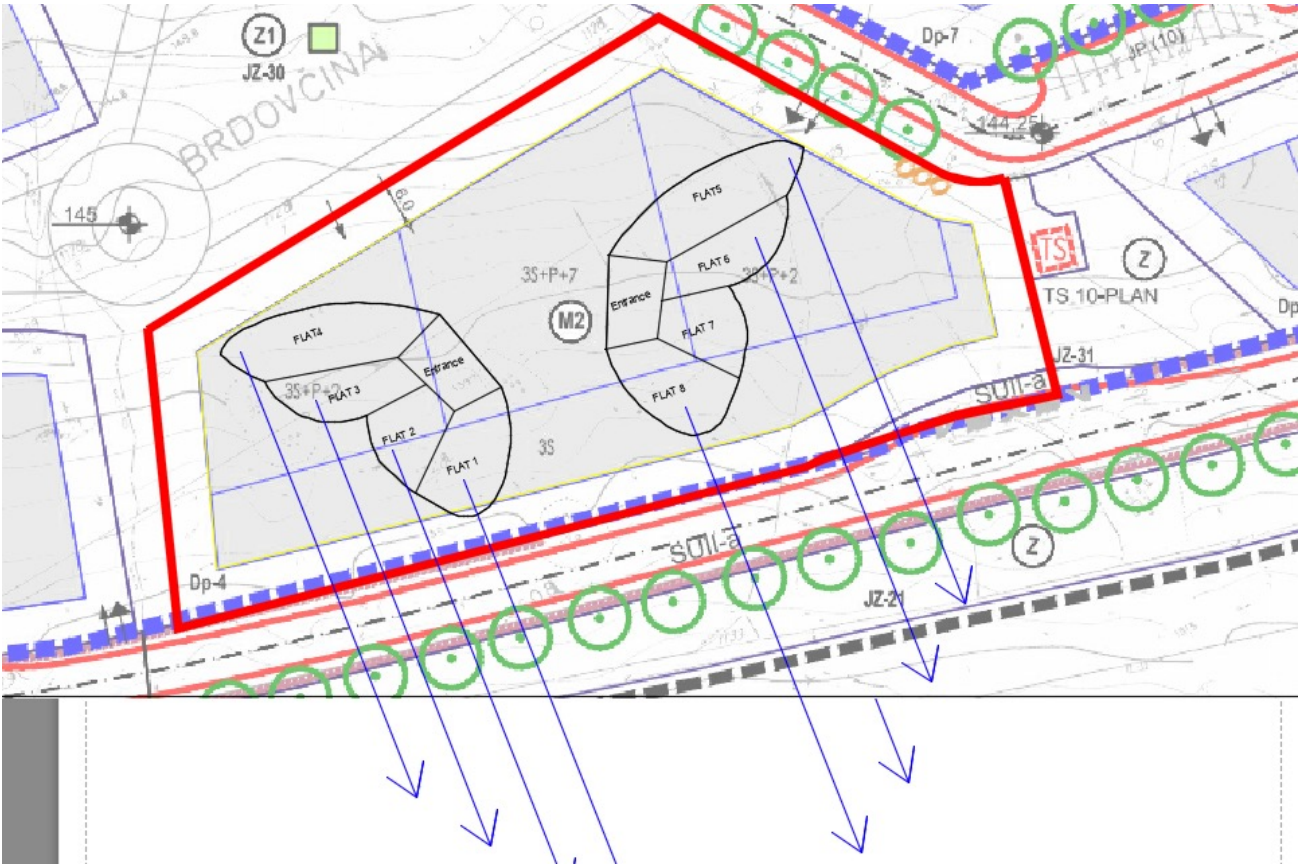
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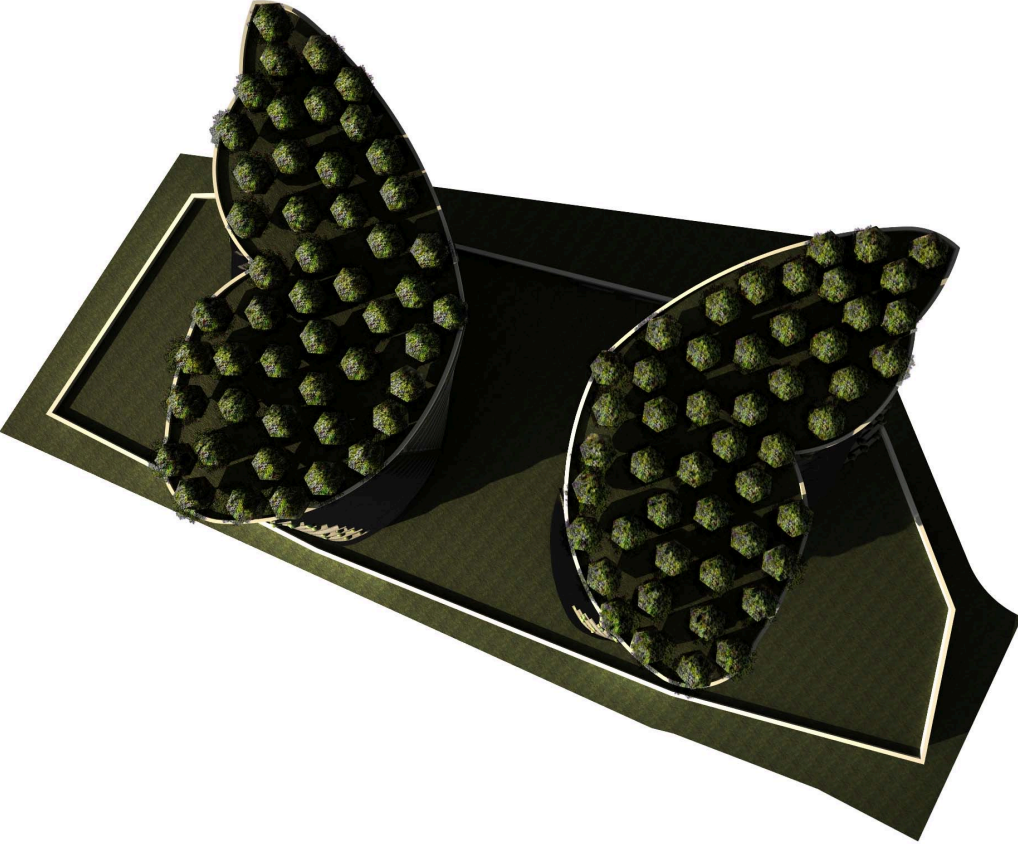


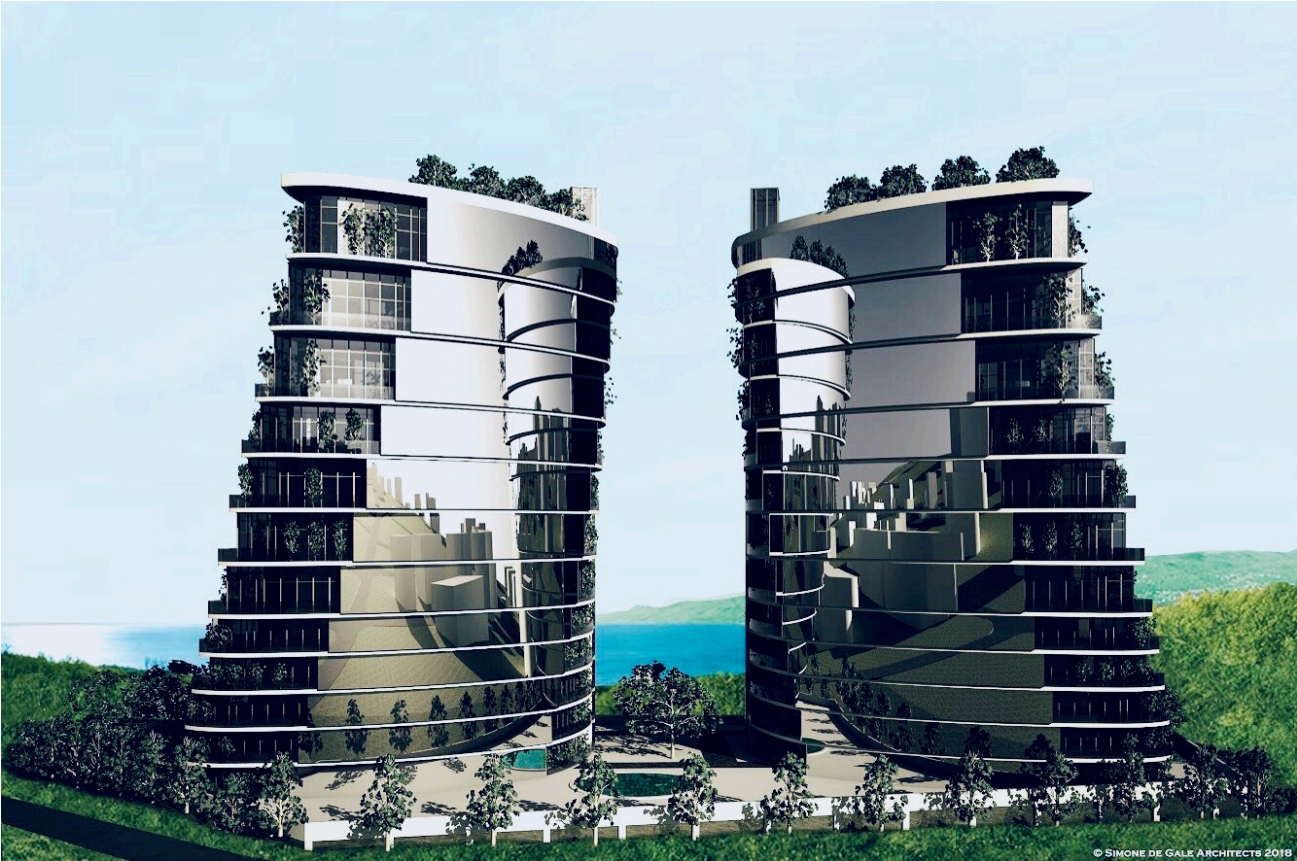
TRIANGLE











THANK YOU!

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