

# HAND IN HAND

" A PHYSICAL & SOCIAL CONNECTION IN ROTTERDAM SOUTH"



THOMAS MOEKEN | 4002709 | 28-01-2016

HENRIETTE BIER | NIMISH BILORIA | KAREL VOLLERS | SIEN VAN DAM

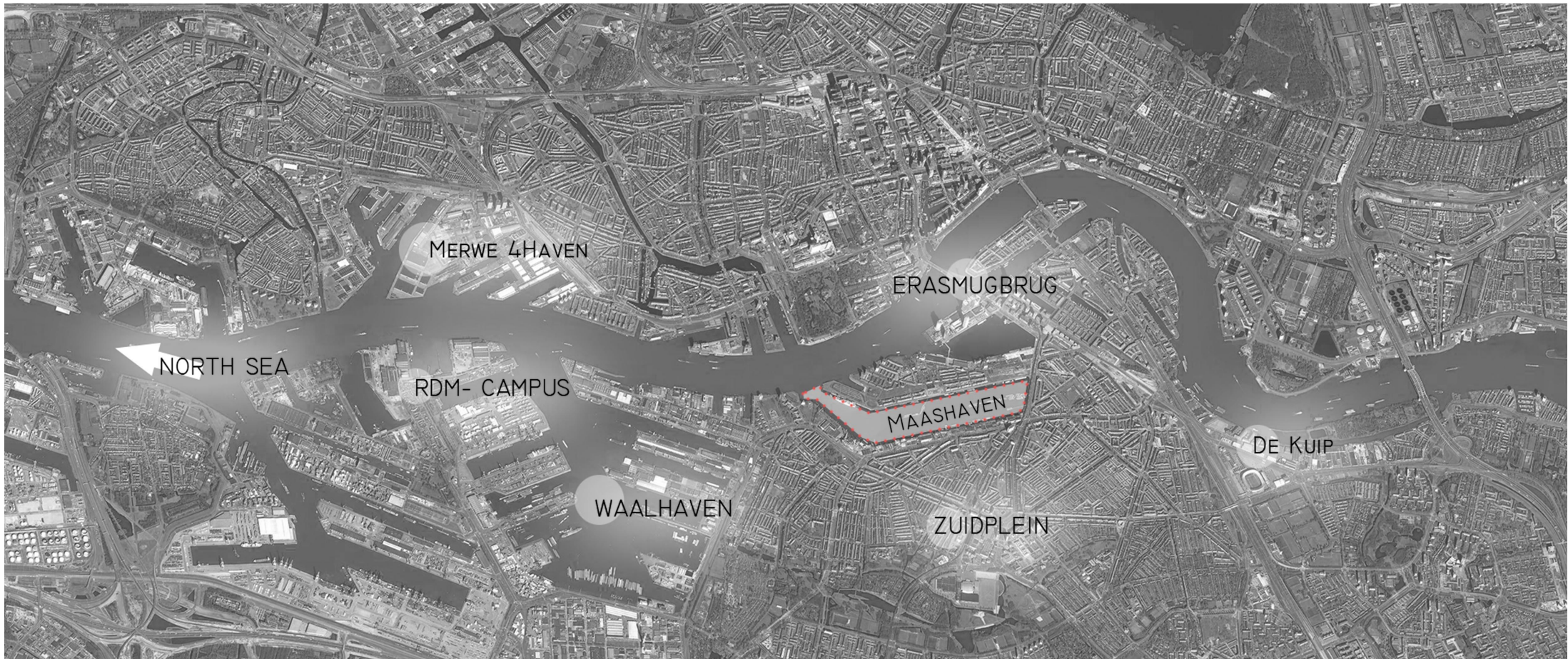


# MAASHAVEN

- 350 METERS -

- 1350 METERS -





THE MAASHAVEN IS SITUATED IN THE ORIGINAL PORT OF ROTTERDAM, ONE OF THE BIGGEST HARBOURS OF THE WORLD. IT IS RELATIVELY CLOSE TO THE CITY CENTER, CONNECTED BY THE ERASMUSBRIDGE, AND ZUIDPLEIN SHOPPING MALL.



THE SURROUNDING AREA OF THE MAASHAVEN CONSISTS OF COMPLETELY DIFFERENT AREAS; ON THE NORTH SIDE, YOU HAVE KATENDRECHT & DE KOP VAN ZUID AND ON THE SOUTH SIDE, DE AFRIKAANDERWIJK & DE TARWEWIJK



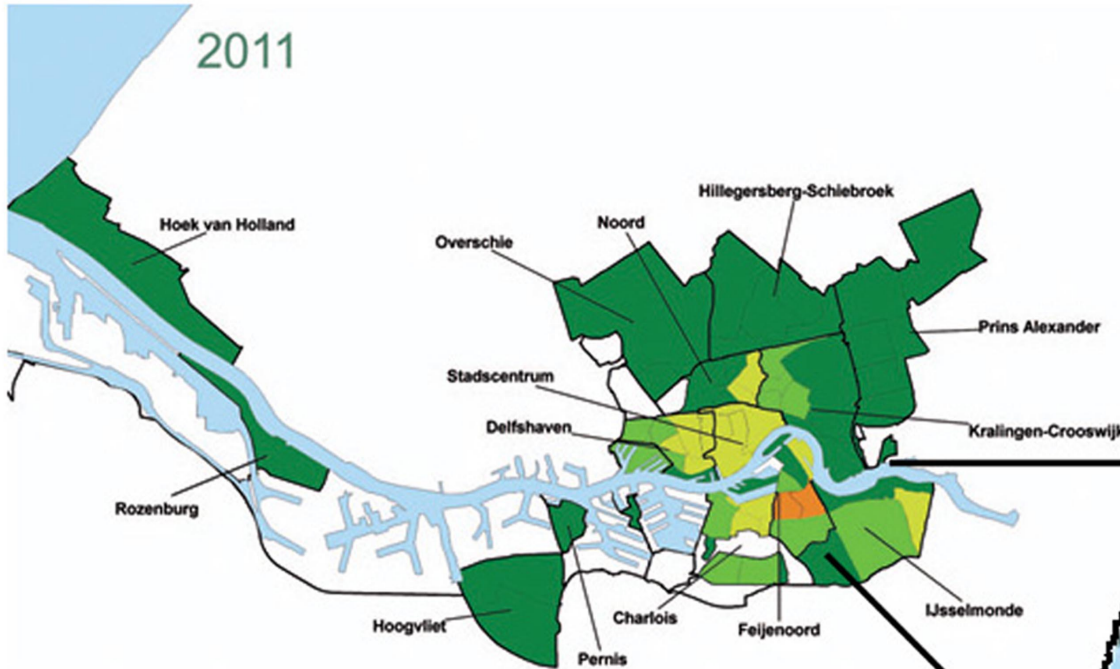
KOP VAN ZUID

KATENDRECHT

AFRIKAANDERWIJK

TARWEWIJK





ACCORDING TO, ROTTERDAM MUNICIPALITY. THE SAFETY INDEX, WHICH IS DETERMINED BY SEVERAL PARAMETERS, SUCH AS: LIVING CONDITIONS, EDUCATION, INCOME ETC. HAS THE LOWEST VALUES IN THE AREAS DIRECTLY SOUTH TO THE MAASHAVEN.



	2005	2006	2007	2008	2009	2011
<b>Rotterdam</b>	6,9	7,2	7,3	7,2	7,3	7,5
<b>Charlois</b>	5,4	5,8	5,9	5,8	5,8	6,2
Zuidplein	4,9	4,4	4,7	5,1	4,4	5,3
Carnisse	5,8	5,8	5,7	6,2	5,6	5,5
Tarwewijk	4,5	5,3	4,6	4,6	3,9	5,5
Pendrecht	4,9	4,7	5,4	5,5	5,4	6,1
Oud Charlois	4,6	5,7	6,3	5,9	6,4	6,3
Zuidwijk	6,7	6,8	6,7	6,2	7,0	7,0
Heijplaat	7,5	8,4	9,4	9,1	8,2	7,8
Wielewaal	8,5	9,2	10,0	9,9	8,2	8,5

THE DIFFERENCES BETWEEN, DE TARWEWIJK & DE AFRIKAANDERWIJK, COMPARED TO THE WILHELMINAKADE & KATENDRECHT. ARE VISIBLE NOT ONLY IN FACTS AND NUMBERS. BUT ALSO IN THE ARCHITECTURE AND THE OPEN SPACE. WHILE KATENDRECHT HAS BEEN DEVELOPED RECENTLY AND STILL IS BEING DEVELOPED. ALMOST NOTHING HAPPENS IN THE SOUTHERN DISTRICTS.

## KATENDRECHT



## TARWEWIJK

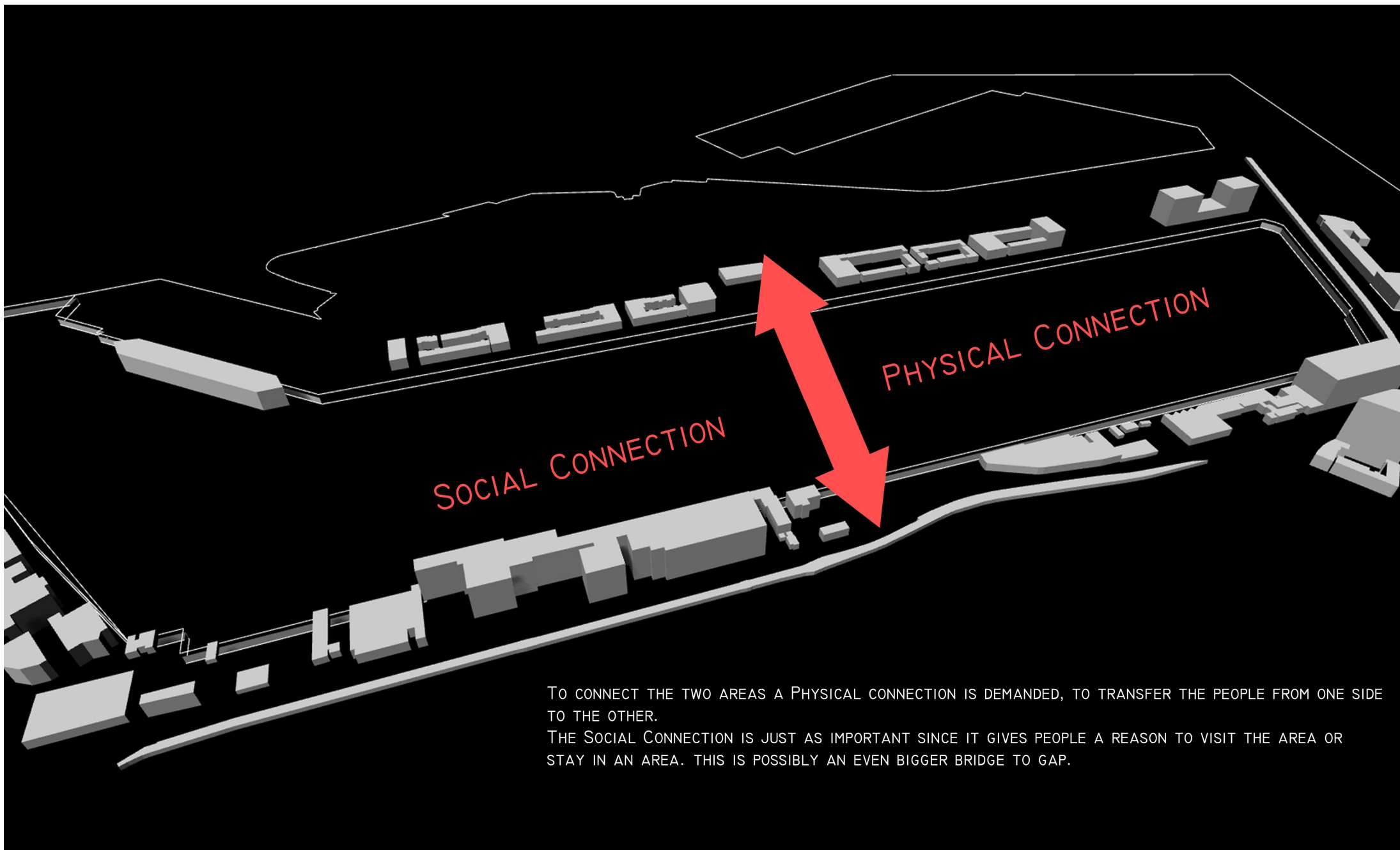






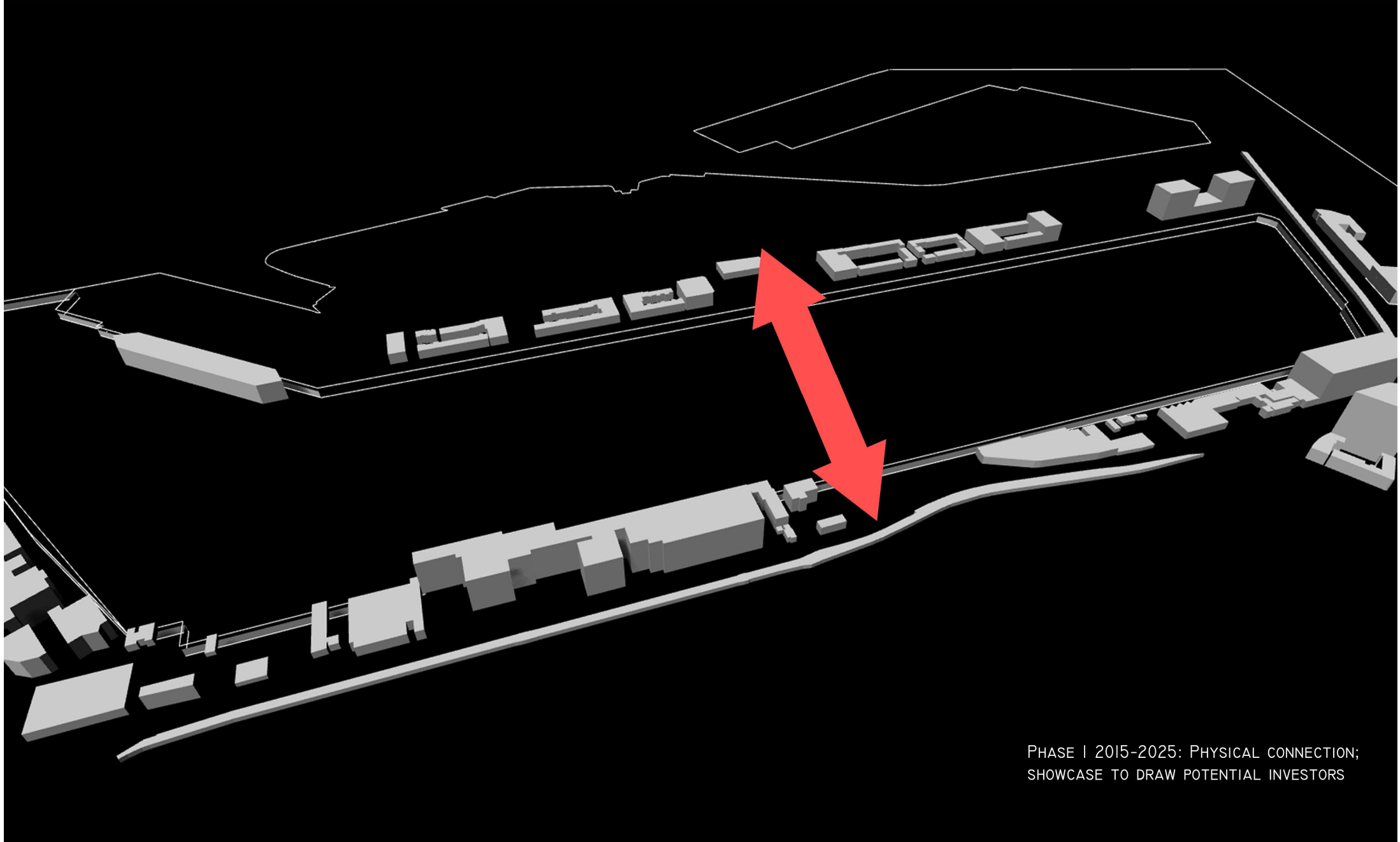
THE DEVELOPMENT OF THE KOP VAN ZUID, STARTING WITH THE CONSTRUCTION OF THE ERASMUSBRIDGE. STIMULATED THE GROWTH OF KATENDRECHT. AND PULLED INVESTORS AND HIGHER INCOMES INTO THIS, FORMERLY KNOWN AS A NO GO AREA, POPULAR CULTURAL ENVIRONMENT.



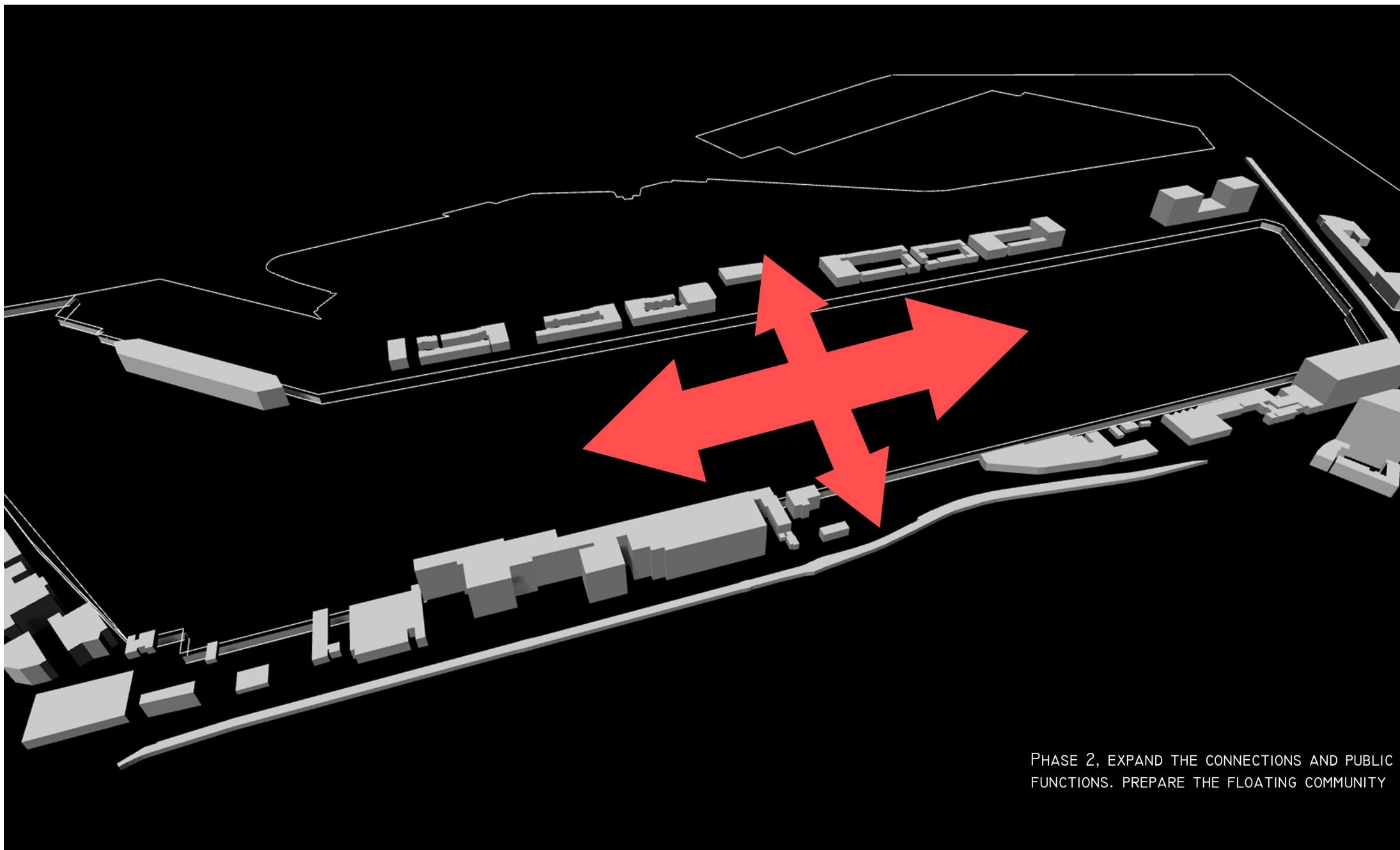


TO CONNECT THE TWO AREAS A PHYSICAL CONNECTION IS DEMANDED, TO TRANSFER THE PEOPLE FROM ONE SIDE TO THE OTHER.  
THE SOCIAL CONNECTION IS JUST AS IMPORTANT SINCE IT GIVES PEOPLE A REASON TO VISIT THE AREA OR STAY IN AN AREA. THIS IS POSSIBLY AN EVEN BIGGER BRIDGE TO GAP.



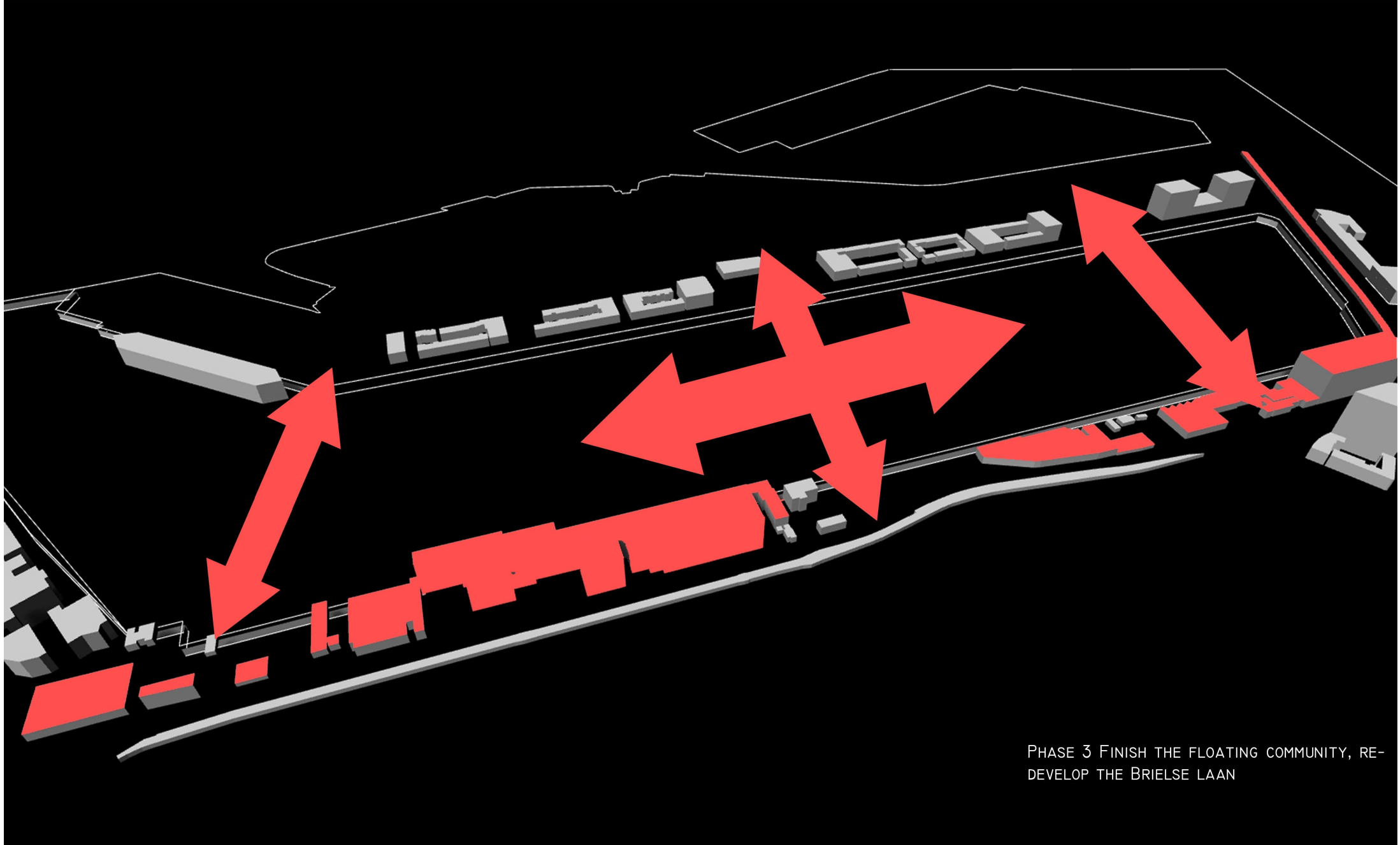


PHASE I 2015-2025: PHYSICAL CONNECTION;  
SHOWCASE TO DRAW POTENTIAL INVESTORS

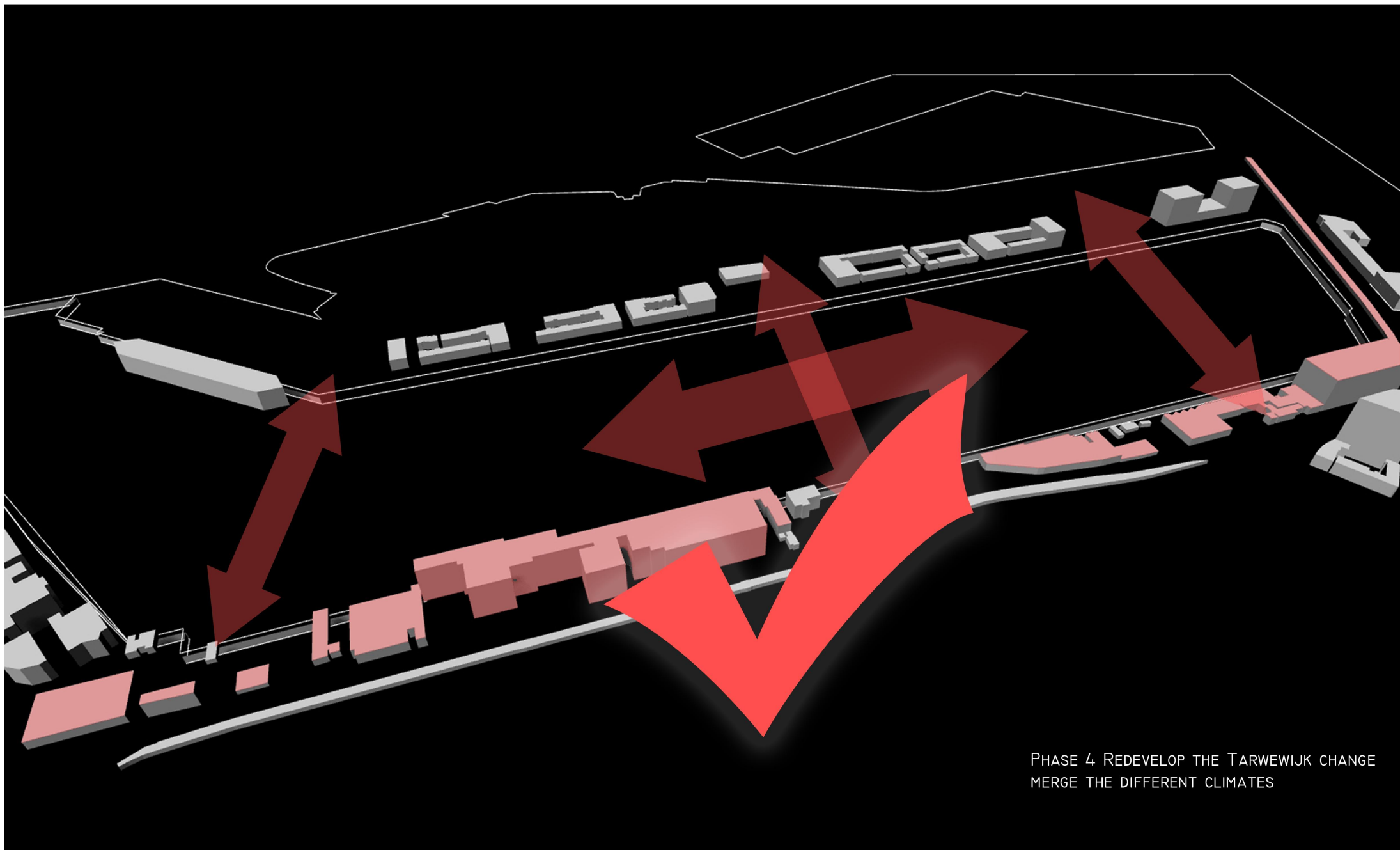


PHASE 2, EXPAND THE CONNECTIONS AND PUBLIC FUNCTIONS. PREPARE THE FLOATING COMMUNITY





PHASE 3 FINISH THE FLOATING COMMUNITY, RE-DEVELOP THE BRIELSE LAAN



PHASE 4 REDEVELOP THE TARWEWIJK CHANGE  
MERGE THE DIFFERENT CLIMATES





# ROTTERDAM.CLIMATE.INITIATIVE

TO MAKE A BRIDGE CONNECTION IS ONE THING. BUT TO BUILD AN ENTIRE **FLOATING COMMUNITY** ON THE WATER SEEMS QUITE EXTREME.

HOWEVER, **STADSHAVENS ROTTERDAM** HAS ALREADY ASSIGNED THE MAASHAVEN TO BE ON OF THE FIRST **FLOATING COMMUNITIES** IN THE WORLD. TOGETHER WITH THE **RDM-CAMPUS** THEY ARE ALREADY DEVELOPING AND ALMOST WORLD LEADING IN THERMS OF **FLOATING STRUCTURES**.

**DELTA SYNC** HAS MADE THE NEWS COUPLE OF TIMES ALREADY WITH THEIR DESIGNS, BUT ALSO THE **FLOATING DOME** IN THE RIJNHAVEN.

WITH THE **CLIMATE CHANGES** AHEAD OF US A **RISING SEA LEVEL** WILL BE DIRECT CONSEQUENCE. WHILE IN THE **NETHERLANDS** WE LIVE UNDER SEA LEVEL ALREADY THIS DEMANDS **INOVATIVE SOLUTIONS**

Stadshavens Rotterdam  
**1600 ha**  
Gebiedsplan concept januari 2009  
Rijnhaven-Maashaven

**Showcase  
van de  
Rotterdamse  
Stadshavens**

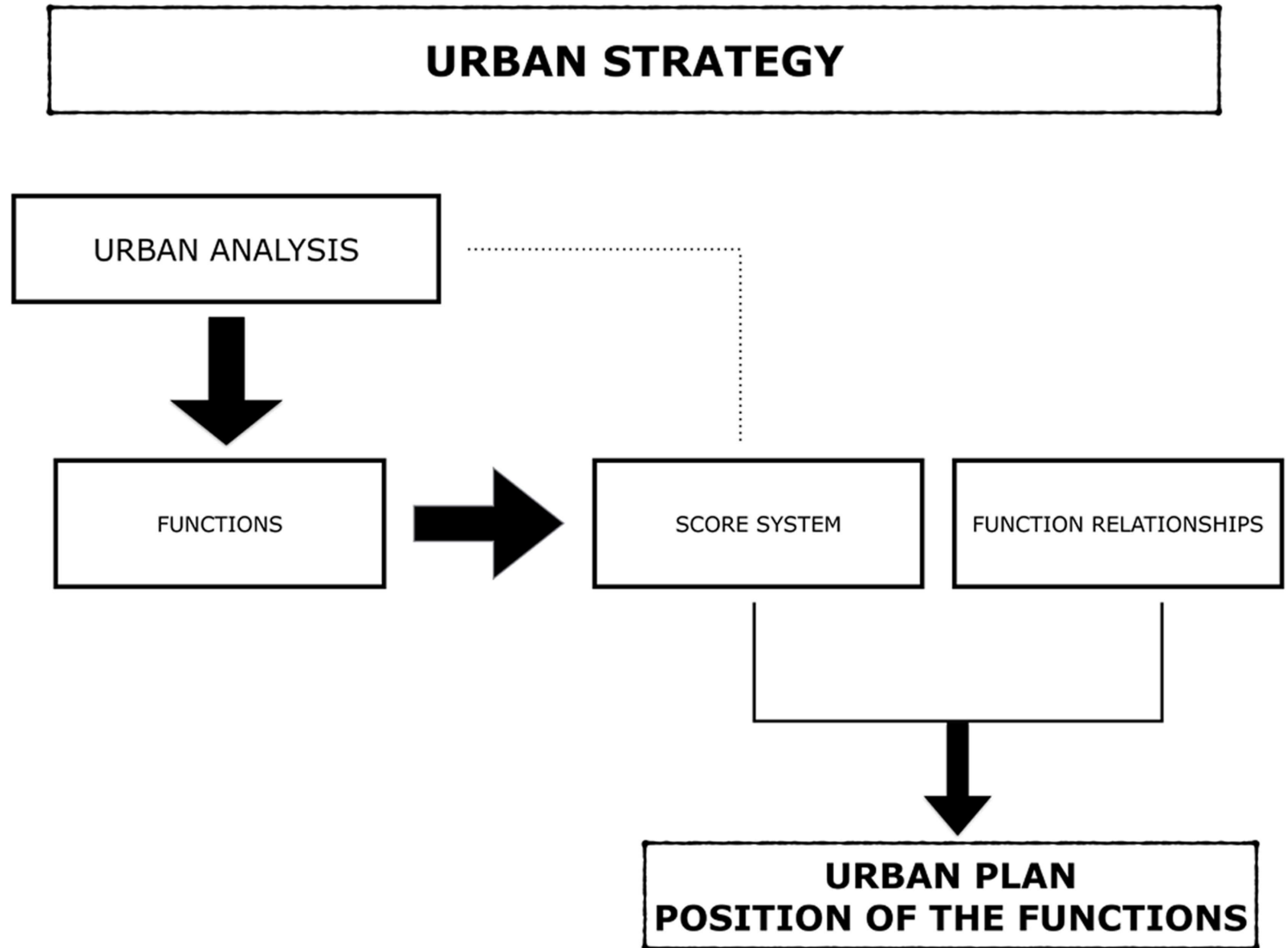


PHASE I , " AN ATTEMPT TO RELOCATE THE GROWTH"





THE DESIGN STRATEGY FOR THE URBAN PLAN STARTS WITH AN URBAN ANALYSIS. THIS WILL DETERMINE THE DESIRED FUNCTIONS WHICH WILL BE TESTED AGAINST A SO CALLED SCORE SYSTEM. THIS SCORE SYSTEM HAS PARAMETERS INPUT BY THE URBAN ANALYSIS. AND TOGETHER WITH THE SET FUNCTION RELATIONSHIPS THE POSITION OF THE FUNCTIONS FOR AN URBAN PLAN WILL BE DETERMINED.



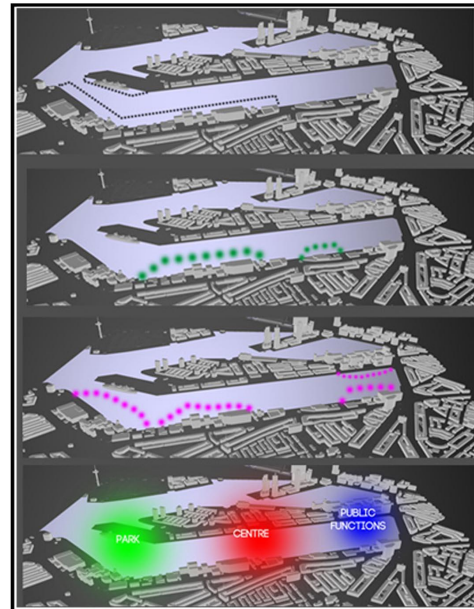
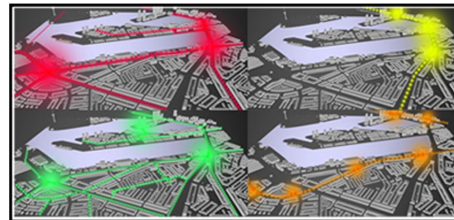
THE URBAN ANALYSIS HAS TO DEFINE THE MISSING FUNCTIONS FOR THIS AREA TO DEVELOP. IT IS AN HARBOUR AREA WHICH IS STILL BEING USED BY LITTLE PARTS OF INDUSTRY AND AS A DOCKING STATION FOR SHIPS.

THEREFORE THE FIRST IMAGE SHOWS THE RESTRICTIONS BASED ON SHIP ACTIVITY

THE SECON IMAGE SHOWS PUBLIC TRANSPORT

THE TIRD GIVES US RESTRICTIONS BASED ON THE SURROUNDING, THINK ABOUT POLLUTION AND CONNECTING LIVING AREAS

THE FOURTH IMAGE SHOWS THE AVAILABLE FUNCTIONS IN THE SURROUNDING AND GIVE US AN INDICATION WHAT KIND OF FUNCTIONS WILL BE USEFULL IN OUR PLAN TO DEVELOP THE MAASHAVEN.

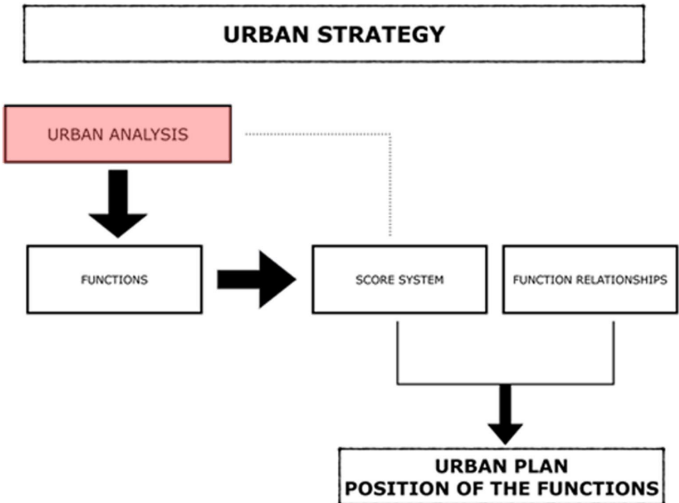
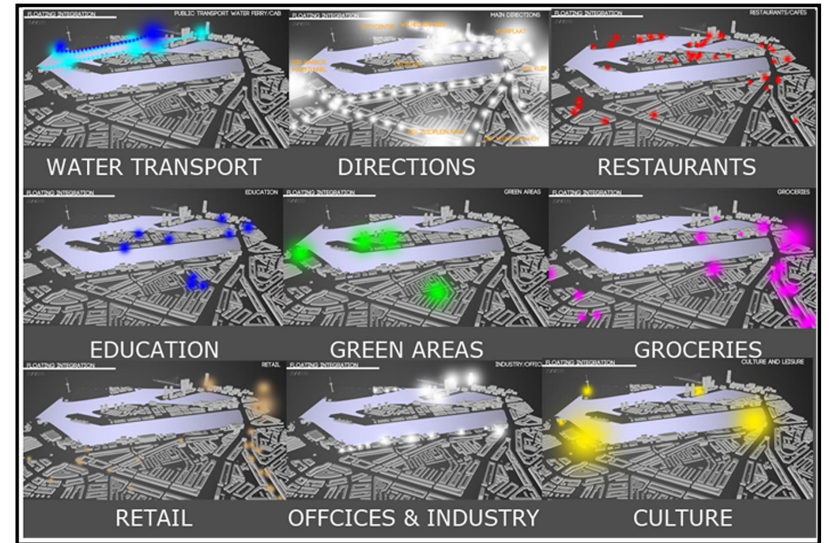


1

2

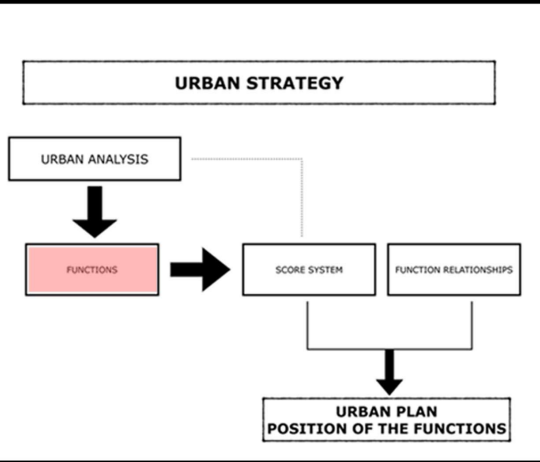
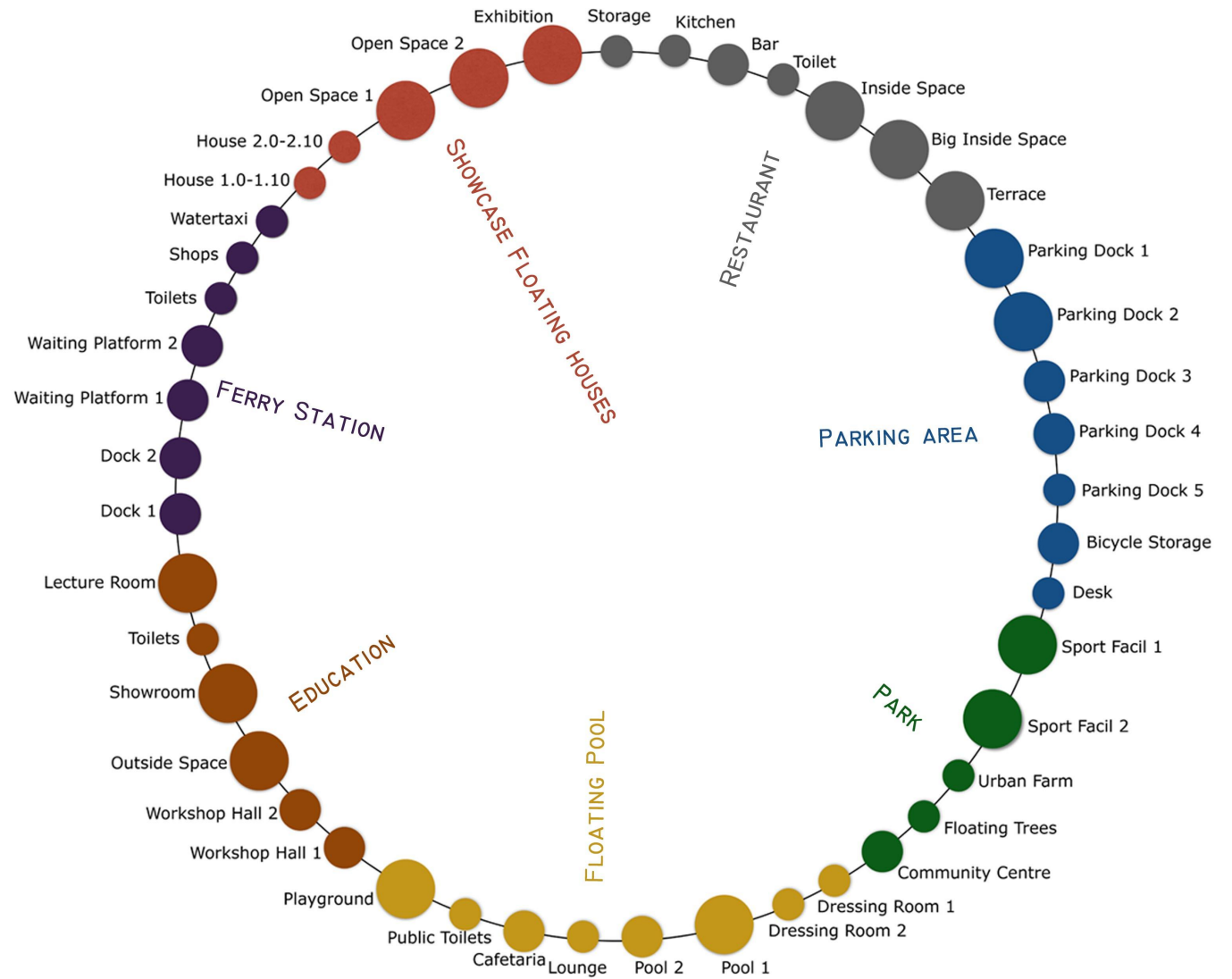
3

4





BASED ON THE URBAN ANALYSIS 7 MAIN FUNCTIONS HAVE BEEN CHOSEN TO DEVELOP THE FIRST PHASE, AND HELP, NEXT TO PHYSICALLY ALSO MAKE A SOCIAL CONNECTION BETWEEN CULTURAL DIFFERENCES



NEXT STEP ON THE LIST TO GET TO THE POSITION OF THE FUNCTIONS IS THE " SCORE SYSTEM"

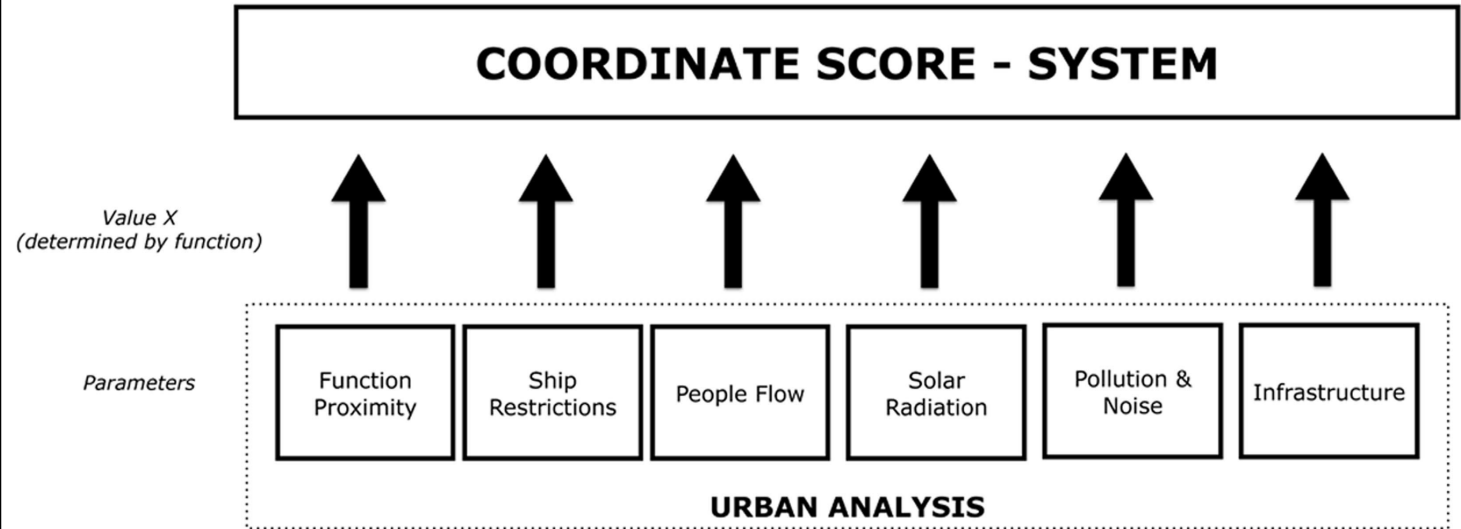
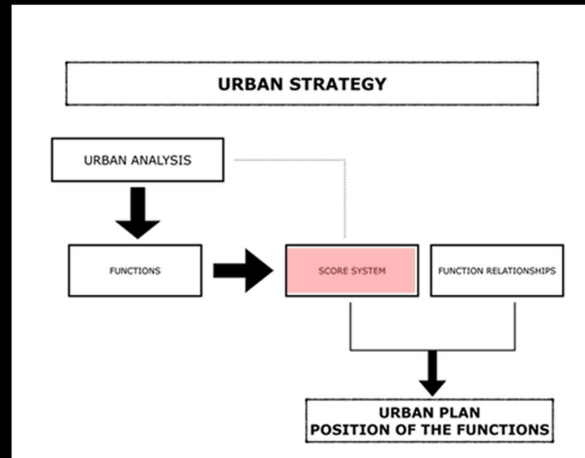
THIS SYSTEM WILL HELP TO DETERMINE THE BEST LOCATIONS FOR SPECIFIC FUNCTIONS.

THE MAASHAVEN WAS DIVIDED INTO A GRID OF 5X5 METER. EVERY GRID GOT IT'S OWN COORDINATE.

EACH COORDINATE COULD SCORE POINTS BASED ON THE SET PARAMETERS. WHICH WOULD RESULT IN A HIGH SCORE FOR CERTAIN POINTS.

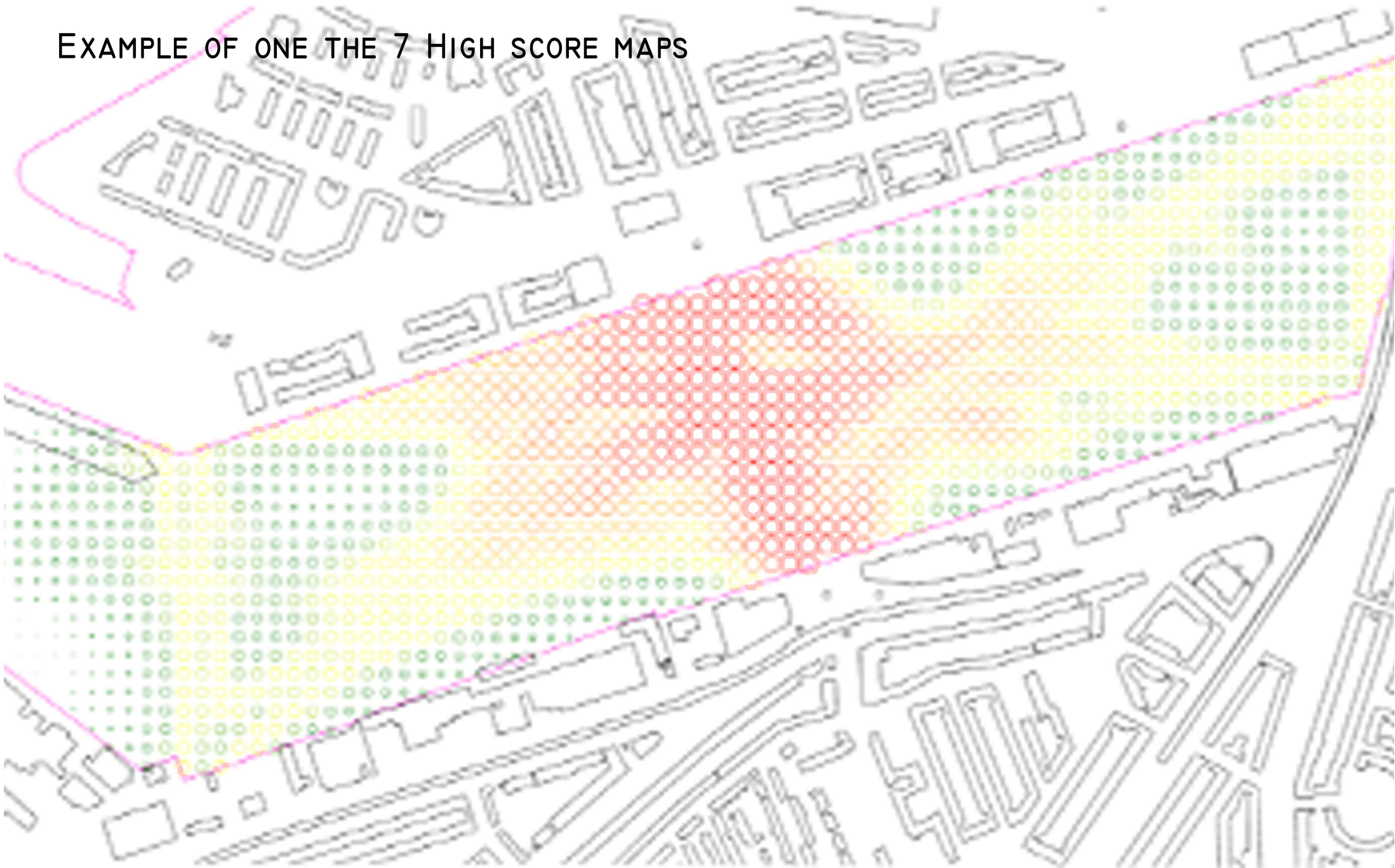
DIFFERENT FUNCTIONS ASK FOR DIFFERENT DEMANDS AND THEREFORE EACH PARAMETER IS WORTH A DIFFERENT KIND OF POINTS BASED ON THE VALUE SET FOR THIS PARAMETER.

LEADING TO A HIGH SCORE FOR EVERY SINGLE FUNCTION



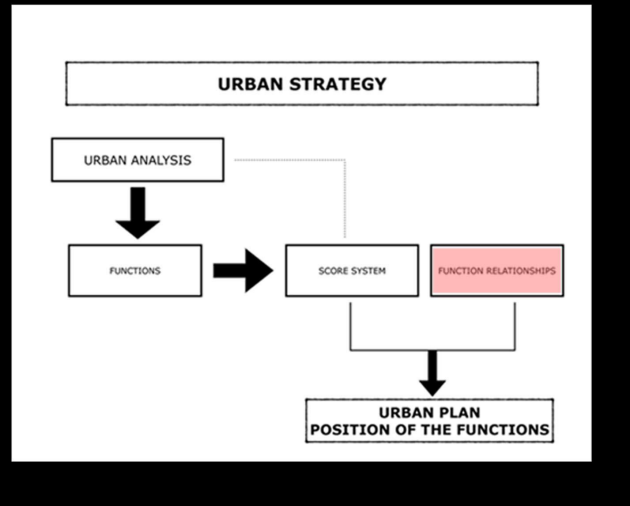
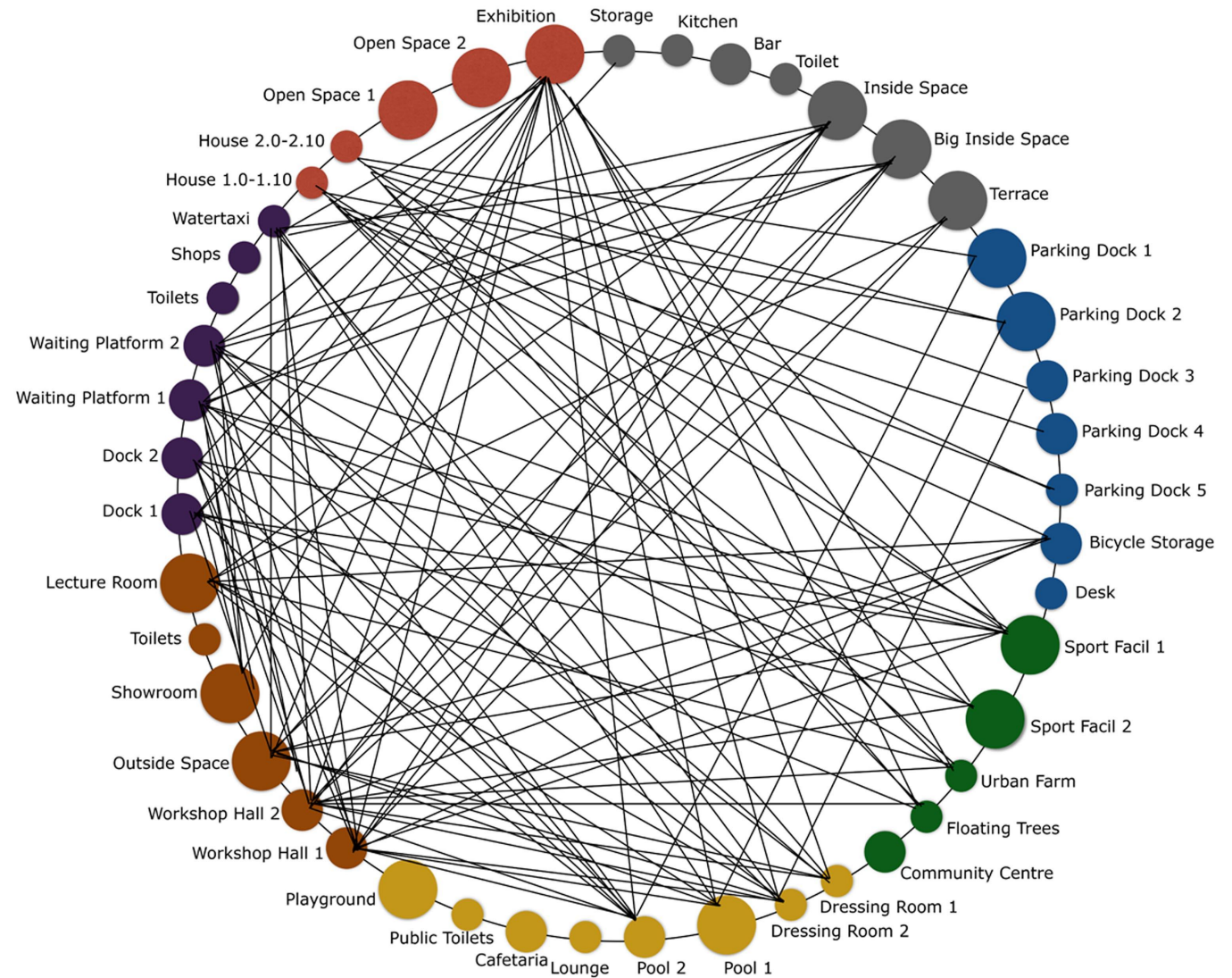


EXAMPLE OF ONE THE 7 HIGH SCORE MAPS

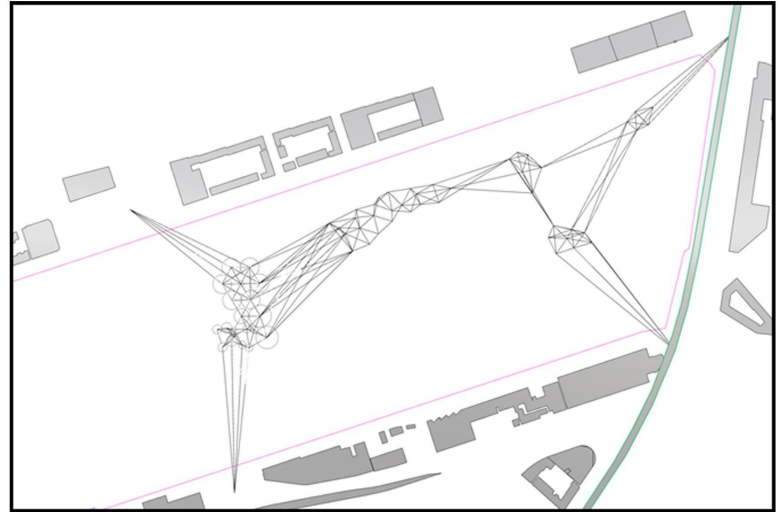


THE SCORE SYSTEM GAVE AWAY THE BEST POSSIBLE POSITIONS FOR THE FUNCTIONS. HOWEVER THESE DIFFERENT FUNCTIONS ARE RELATED TO EACHOTHER IN SOME WAYS. SO TO KEEP THEM FROM BEING SCATTERED ALL OVER THE PLACE RELATIONS HAVE BEEN SET INBETWEEN THE DIFFERENT FUNCTIONS.

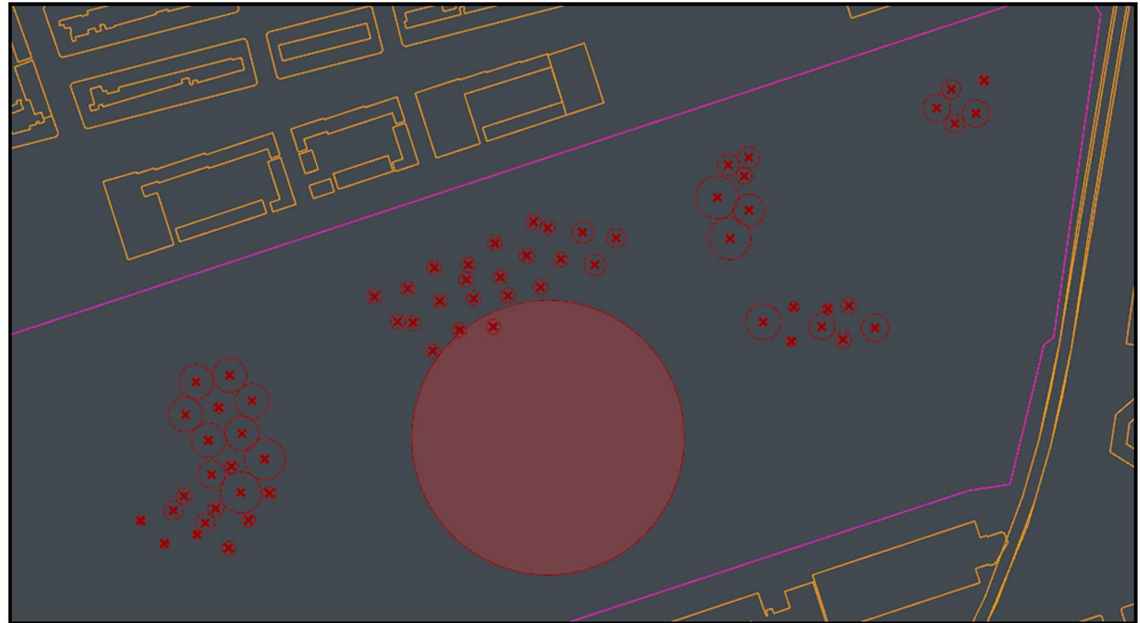
THESE RELATIONS WILL WORK AS ATTRACTORS TO DEFINE THE FINAL POSITION OF THE FUNCTIONS.

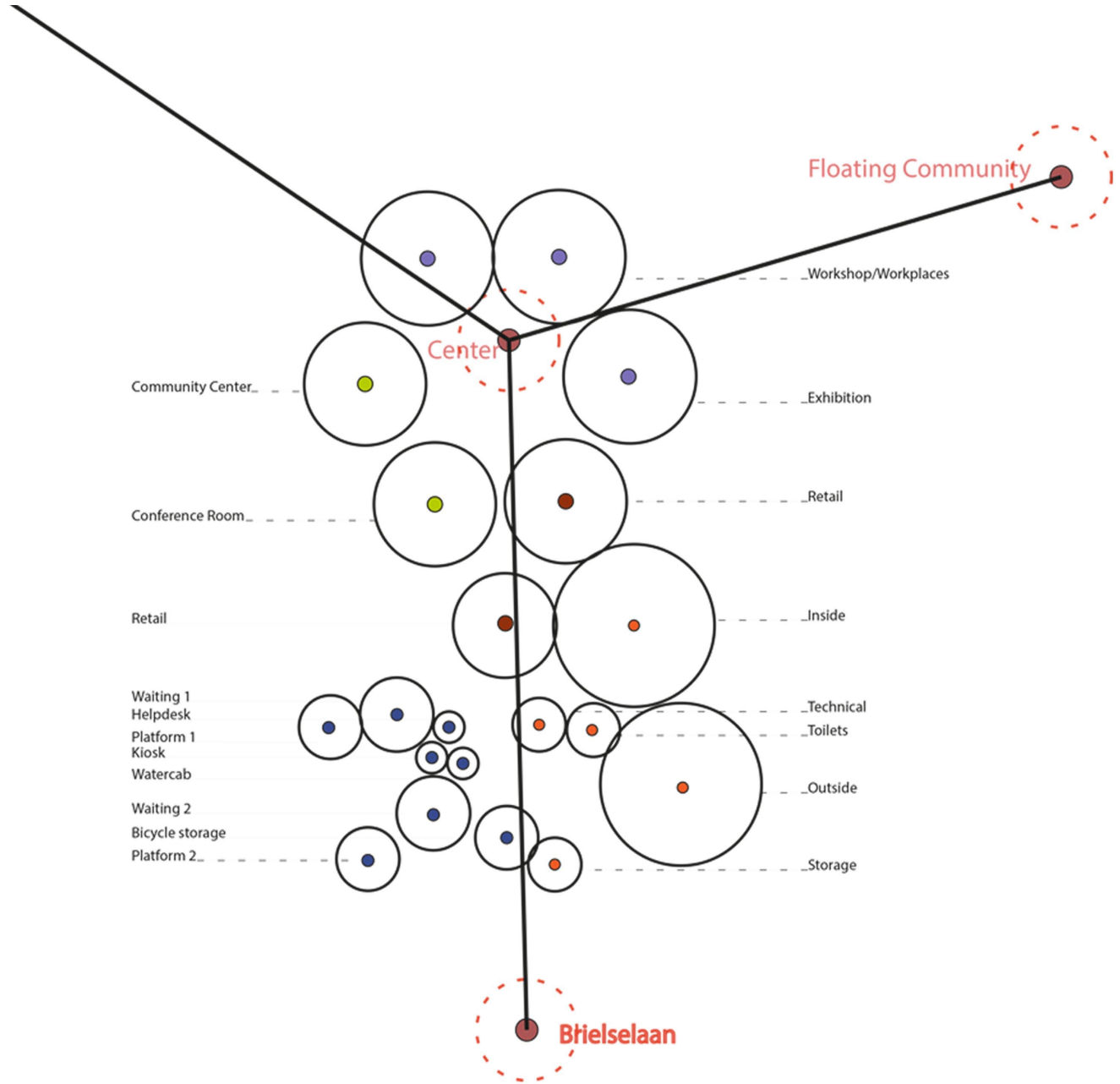






IN THE FIRST IMAGE YOU CAN SEE THE FUNCTIONS BEING SCATTERED ON THEIR HIGH SCORE POSITIONS. HOWEVER, THE SECOND IMAGE SHOWS THE CONNECTIONS WHICH HAVE DETERMINED THE FINAL (TIRD IMAGE) POSITION OF THE FUNCTIONS





A SMALL SEGMENT WILL BE WORKED OUT INTO DETAIL ZOOMING IN ON THE MAIN CONNECTION.

DIMITRI STEFANESCO, THIS BRIDGE USES THE DIFFERENT LANDINGS AND AS A RESULT OF RESTSPACE FUNCTIONS GAIN PLACE





THE BY FOA DESIGNED YOKOHAMA TERMINAL IS MEANT AS A LANDSCAPE. SHAPED BY A CONTINUOUS SURFACE, WHICH OPENS AND FOLDS AROUND FUNCTIONS.

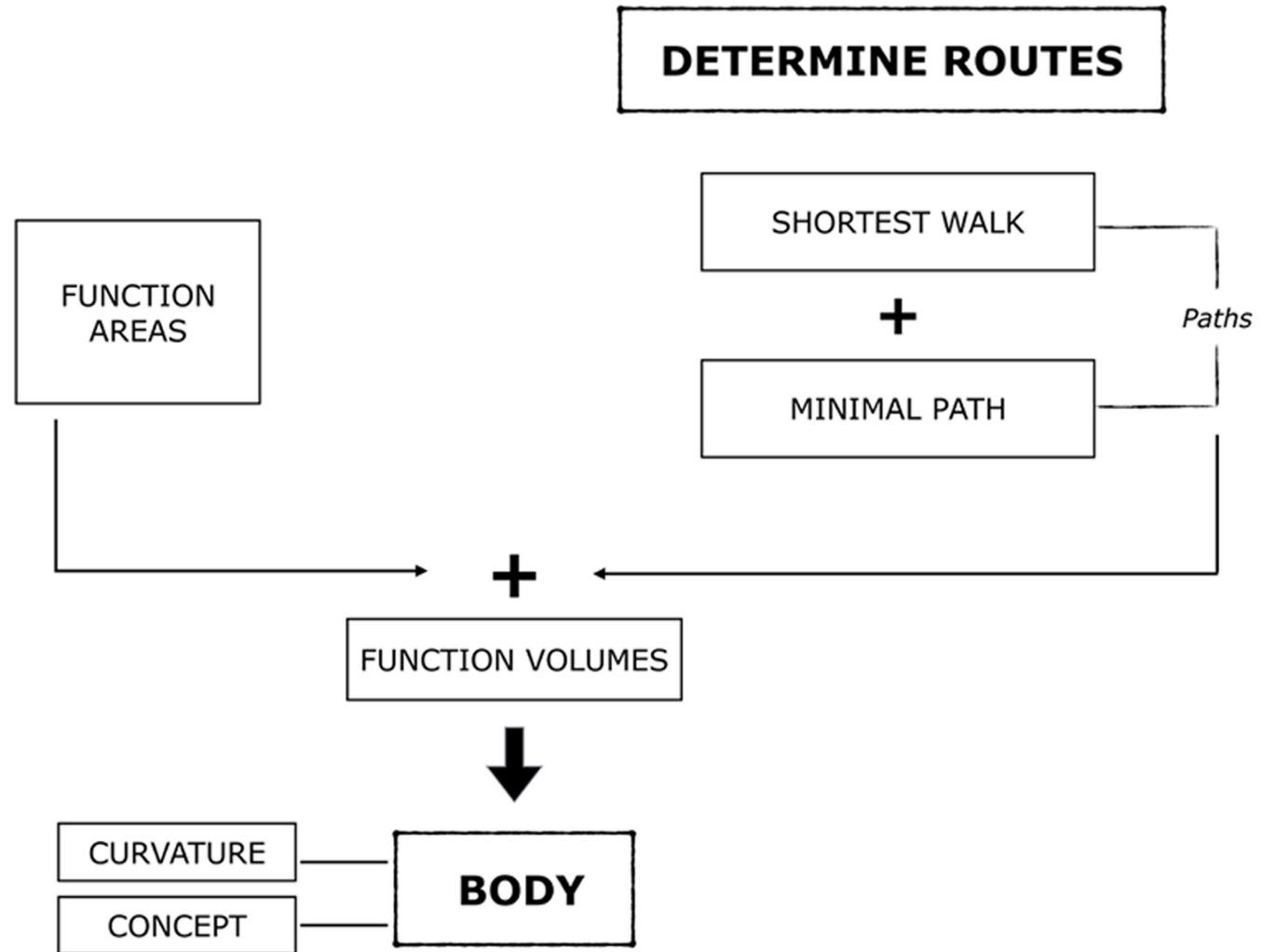


EVENTUALLY THE CHOSEN SEGMENT HAS TO BE DEVELOPED INTO AN ARCHITECTURAL BUILDING FOLLOWING THE GOALS AND AMBITIONS SET IN THE PROCESS.

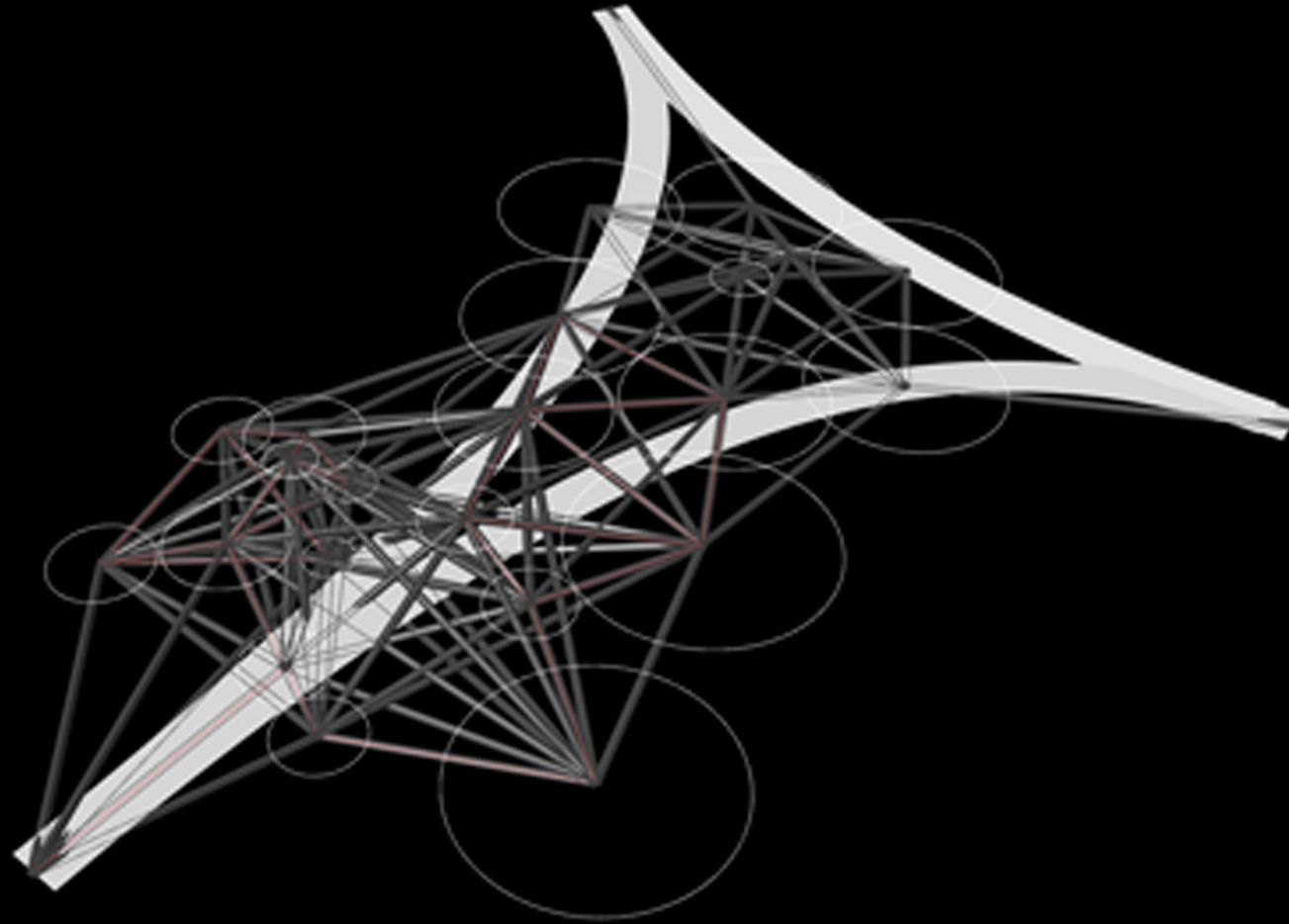
THIS DIAGRAM HELPS TO UNDERSTAND THIS PART OF THE DESIGN PROCESS.

THE FUNCTIONS ALREADY HAVE DETERMINED SIZES AND THEREFORE OCCUPY CERTAIN AREAS.

TO CONNECT THE FUNCTIONS AND TO CREATE A BUILDING, HOUSING THESE FUNCTIONS ROUTES HAVE BEEN DETERMINED BASED ON DIFFERENT DESTINATIONS AND DIFFERENT BEHAVIOR.



THE 3 DIRECTIONS: KATENDRECHT, BRIELSELAAN & THE FUTURE FLOATING COMMUNITY WILL BE CONNECTED BY A FAST LANE FOR CYCLISTS. THIS WILL ALSO BE AVAILABLE FOR PEDESTRIANS WHO WANT TO JUST CROSS

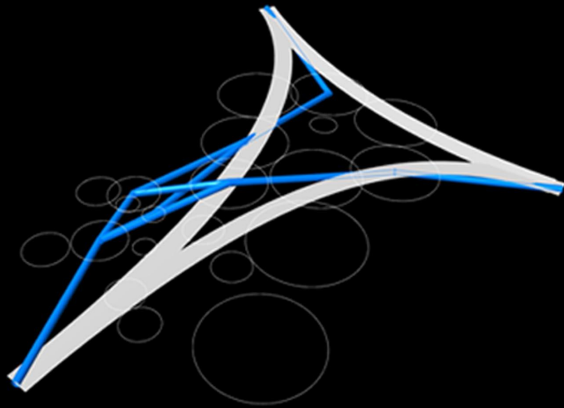


THE GRAY CONNECTIONS ARE ALL POSSIBLE

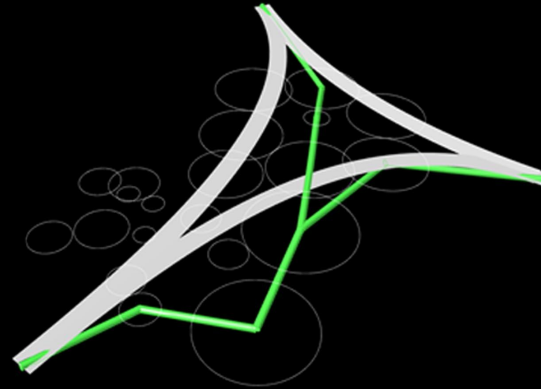


4 DIFFERENT TYPE OF PATHS HAVE BEEN CHOSEN FOR DIFFERENT TYPE OF USERS.

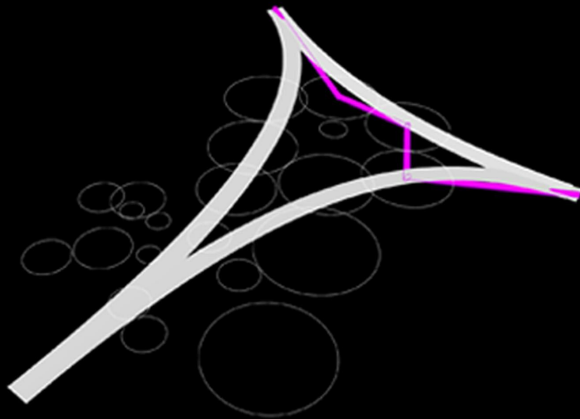
FERRY PATHS



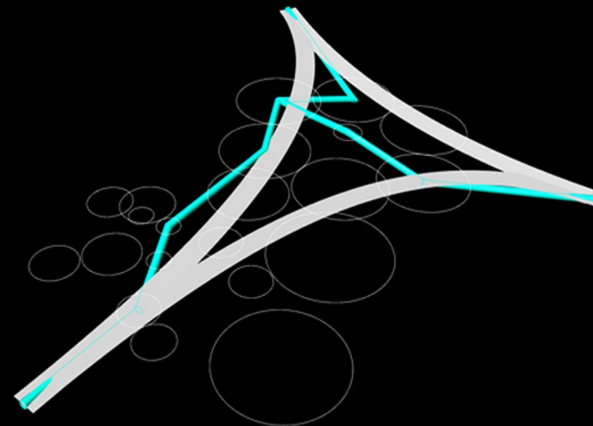
RESTAURANT PATH

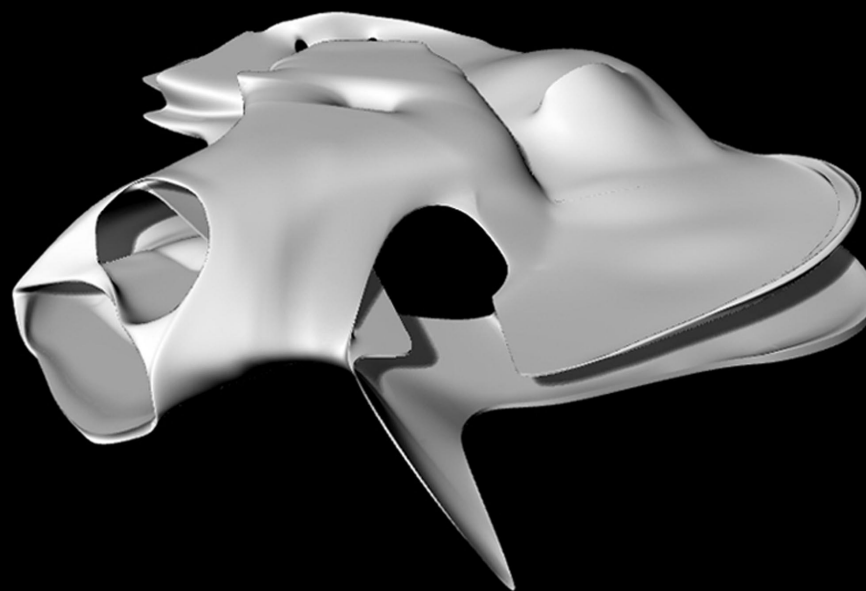
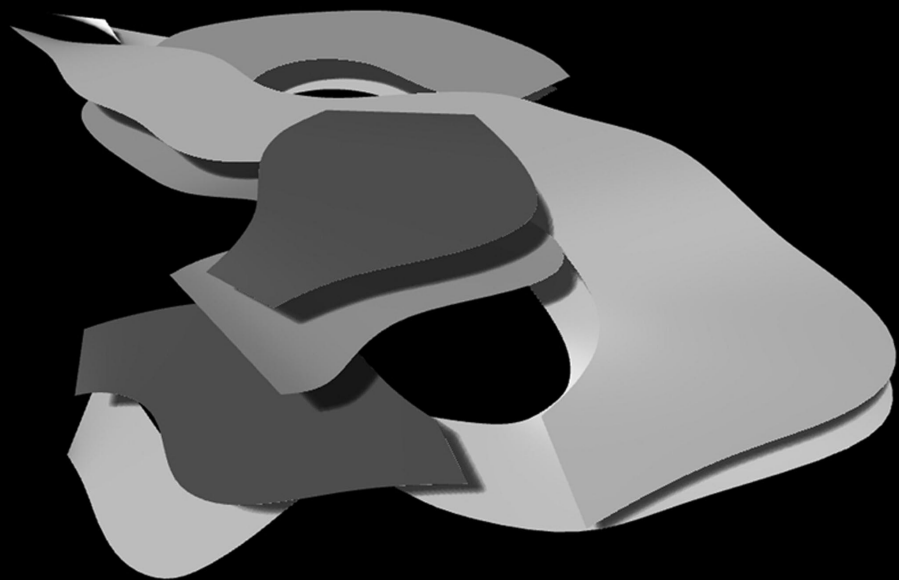


EXHIBITION PATHS



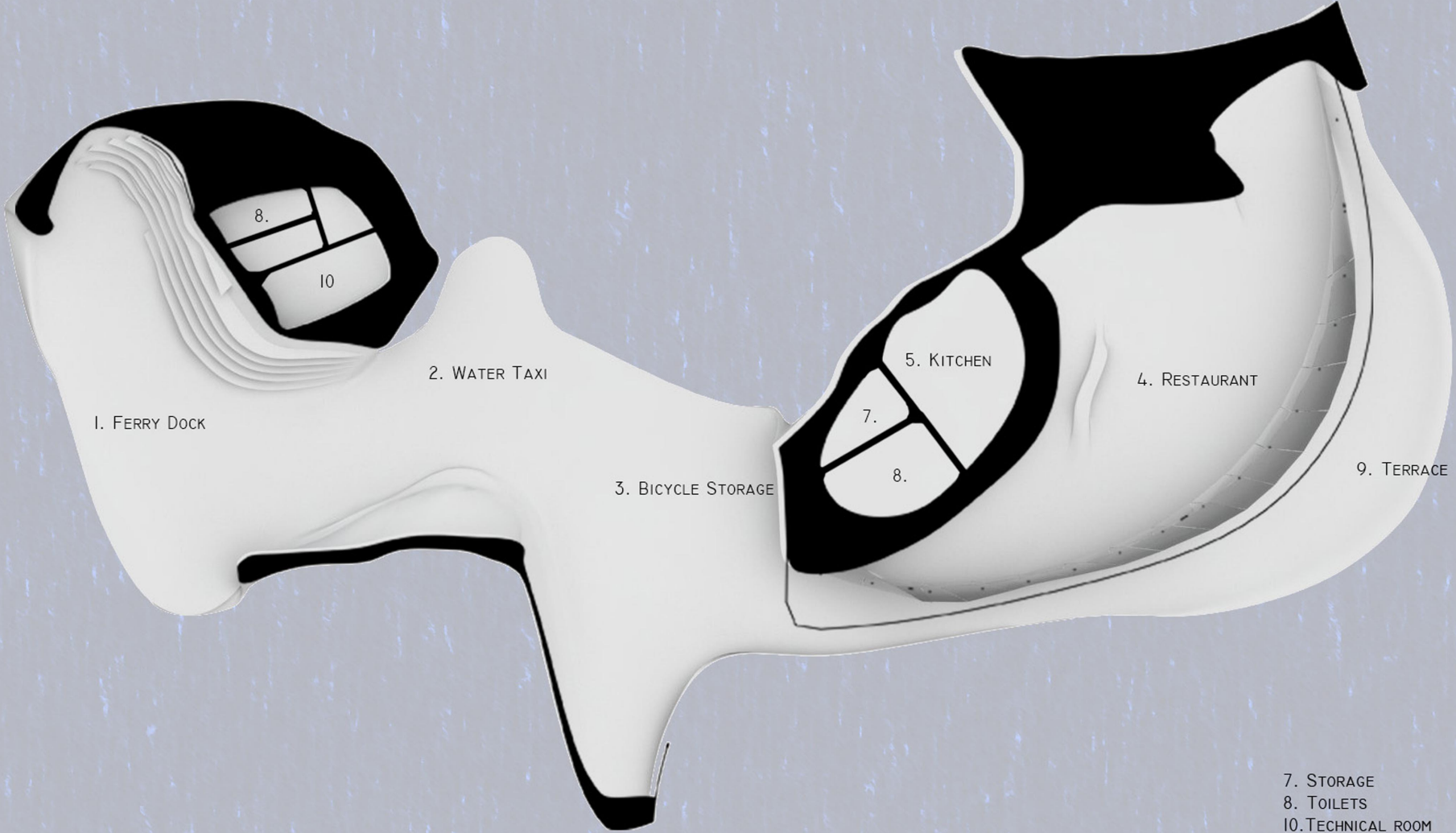
CONFERENCE PATH





THE PATHS TOGETHER WITH THE FUNCTION SIZES RESULT IN SURFACES WHICH MORPH AROUND THE FAST LANE

# FLOORPLAN -I WATER LEVEL

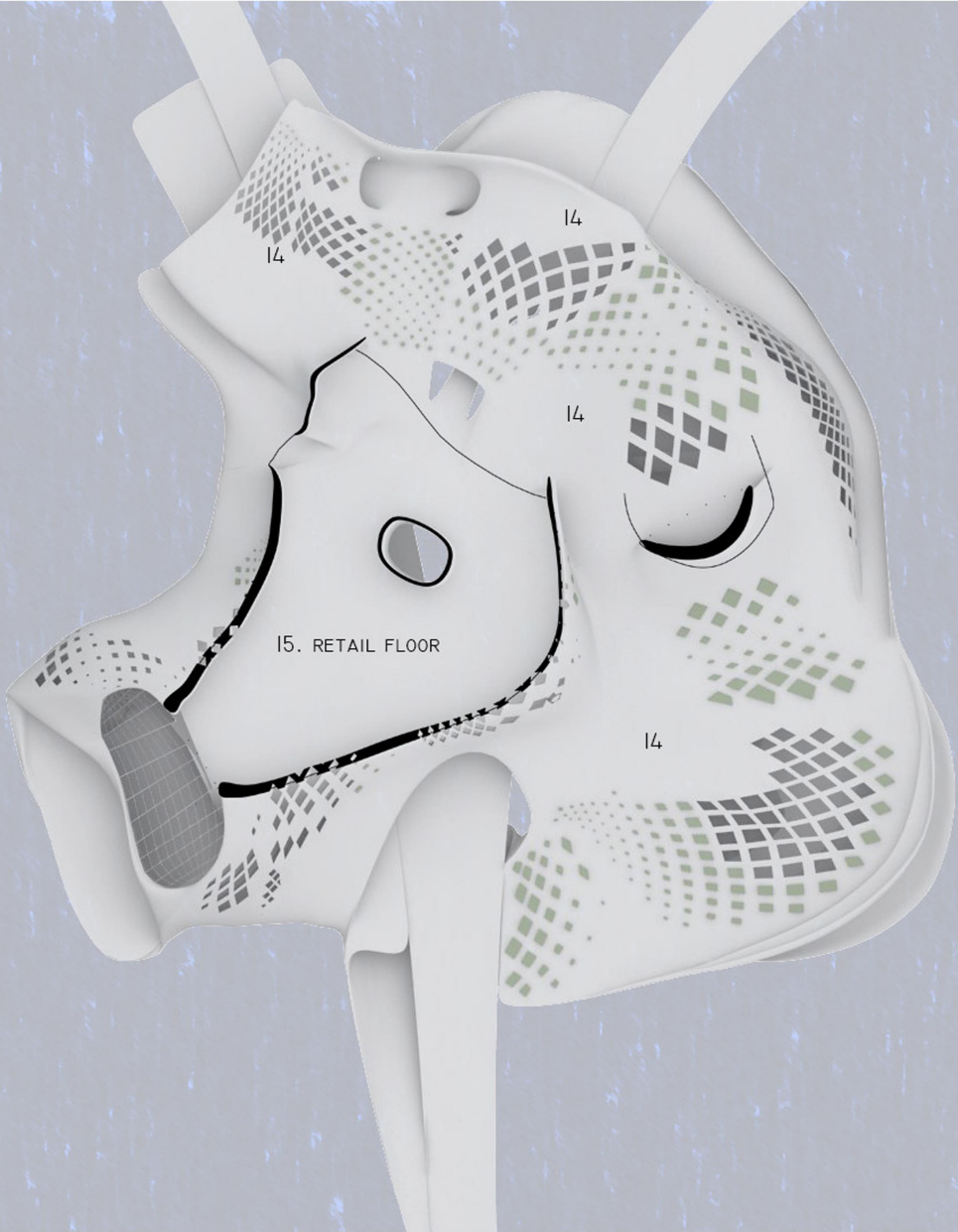




# FLOORPLAN 0 MAIN ROAD



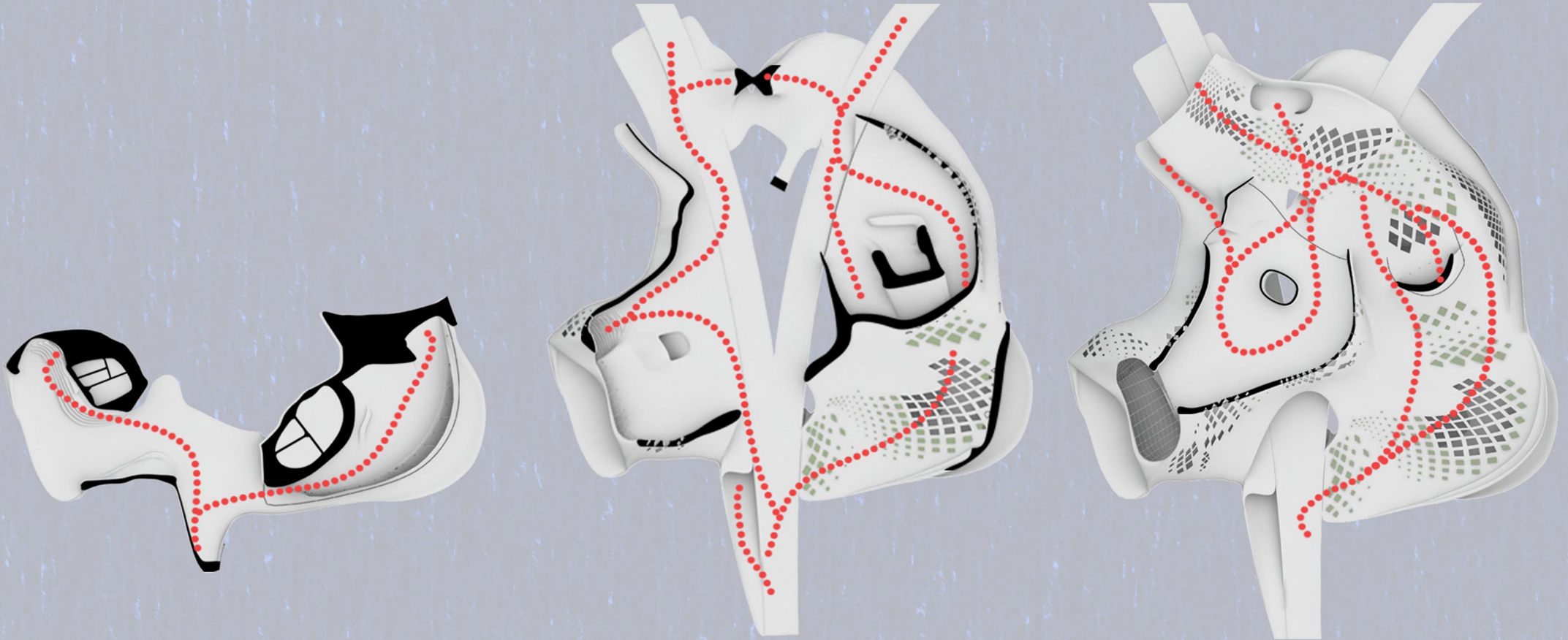
# FLOORPLAN | +5



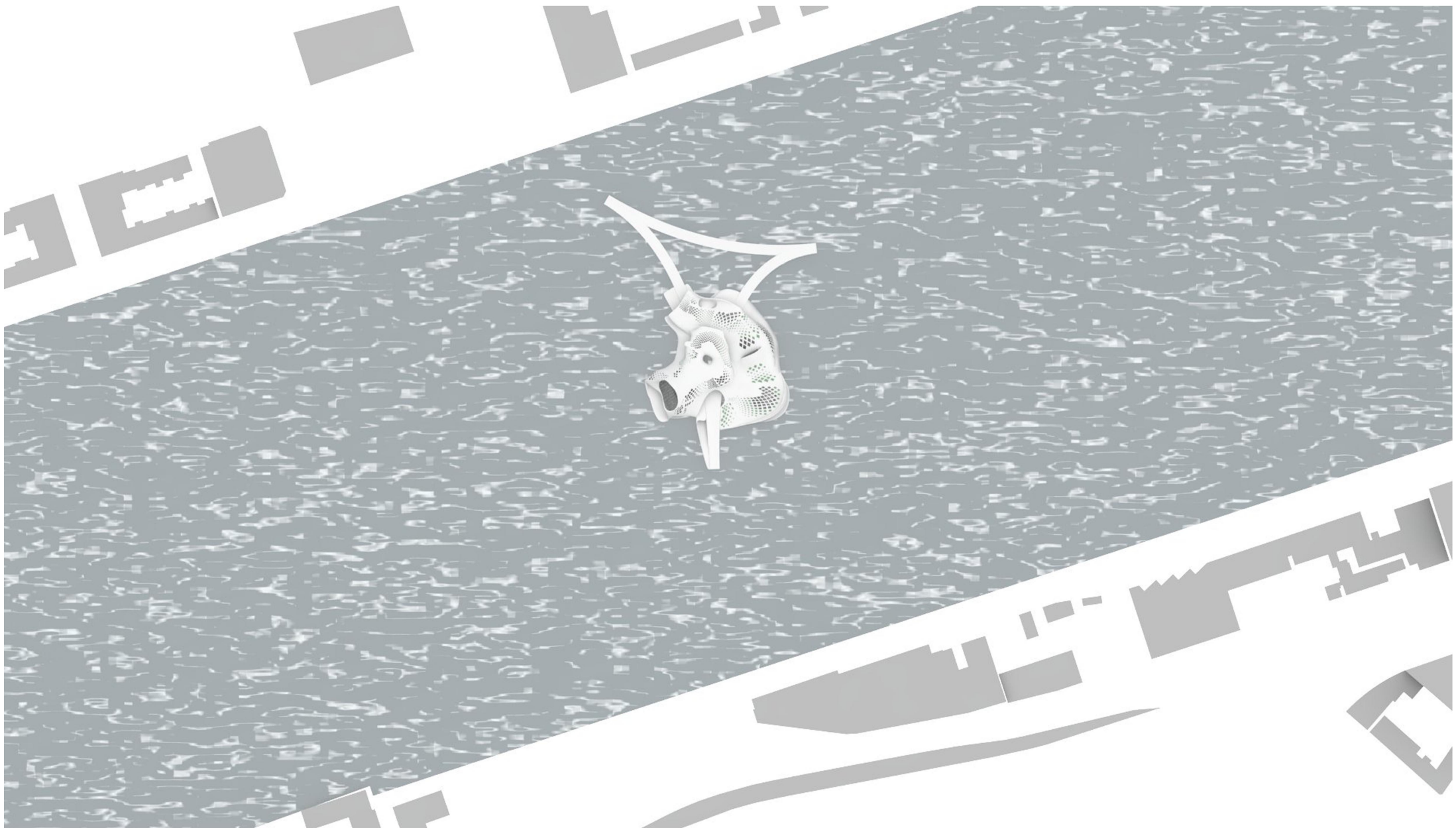
14. PUBLIC ROOF TERRACE



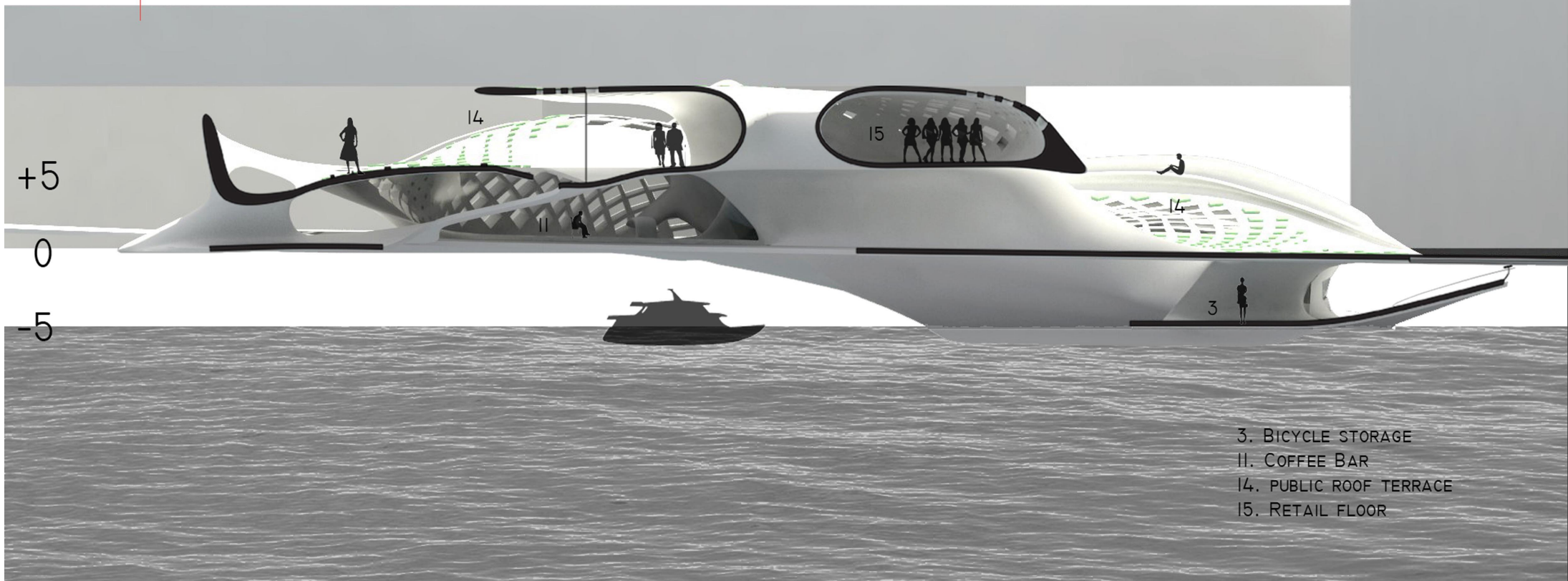
# ROUTING





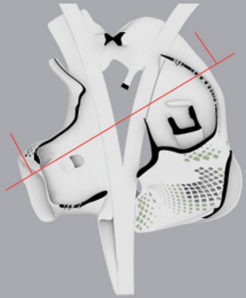


# SECTION C1

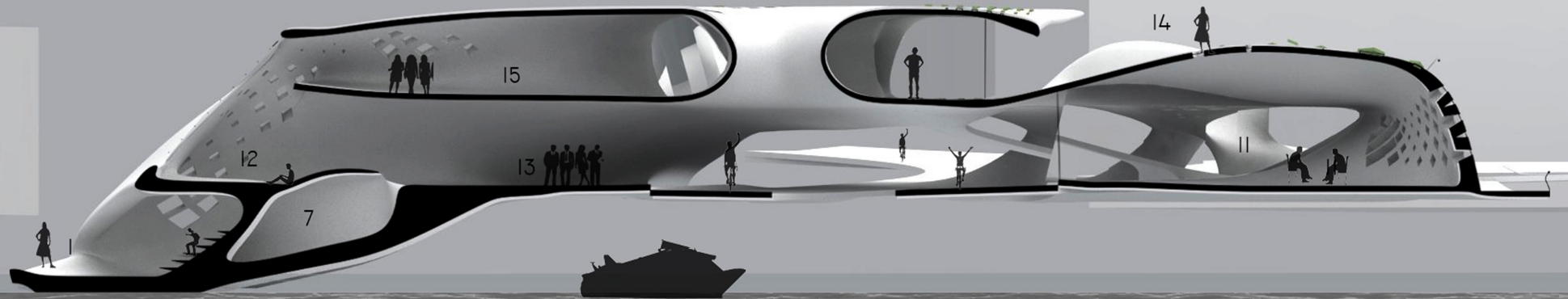


- 3. BICYCLE STORAGE
- 11. COFFEE BAR
- 14. PUBLIC ROOF TERRACE
- 15. RETAIL FLOOR

# SECTION A1

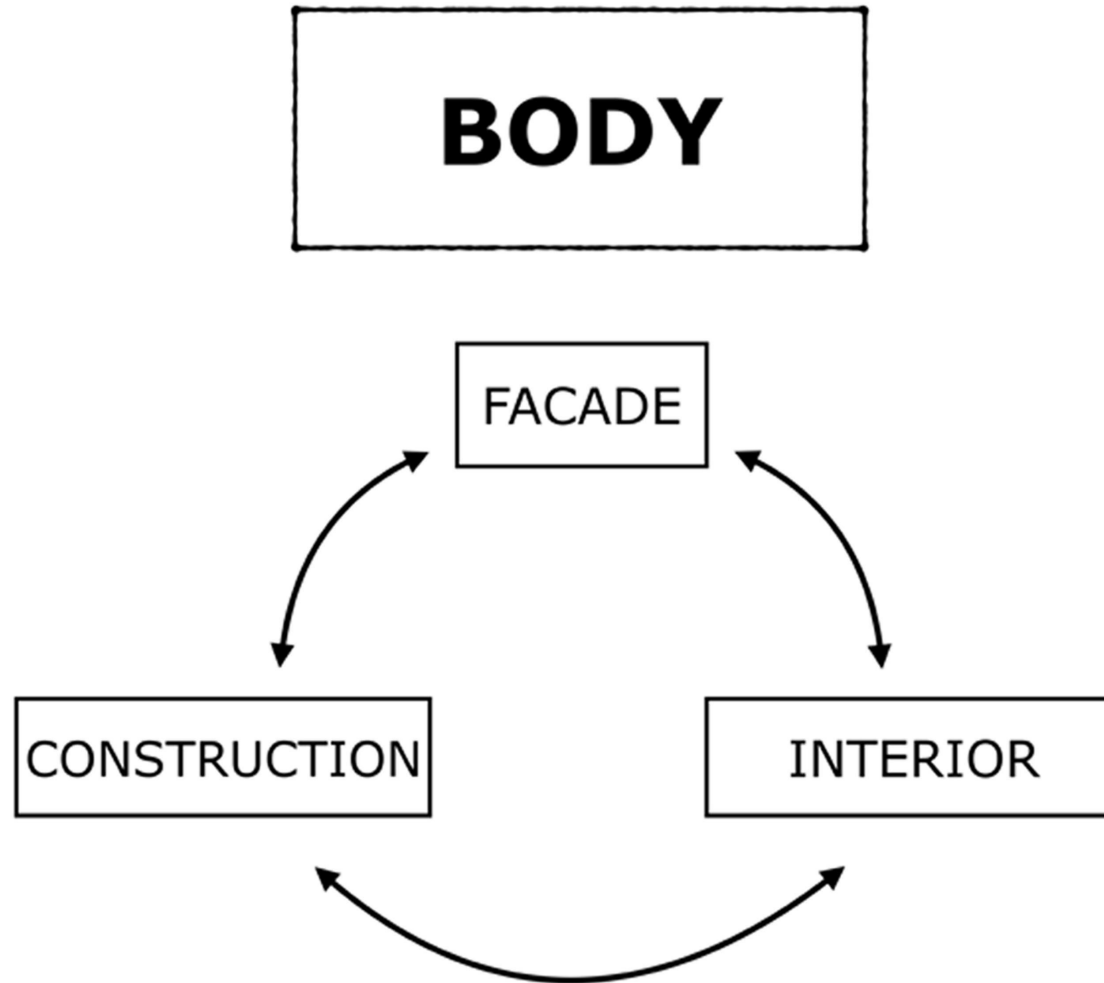


+5  
0  
-5



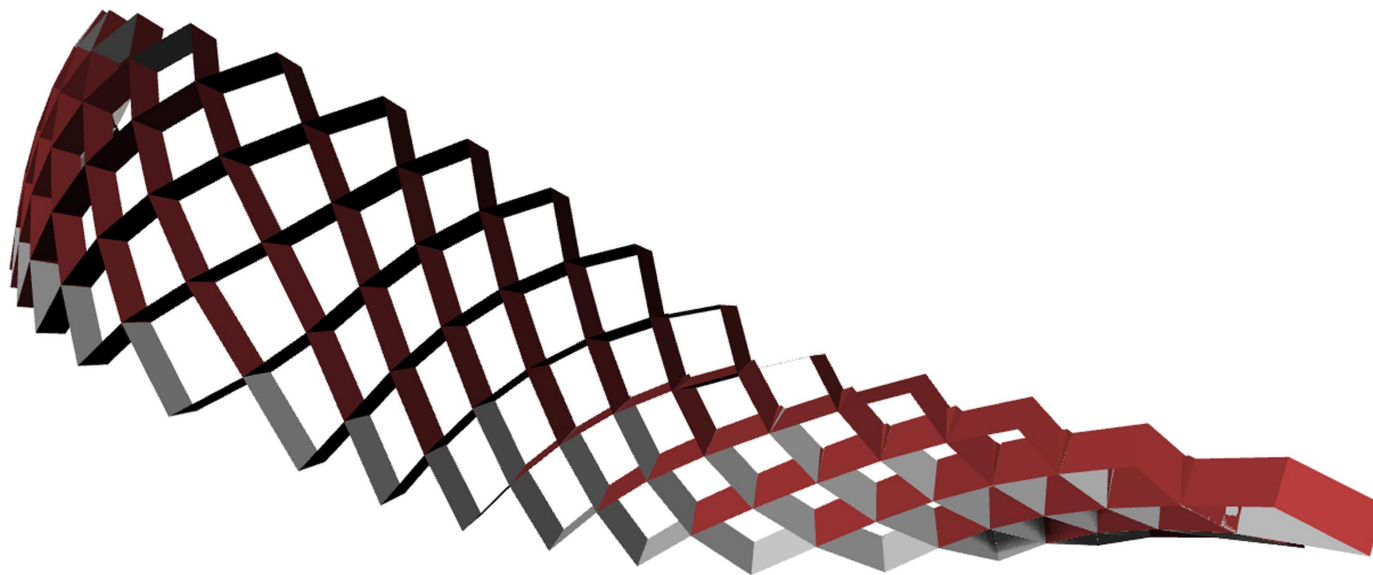
- 1. FERRY DOCK
- 7. TOILETS
- 11. COFFEE BAR
- 12. FERRY WAITING
- 13. HELPDESK
- 14. PUBLIC ROOF TERRACE
- 15. RETAIL FLOOR





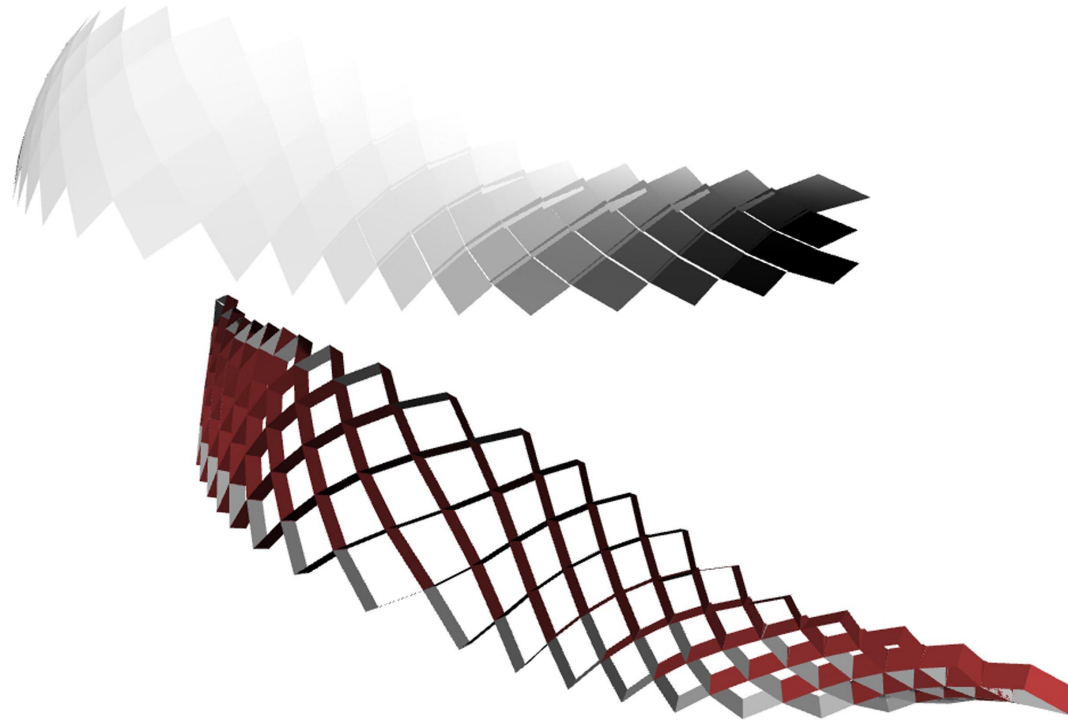
THE BODY WILL EVENTUALLY BE DESIGNED IN A SYSTEM WHICH WORKS TOGETHER WITH ALL ASPECTS

CONSTRUCTION + FACADE



METAL CONSTRUCTION SYSTEM

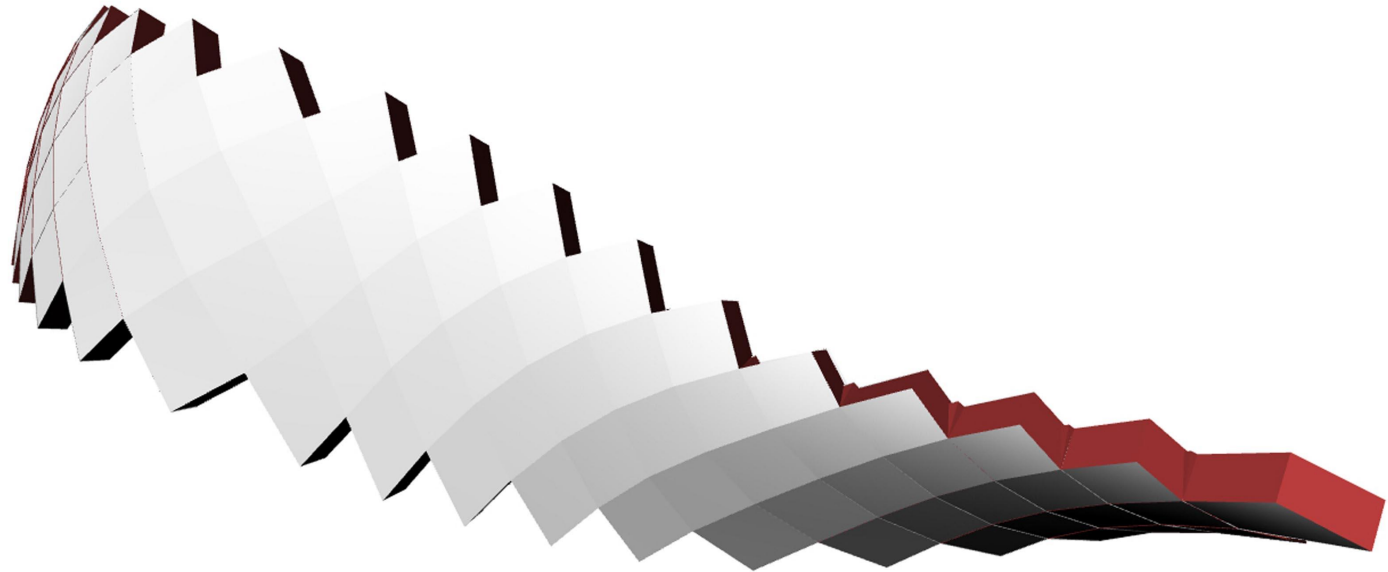
CONSTRUCTION + FACADE



ADDING PREFAB PANELS

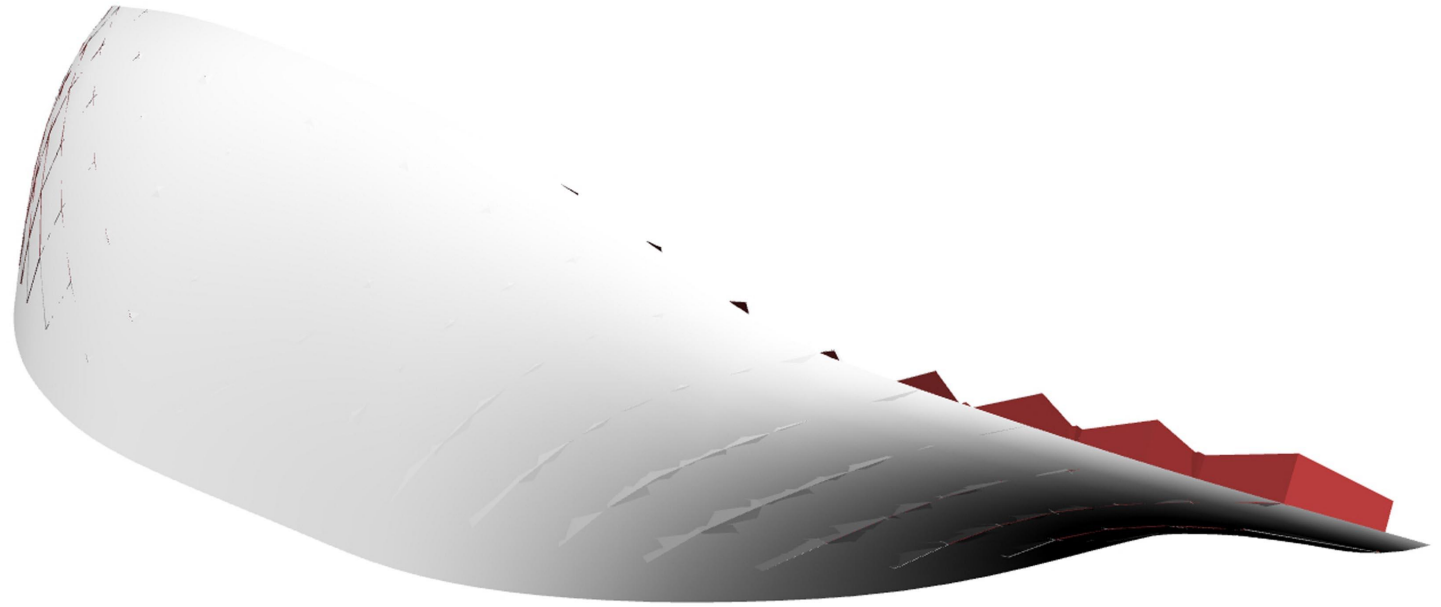


CONSTRUCTION + FACADE



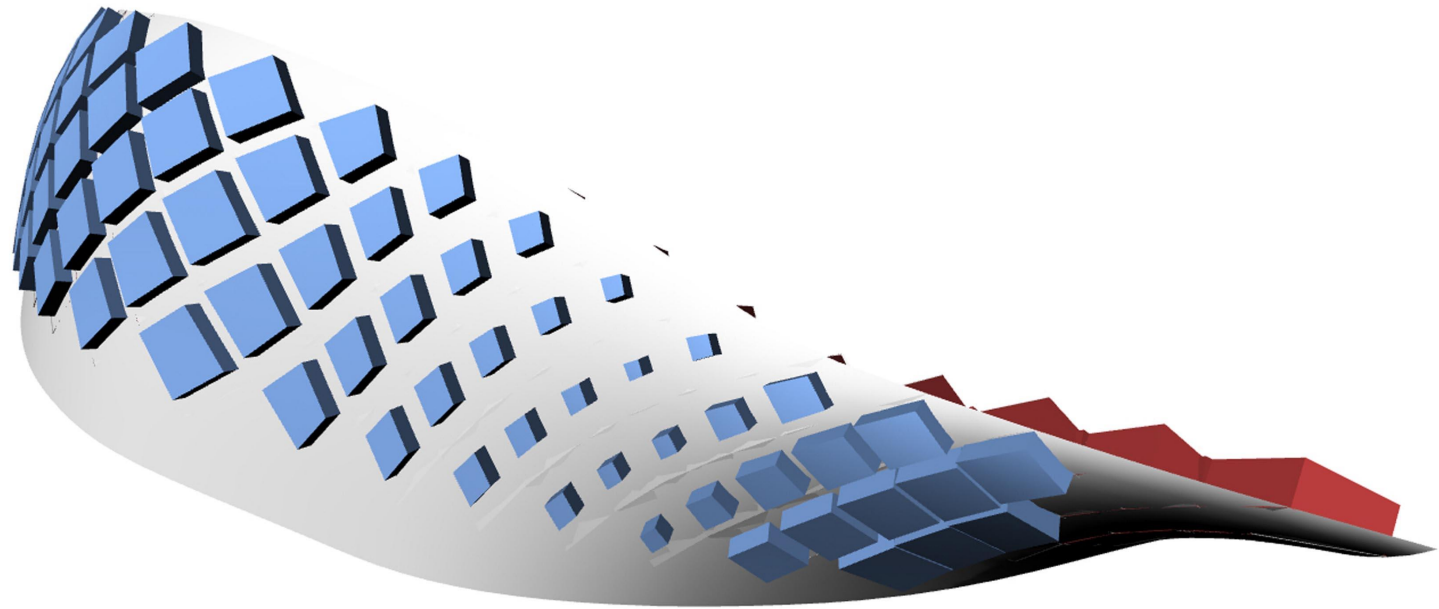
ADDING PREFAB PANELS

CONSTRUCTION + FACADE



ADDING PLASTER / INSULATION LAYER

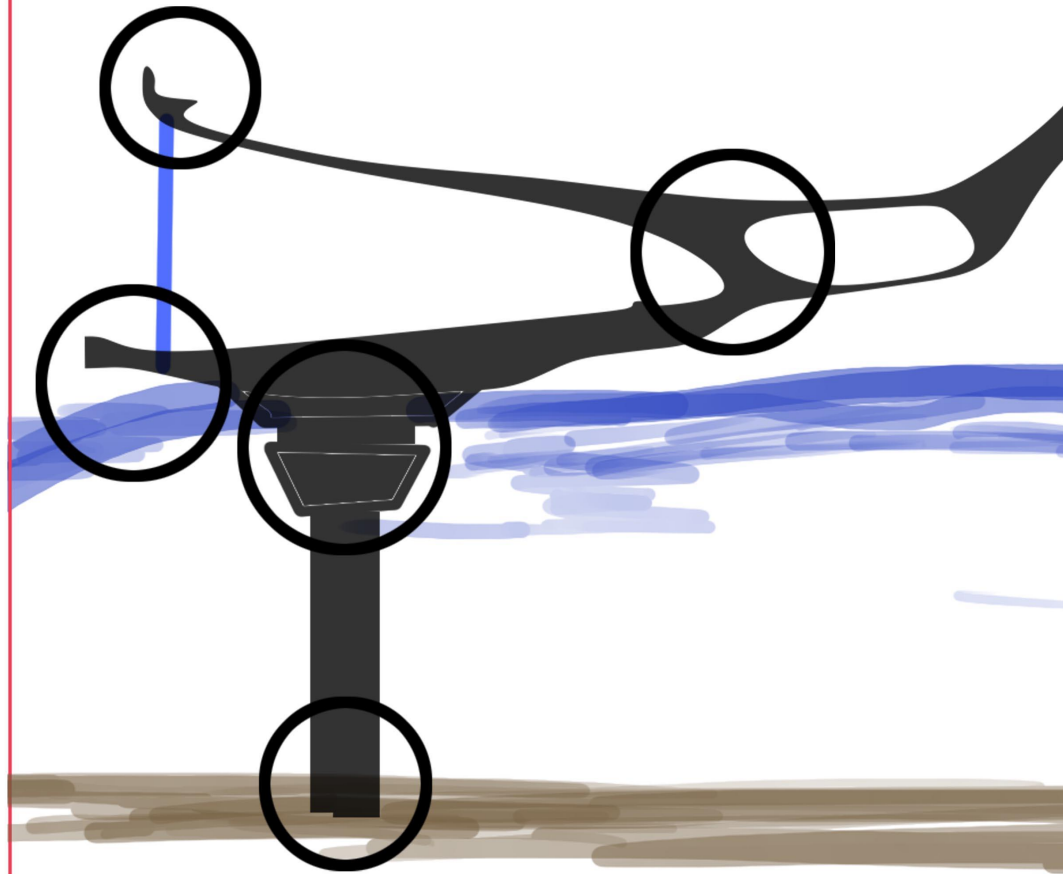
CONSTRUCTION + FACADE



IF THERE ARE OPENINGS, THEY ARE BASED ON THE MAIN GRID

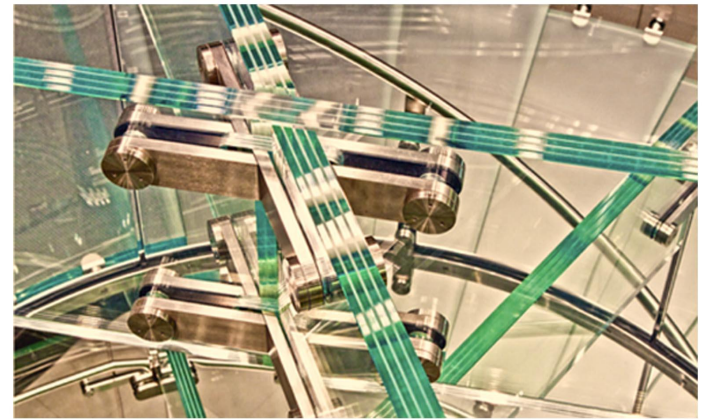


TO WORK OUT CONSTRUCTION DETAILS

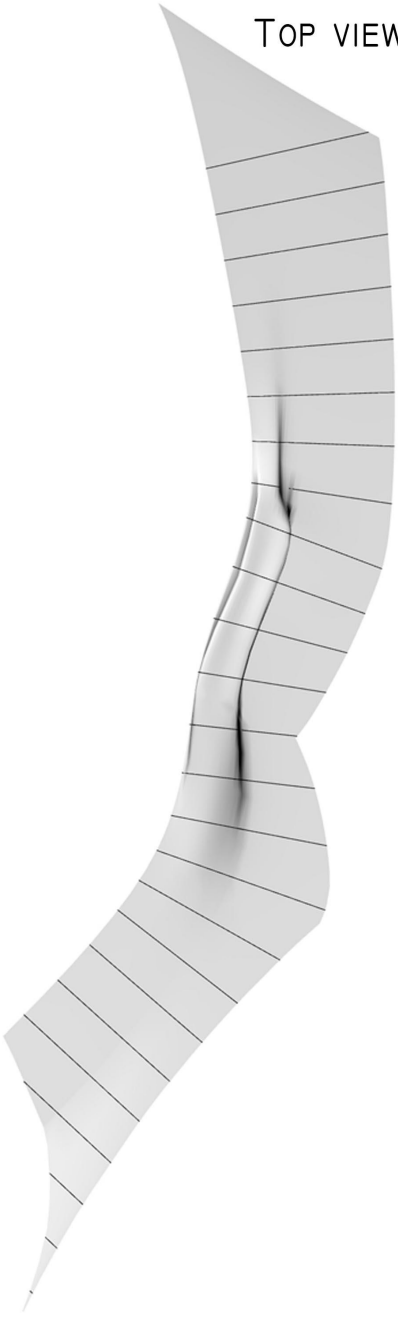




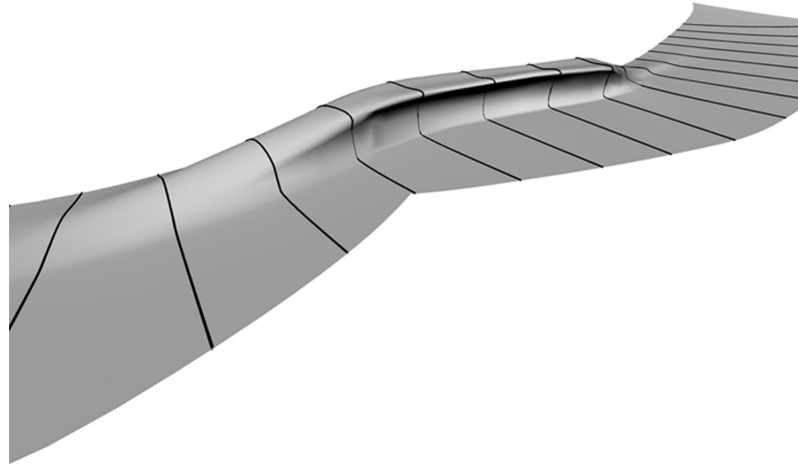
## CONSTRUCTION/ MATERIALISATION REFERENCES



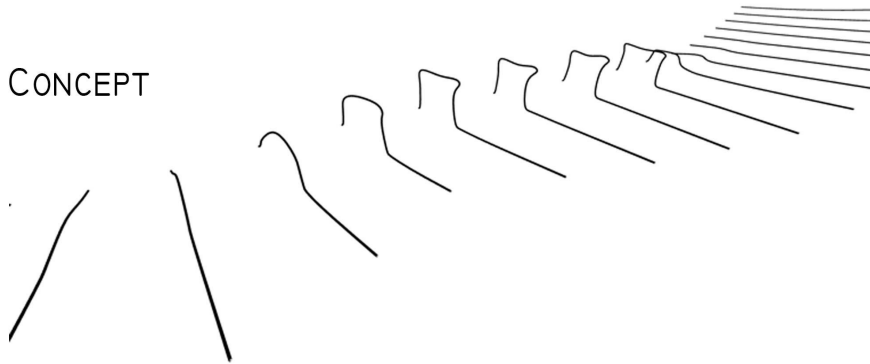
TOP VIEW



PERSPECTIVE



CONCEPT

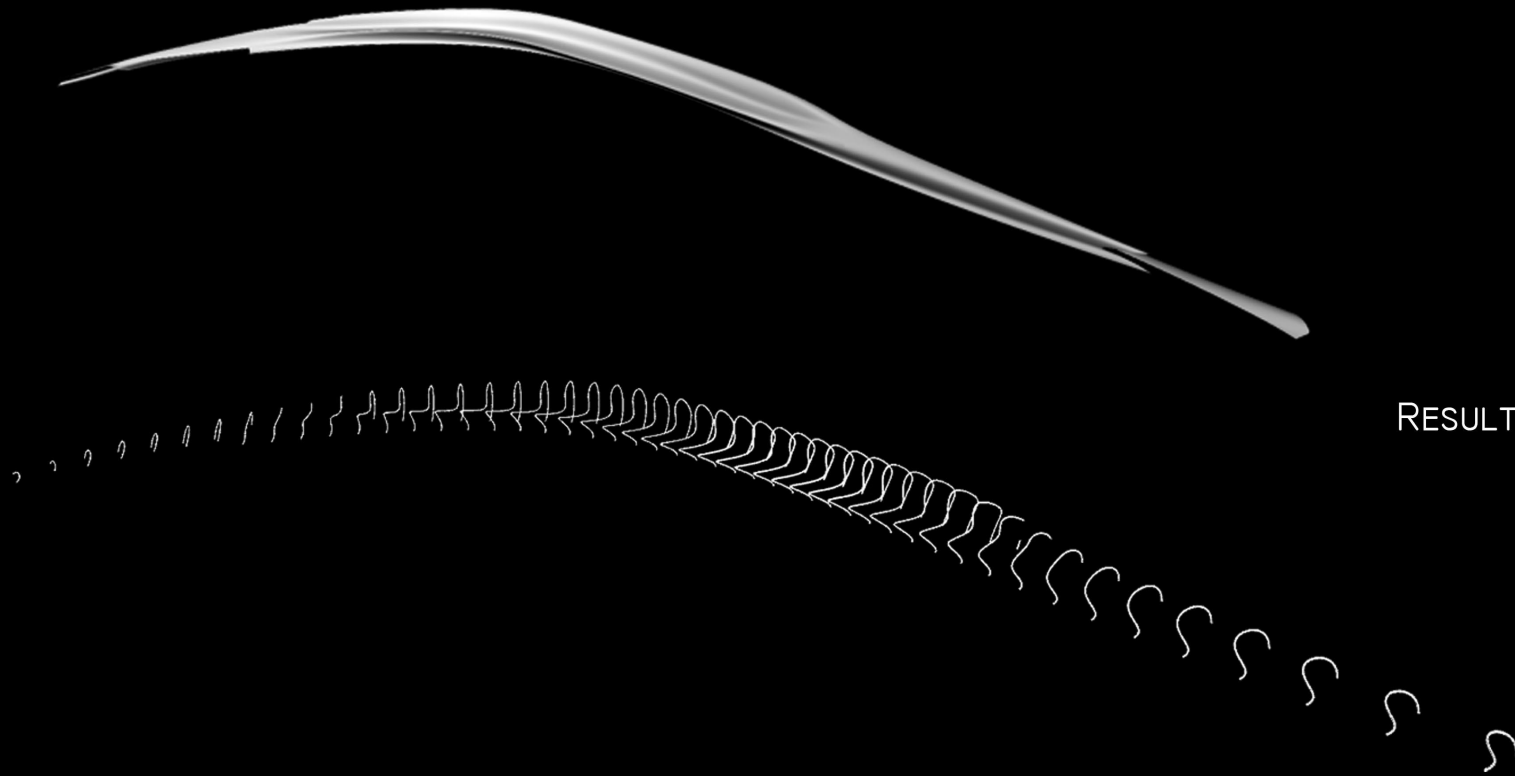


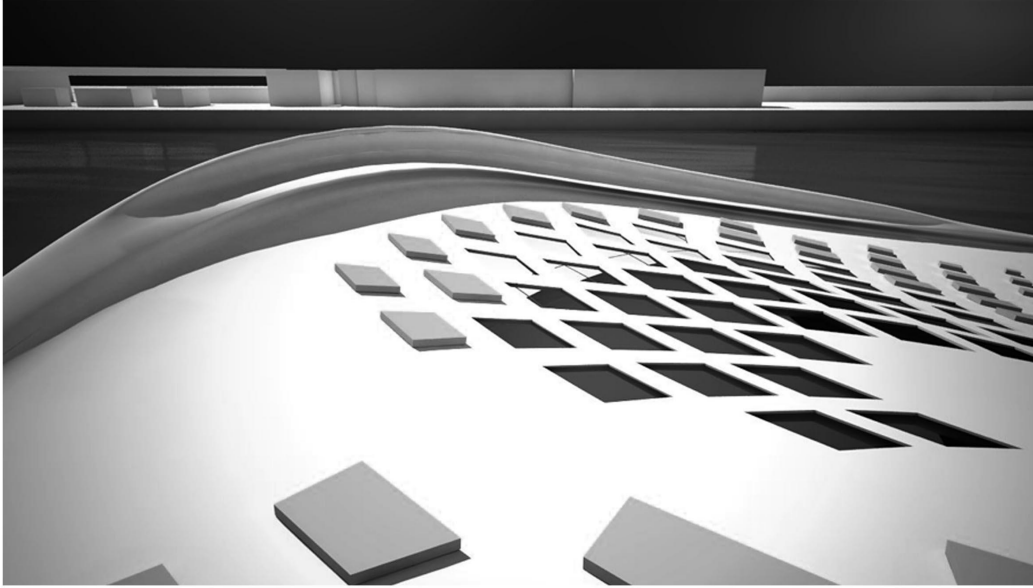


RAILING MORPHS INTO BENCH

RESULT

CONCEPT

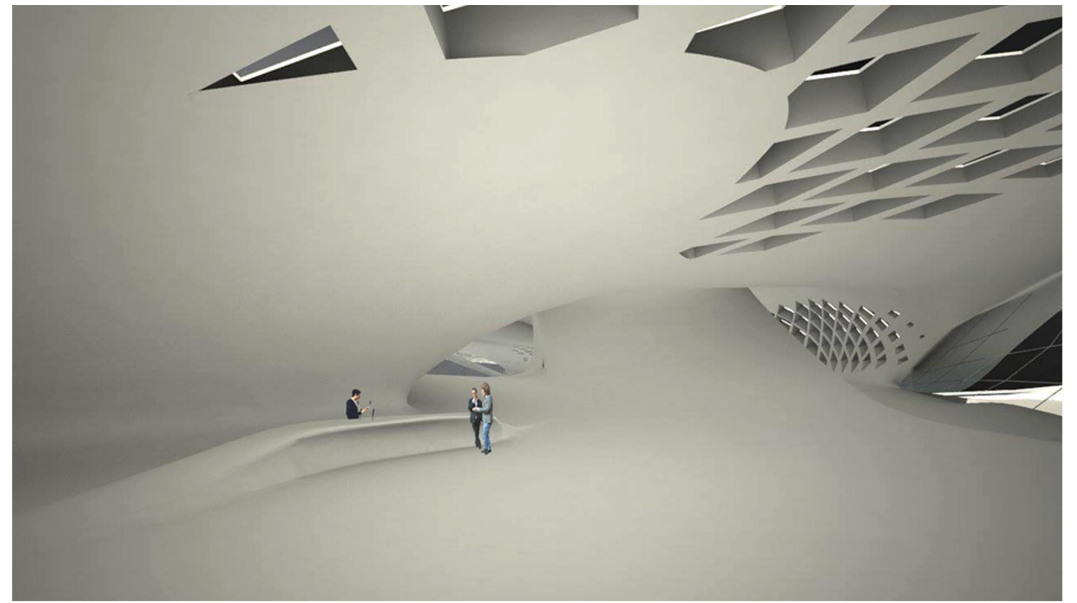
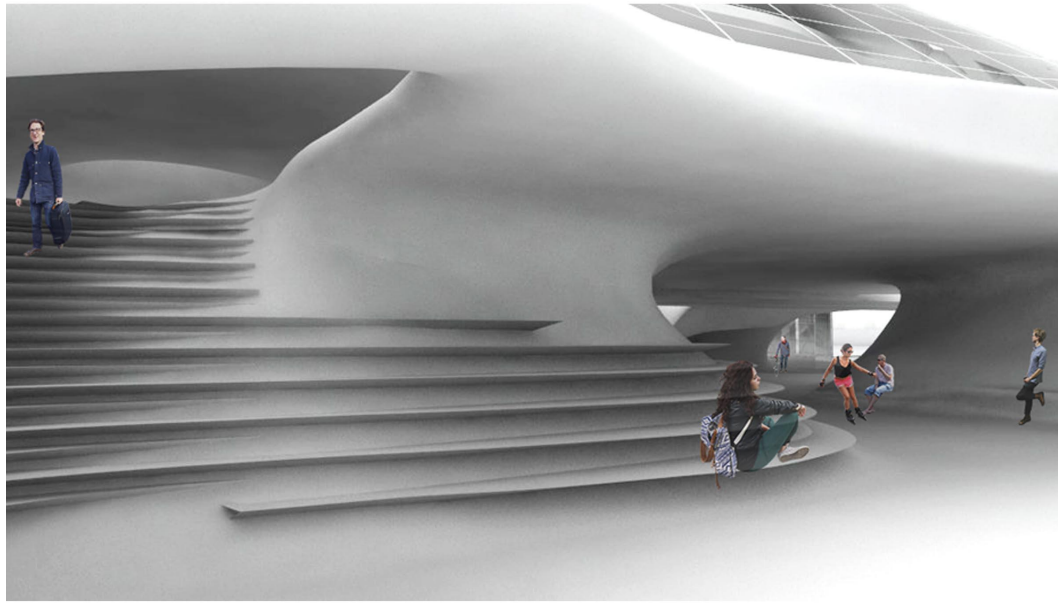




BENCH DISSOLVES INTO RAILING

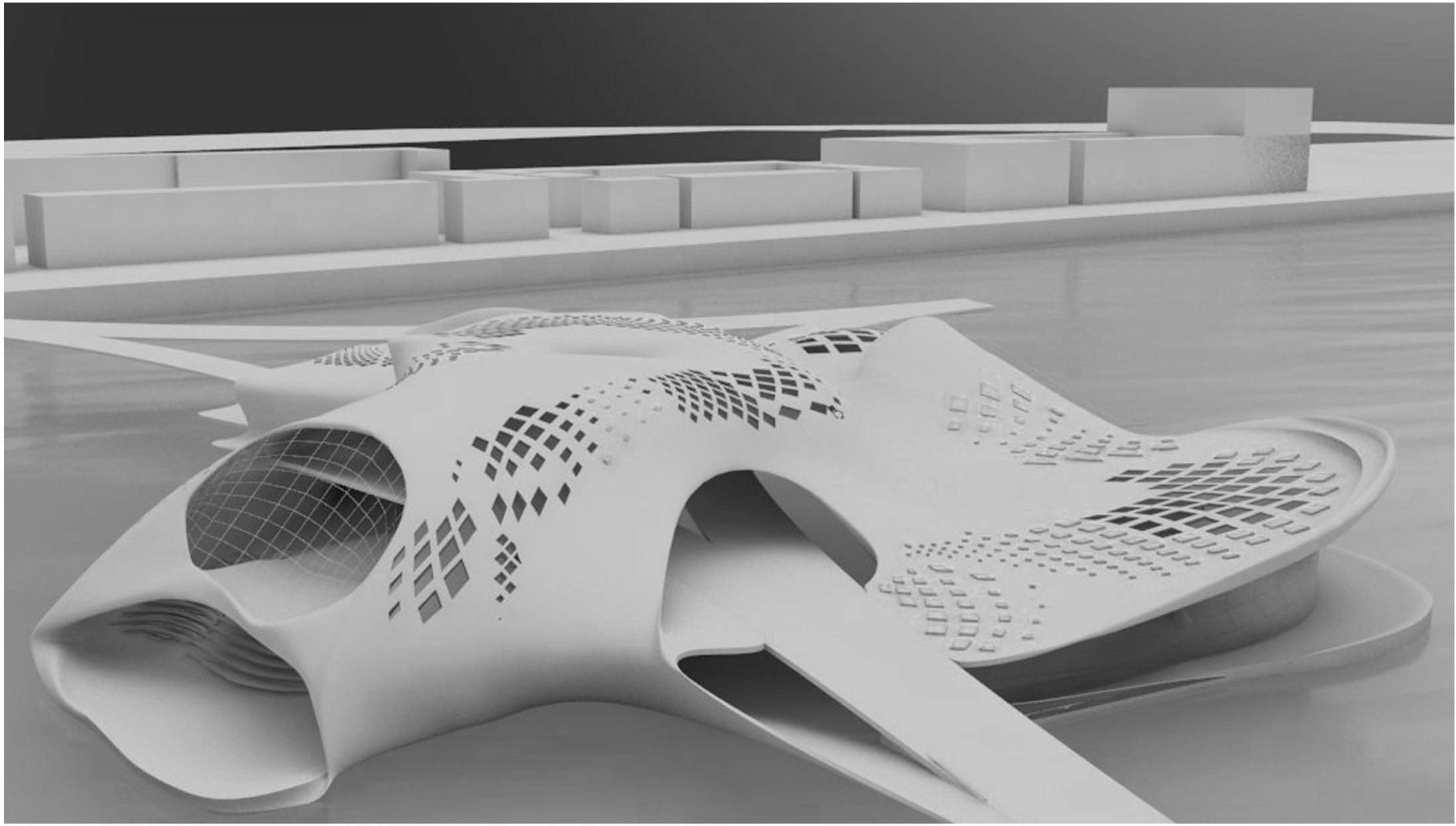


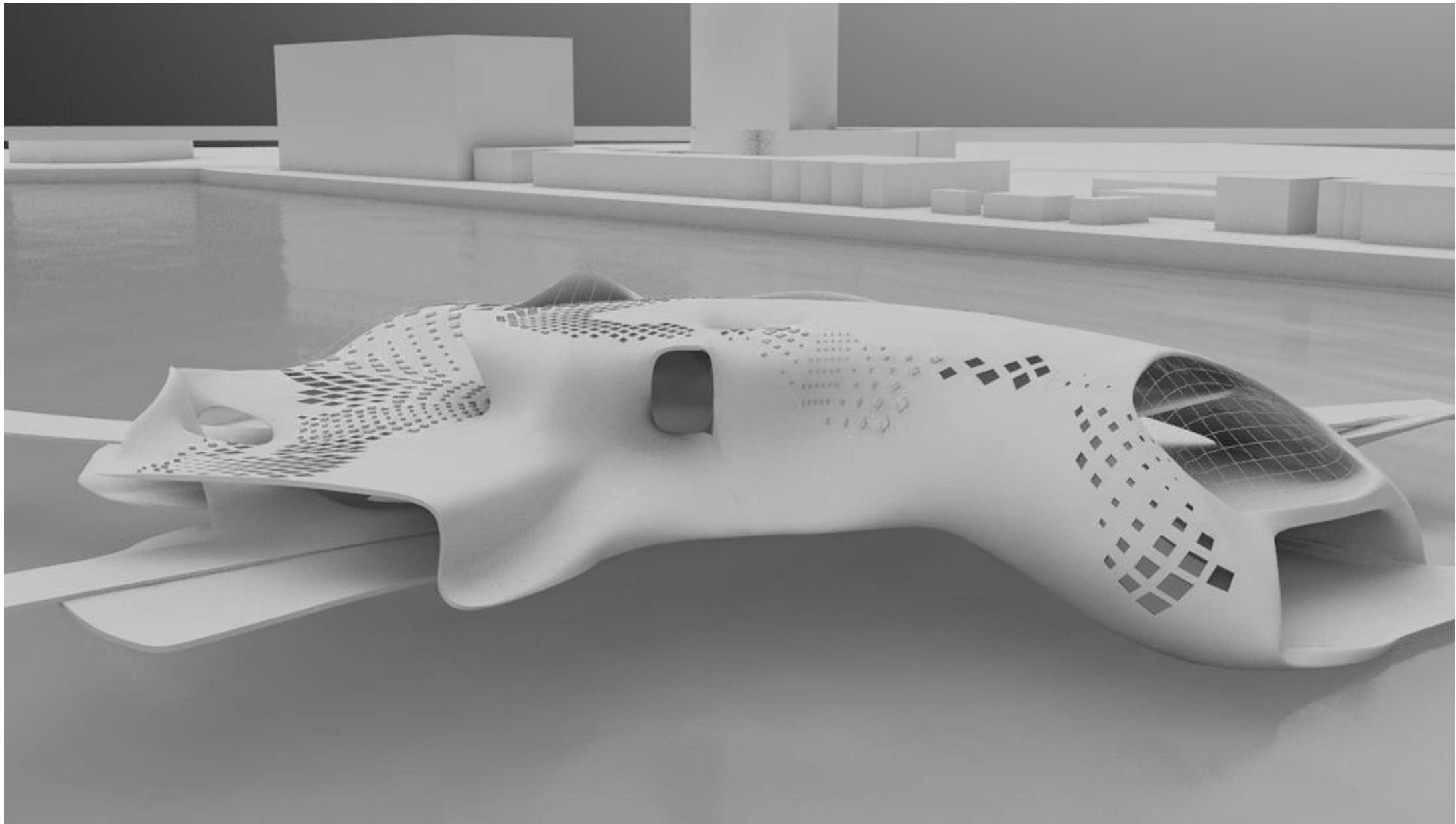
WATER TAXI LEANING INTO SEATING WALL













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