

ABRAHAM ARENA

A STADIUM IN THE DENSE URBAN GRID OF NEW YORK



P4 REFLECTION

- **SUMMARY OF THE PROJECT**

In 1811, commissioners designed a plan to develop Manhattan in a very efficient way of maximizing land value with a perpendicular network of streets and avenues. In 1854, the grid was fully constructed and the original land was hardly recognizable anymore. New York grew, got bigger and bigger, resulting in a metropolis where millions work and try to make the best of their life. The city is changing all the time, fitting contemporary times. In the project a visit to Manhattan, thorough investigations and discussions, resulted in suggestions for improvement that redesign the area. Motorways are redirected which creates space for a larger plot and thus space for a large, complex and multifunctional building. The developed building combines living, working, sports and leisure, connecting the adjacent areas and thus improving the quality of life for all inhabitants in the neighborhood.

- **RELATION BETWEEN RESEARCH AND DESIGN**

While walking in Manhattan finding your way seems easy; the outline of streets and avenues makes planning your route to any destination simple. Walkways are small, optically reducing the width of roads, even more emphasized by tall buildings on either side. Compared to Dutch standards the limited space for pedestrians and bicycles is striking. New Yorkers seem to take a taxi, drive a car or use the subway.

Although the rectangular pattern of streets makes the lay-out of the city straightforward, it is neither spectacular, nor intriguing. No small allies, winding curves or bends to discover a small hidden square, park or pond. This makes Manhattan completely different from most, organically grown, old European or Asian metropolises.

This rather typical grid is designed two centuries ago with a clear reason, and has extended throughout Manhattan. Striking however, is that irregularities of this grid lead to typical and remarkably interesting places. Examples are caused by Broadway, the old "Brede weg" which has been left in place for four centuries and does not cross all streets and avenues rectangularly but diagonally. Small parks and squares are resulting from this deviation of the grid. Other examples are Central Park, the green lungs of Manhattan, in sharp contrast to all polluting deviations caused by motorways, bridges, and tunnels (to New Jersey and Brooklyn). Finally, huge buildings create deviations of the original grid, simply because the size of the buildings are too large to fit a standard plot.

Whilst spending time in Manhattan observing the way New Yorkers live, walk and relax made me aware of the fact that it is not easy to exercise in downtown Manhattan, nor is it easy to lose weight or to enjoy parks and squares. Some areas (e.g. Hells kitchen/Kips bay) can be considered really polluted, unsafe or unwelcoming, and therefore not a particular nice place to find yourself.

- **THE RELATION BETWEEN GRADUATION TOPIC AND STUDIO TOPIC**

The studio topic of Complex projects 2020 is Midtown Manhattan. In this large area we as students have the opportunity to re-think the various areas. Hudson Yards is the main denominator of the area allocated to our group of ten. Since this area is in transition from a rather desolated region of midtown Manhattan into a booming district full of energy, we named the quadrant "Transitional Yards".

Within Transitional Yards the Lincoln tunnel connects New Jersey with New York, giving rise to lots of traffic, motorways, ramps, parking plots for buses, concrete and dirt; lots of noise, pollution and dust make the area rather unpleasant. The bus terminal and the connecting subway lines ensure that the area is used by lots of commuting people. However, an easy east-west connection is missing. This is caused by the abundance of traffic. The Highline, an old train-track very successfully upgraded by the Dutch horticultural expert Piet Oudolf, may seem close by, however an actual connection is missing.

The new buildings at the shores of Hudson river, Hudson Yards, are impressive in size and design. These buildings give an architectural boost to this part of Manhattan. This contrasts with the abovementioned concrete paved area, filled with cars, buses and smog. This defines both the challenge and the opportunity for the present research.

- **RESEARCH METHOD AND APPROACH CHOSEN BY THE STUDENT IN RELATION TO THE GRADUATION STUDIO**

The Manhattan grid provides positive aspects, as discussed earlier. However, this grid also has its limitations. Thus the research question is; What is the potential of grid irregularities in Manhattan?

Can a vicinity be improved when the grid is changed? There are two possibilities to make a change in the grid; increase the plot by merging two (or more of them) or reduce the plotsize by 'breaking' them with a road.

A smaller plot will lead to more streets per square mile, possibly narrow or winding alleys, and will presumably result in concomitant smaller buildings. Although less predictable and therefore potentially more exciting, this change may not be ideal when considering the high value of a square meter of land in Midtown Manhattan.

Research (research booklet: Transtional Yards) showed that changing the grid by increasing the plot size offers the possibility to create larger buildings, which has the advantage of more building per square meter. A similar response to the lack of available space is seen in Manhattan air-rights. In the Manhattan air-rights, unused height of your neighbor's plot may be used to elevate any adjacent structure, creating more 'building' and thereby space in the vertical range.

Whilst observing daily life in Manhattan, a few topics came to mind; the gross obesity of many New Yorkers, the limited options to exercise (and lose weight), the impossibility to perform sports or participate into leisure and relaxing activities. These observations led to a program fitting these contemporary times. A full-sized soccer pitch combined with a wide range of in- and outdoor sport facilities, a park, and a multifunctional building to live, work and shop in.

During our research towards Transitional Yards we noticed the absence of a comfortable east-west route which could connect the new mega buildings at Hudson Yards with the Garment District and ultimately Times Square. The Highline is a success and demonstrates the need of clever improvements of the surroundings. The Highline enables walking straight through Manhattan, but at the same time having the feeling of being outdoor caused by trees, bushes and flowers. Nowadays, city inhabitants prefer vegetation and leisure-space to raise their children and improve their stressful life. Whilst urbanization has led to the abundant existence of concrete, roads and cars.

In conclusion, my research demonstrates the need of living and working in an area full of options to leisure and to perform in- and outdoor sports. An area where healthy food and possibilities for relaxation co-exist. Where good public transport results in less parked cars, where neighboring vicinities can be reached easily by foot, without inhaling polluted air from the massive amount of trucks and commuting cars coming from and going to New Jersey.

To achieve all of the above mentioned a standard Manhattan grid is limiting the multifunctional building that needs to facilitate all aspects. Therefore, I decided to enlarge the plot size and to create a building that comprises a full sized soccer pitch together with in- and outdoor sport facilities to improve the wellbeing of people working and living in the new building or the surrounding area.

This arena can also house concerts, music festivals and outdoor public activities. The grid is redesigned to a plot that invites for an easy stroll to the adjacent areas. Traffic will be minimized through a more efficient layout of the roads.

A newly developed park will connect this sports-arena with the New Port Authority Bus Terminal to the north, a walkway opens the park to Hudson Yards. The irregularity of the grid will force pedestrians to reroute their direction, amaze themselves at activities done by others, which will stimulate physical activities for all around.

- **RELATION BETWEEN THE GRADUATION PROJECT AND THE WIDER SOCIAL, PROFESSIONAL, AND SCIENTIFIC RELEVANCE**

We started as individuals in pre-corona times researching an area 6000km away from Delft. From distance we dug into hard data; facts, figures and diagrams were brought together to prepare for the trip to New York. In New York we lived together for 10 days, wandering (and wondering) around and were both amazed and puzzled by what we saw and noticed. Gradually, we started to work more and more together, discussed issues and emerged ideas. The coaching provided by Hrvoje Smidihen worked out very well. We left Manhattan as an international team of 10 players, all together forming the team of "Transitional Yards". Back home we worked out what we had noticed, combined this with the hard data which in the end resulted in our research booklet.

This graduation project, a full 1 year project, consumes a considerable amount of time. Prior or just after starting, one may find themself eager to commence designing and building a worthwhile structure, immediately focusing on the aspect of creation and of designing. However, the complete approach of visiting Manhattan, getting to know the area and its surroundings (e.g. the way the infrastructure works, trying to understand the limitations of the existing structures) has shown to be needed. It is research first and

design much later. Conclusions of this research can be taken into account and are discussed with the entire group. Ideas are thoroughly exchanged in order to get better. All in all, possible improvements for the district appear by working together. This also happens in the designing phase, where projects have to collaborate, thereby using the qualities of each other's projects to create a better environment. We ended up with 3 different districts within Transitional Yards. Abraham Arena is located in New Lincoln, responsible for Lincoln Park together with Lincoln Flux, and the New Port Authority Bus Terminal. Every week the work got more specific, but the research design was never out of sight.

We started with a wide horizon and focused every week. We kept our research questions alive, co-operated with our team, kept in contact by mail, discussion groups and had private email discussions with the supporting team. During Isolation, because of Covid-19, the group spirit got a bit lost. Hrvoje helped by suggesting to create a weekly paper ("the Transitional Daily") where weekly information was shared, which improved the quality of our work as well as our team-spirit during this unusual situation.

- **ETHICAL ISSUES AND DILEMMAS YOU MAY HAVE ENCOUNTERED DURING GRADUATION**

I have not encountered any major ethical issue or dilemmas. However, while working with a number of foreign, both European and non-European students, differences in culture become apparent and give rise to discussions. This is considered not only worthwhile and very useful in my future professional career, but also gave opportunities for numerous improvements of ideas and plans.

Finally. The Covid-19 crisis stroke the world and withheld us from meetings at the University in Delft, during the final period of our master-studies. I did miss the non-virtual contacts that give spirit to ideas and make groupwork more fun. Bad luck, but in the end, it did not keep us from sharing knowledge internationally and dealing with disappointments. We tried to enjoy this final part of our studies as much as we could, resulting in a very well perceived period of life.