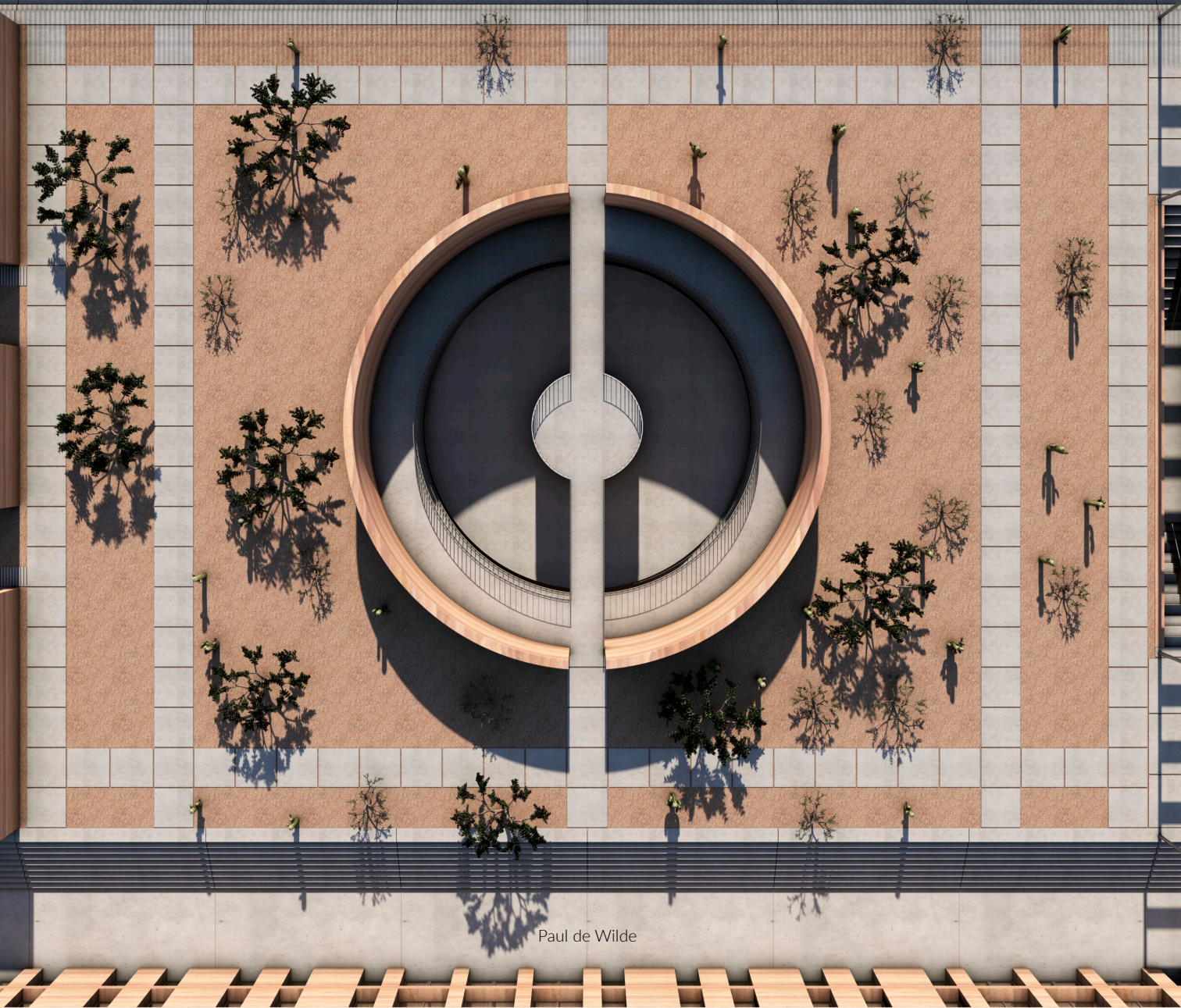


BORDER PRISONERS

Rethinking prison typology in the U.S. - Mexican border condition



Paul de Wilde

BORDER PRISONERS

Rethinking prison typology in the U.S. - Mexican border condition

research & design

TU Delft

Architecture and the Built Environment

2016 | 2017

Paul de Wilde

“The degree of civilization in a society can be judged by entering its prisons.”

Fyodor Dostoyevsky





THE BORDER REGION



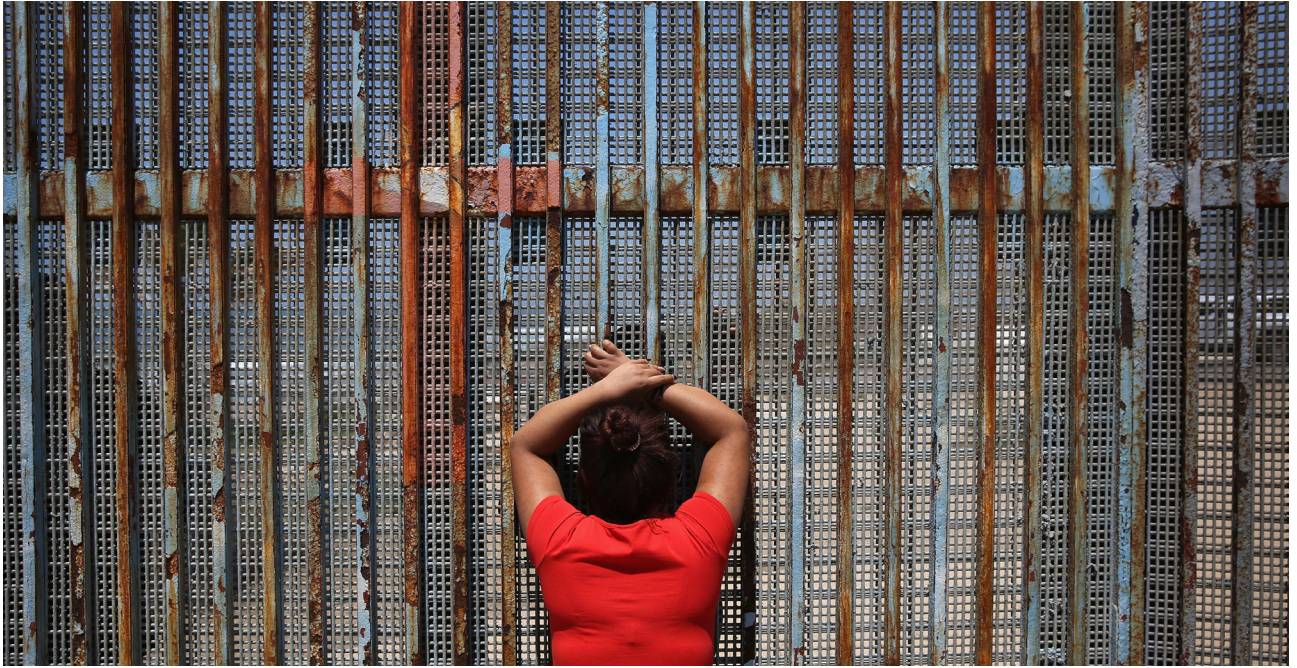
The border between Mexico and the U.S. stretches 3200 kilometres from the Pacific to the Atlantic Ocean. The course of this border is defined by a linear Western part, which is the result of a treaty that was signed after the U.S. - Mexican War in 1848. From roughly halfway towards the East, the course is defined by the river Rio Grande.

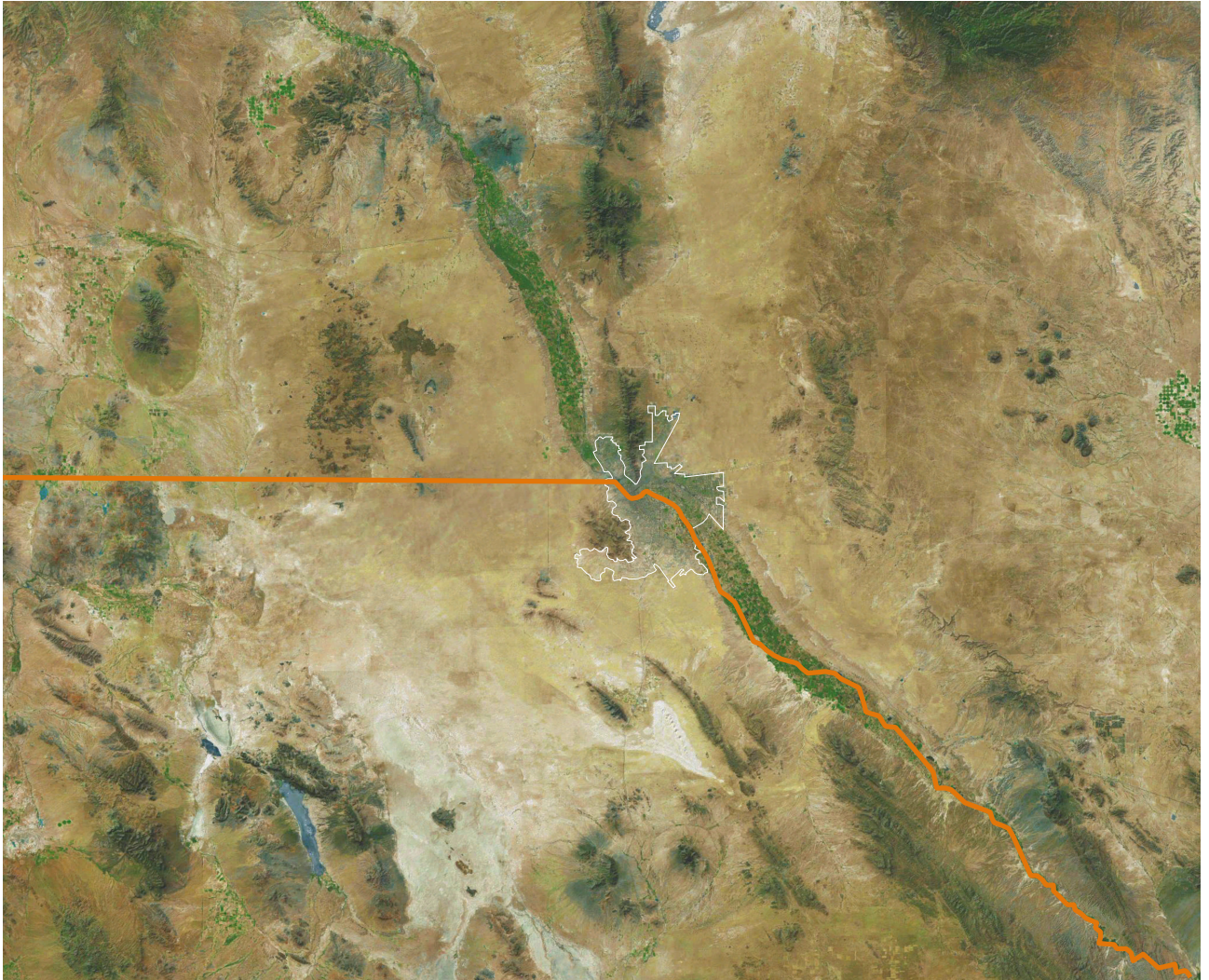
Around 1200 kilometres of this border consist of a physical barrier that separates the countries with a fence, a wall or barricades. In addition many of these areas are secured by scanners, drones or guards. There are just 48 places where people can legally cross if they have the appropriate documents. In general, Americans only need a passport

to cross. Mexicans however, also need a visa or a green card, which is impossible to obtain for the majority of the Mexicans. The remaining unguarded 2000 kilometres of the border is nearly impossible to cross, because it is either the Rio Grande or a scorching hot desert.









The border does not only separate; it also attracts. The first reason for this is the large cultural overlap between the countries, which is primarily due to the fact that Mexico used to be much larger before the U.S. - Mexican war. The second reason why the border attracts, is the North American Free Trade Agreement. This trade agreement allows for tax free shipping between Canada, the U.S. and Mexico. As a result, many U.S. companies have settled in cities along the

border. They ship their raw materials just over the border, have them assembled for 1/6th of the wages in the U.S., often ship them back the same day and then distribute them all over the world. Millions of people on both sides of the border rely on this system. Therefore NAFTA has created an economic dependency of one another that allows cities to grow on both sides of the border; so called twin cities. El Paso - Ciudad Juárez is one of these cities. The city is located at

a pass between two mountain ridges, hence the name El Paso. It is right on the point where the border changes from the linear to the irregular path of the Rio Grande. After a series of floods - that changed the course of the river in and therewith the course of the border - the river was canalized to fix the location of the border. In addition several lines of fence were added. Today, the border is a 250 meters wide scar that cuts right through the city.



U.S. PRISON ISSUES

THE LAND OF THE FREE?

Another aspect that is inherently related to the border is the smuggle of drugs. It started with the *Prohibition* in the United States in the 1920s. This was a constitutional ban on the production, transportation and sales of alcohol. Because alcohol remained legal in Mexico this started a large scale smuggle from Mexico to the U.S. These were extremely violent years.

In the 1960s the smuggle shifted to drugs. The associated violence and drug abuse had such a big impact on society that Richard Nixon declared *The War on Drugs* in 1971. This meant further reinforcement of the border, stricter laws and enforcement of them. The result of this was an explosion of the amount of prisoners. In 30 years the number of prisoners per capita sky-rocketed by 500%. Today nearly 1% of the Americans

is in prison, which is by far the most of any country in the world (see the graphs on page 12 and 16).

Under Nixon the focus of imprisonment changed from rehabilitation to punishment and prisons got much tougher. Systematic abuse, beatings, prolonged isolation and lack of medical care truly made U.S. prisons among the worst in the world. The situation has not improved since then, on the contrary; it is getting progressively worse.

In the 1980s private prisons started to emerge. These are companies that aim to make a profit by running a prison. The method of punishment in these prisons is usually labor. Many multinational corporations like IBM and Boeing produce inside these prisons for wages as low as 20 cents an hour. This is a very sinister

and immoral development because it becomes financially interesting to put people in prison and to keep them there.

In addition, the U.S. prison system is coping with racial inequality. There are relatively six times more black prisoners than white prisoners (see page 18) and one in three black Americans will be in prison at some point in their lives. With the prison labor concept in mind, it is not surprising that the U.S. prison system is referred to as the reinvention of slavery.

It is highly unlikely this situation will improve under *law and order* president Donald Trump. This is confirmed by the fact that the stock value of the largest private prison corporation CoreCivic went up by 43 percent the day that Trump got elected and another 100 percent in the two months after that.

prisoners per 100,000 inhabitants

500
400
300
200
100
0

1880

1890

1900

1910

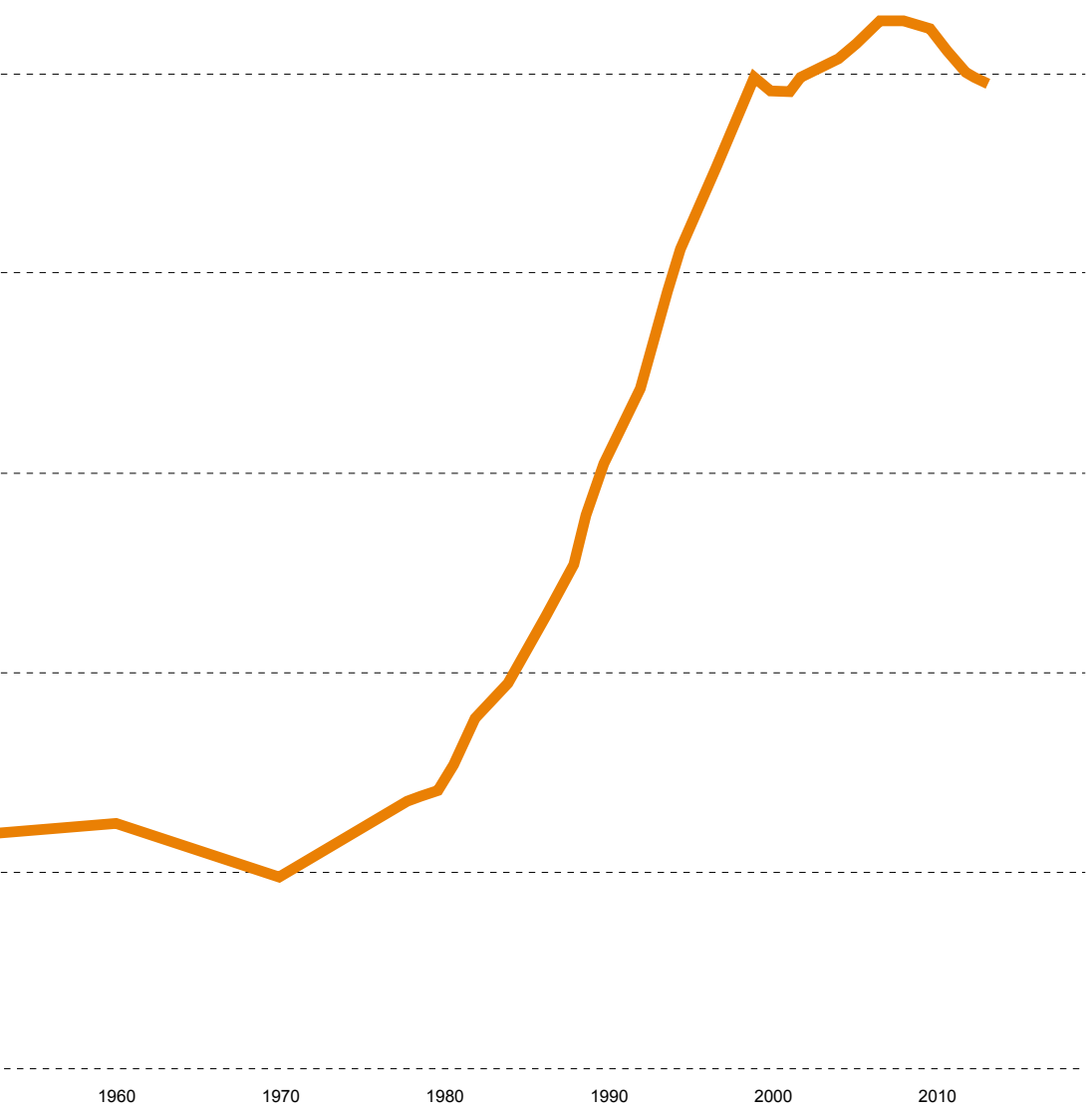
1920

1930

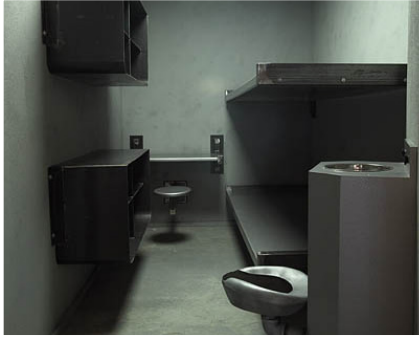
1940

1950



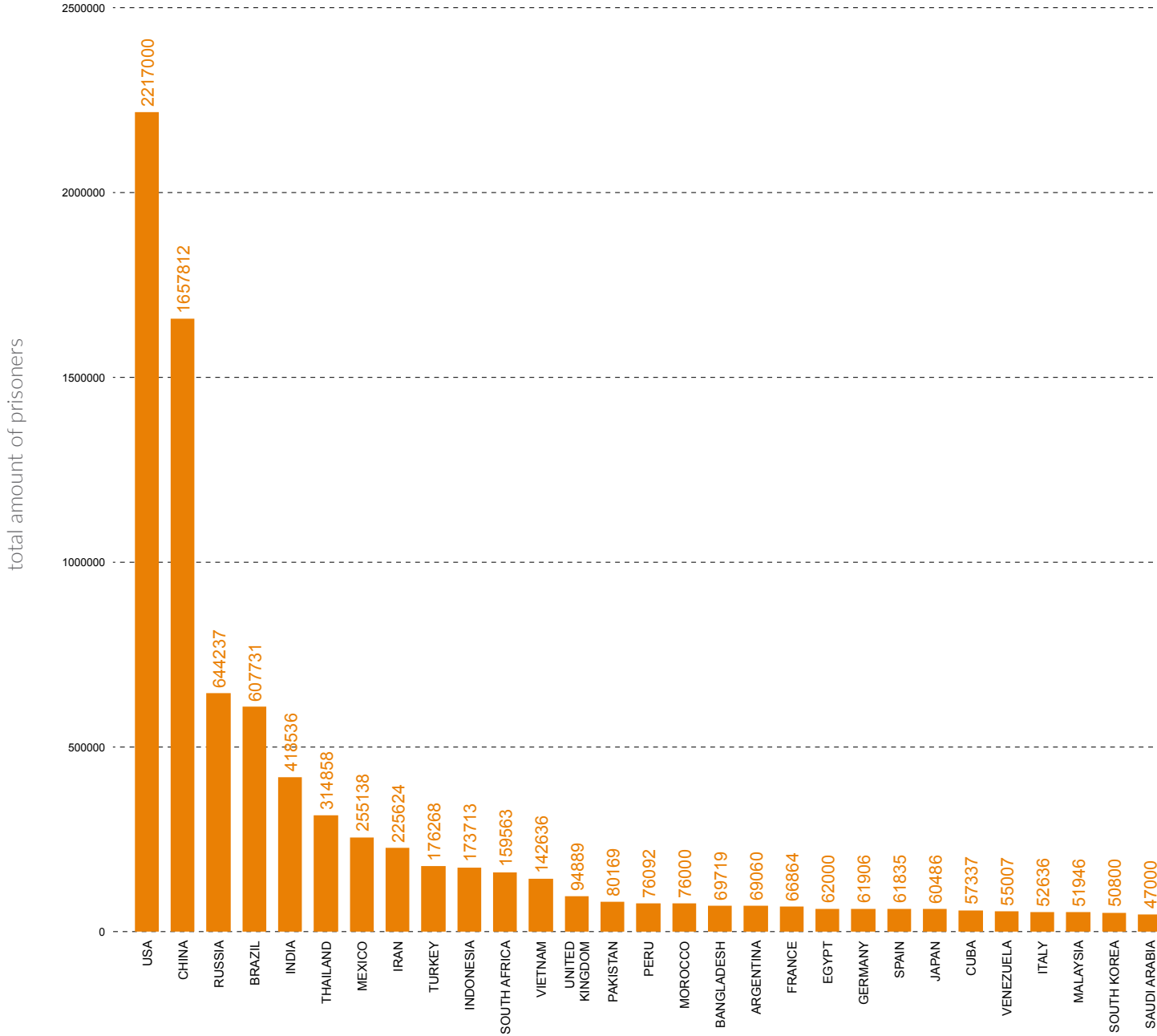


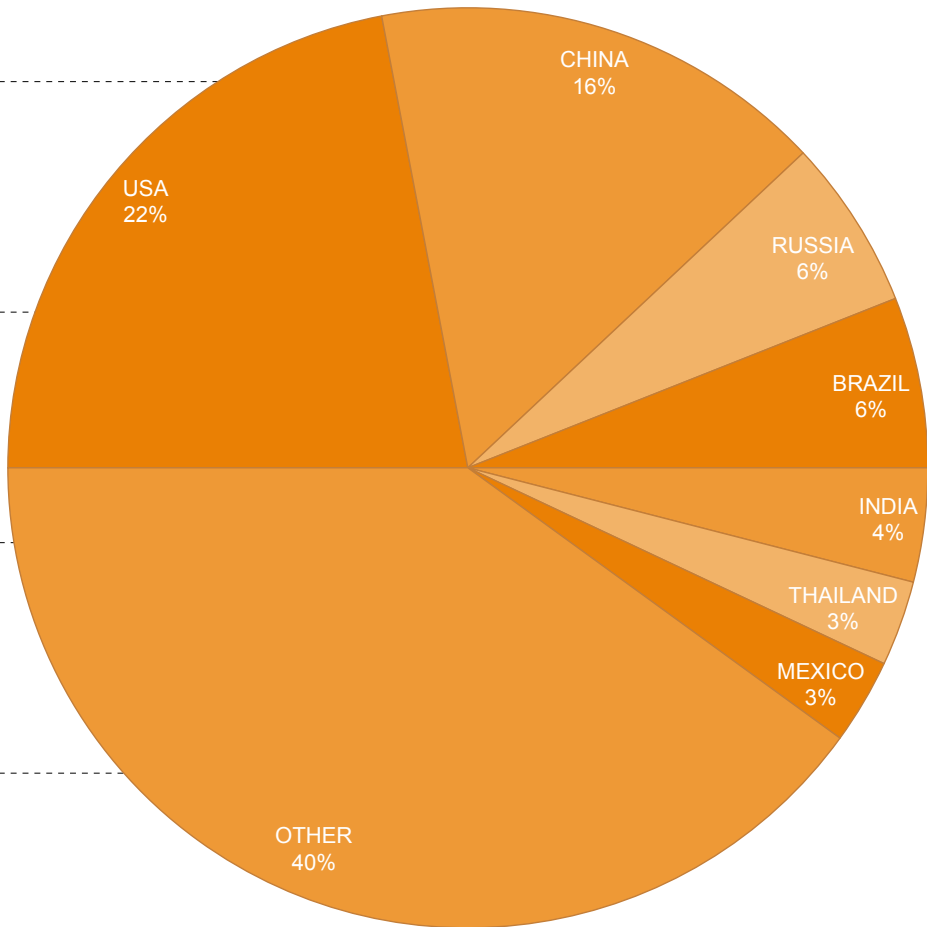
500% MORE PRISONERS PER CAPITA IN 30 YEARS!



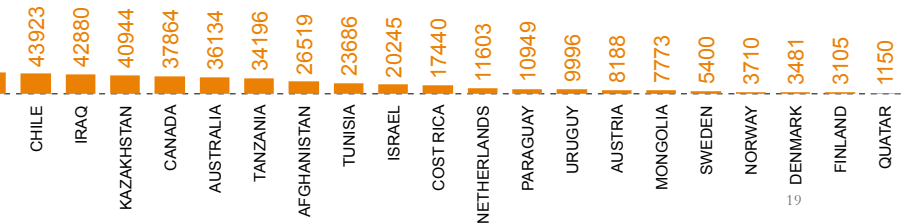


THE U.S. HOLDS **22%** OF ALL THE PRISONERS WORLDWIDE

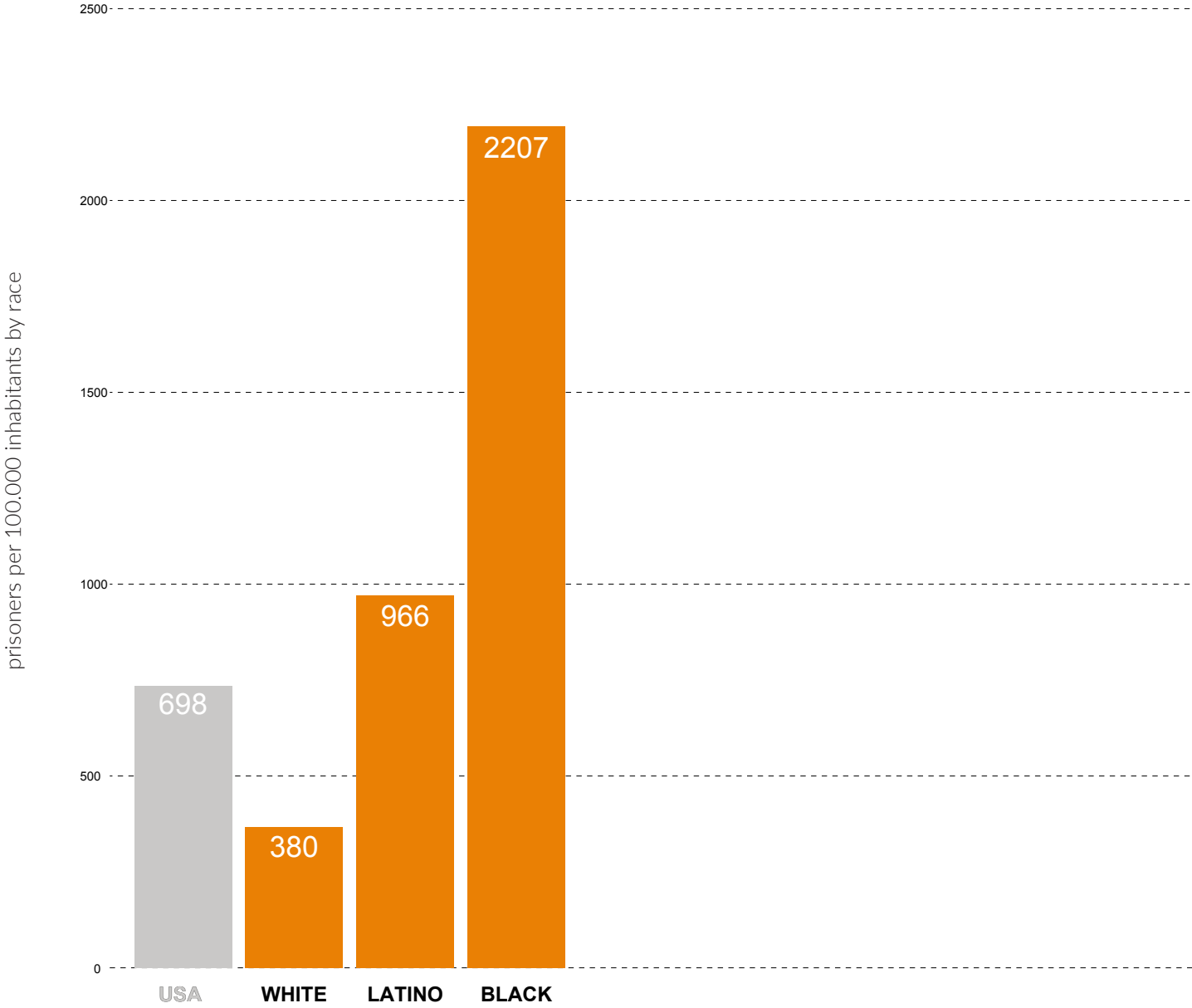




BUT MAKES
UP JUST
4%
OF THE TOTAL
WORLD POPULATION



SIX TIMES MORE **BLACK** PRISONERS THAN **WHITE** PRISONERS





BLACK AMERICANS WILL BE IN PRISON AT SOME POINT IN THEIR LIVES



MEXICAN PRISON ISSUES

CORRUPTION AND DRUGS

The Mexican prison situation is not too bright either. Almost the entire country revolves around the drug market with the U.S. as its primary customer. This is such a profitable business that it has society wide control. It corrupts politics, the military, the police and prisons. The fact that El Chapo managed to escape prison twice, is precedental for the deeply rooted problem of corruption and drugs. The drug cartels that run the cities, also run the prisons. Rivaling gangs often end up in prison riots. Especially because over half of the country's prisons are

overcrowded; there are 60,000 more prisoners than there are places available. This overcrowding, gang rivalry and the corruption make Mexican prisons ticking time bombs; they are among the most violent in the world. Between 2010 and 2013, 570 people have died in conflicts.

The Mexican government acknowledges these problems and is trying to improve the situation. Recently the senate approved a prison reform bill that prohibits the use of torture and other cruel, inhuman or degrading disciplinary measures, including

confinement in cells without light and ventilation. It also bans the use of solitary confinement for more than 15 continuous days. The legislation should ensure that Mexico's prisons will no longer be nests of human right violations.

However the bill has yet to be passed and if it does, there is still an exceptional long way to go. In addition, prisons in Mexico will remain a tool to exclude people from society and will not aim to rehabilitate prisoners before they re-enter society.







THE SCANDINAVIAN MODEL



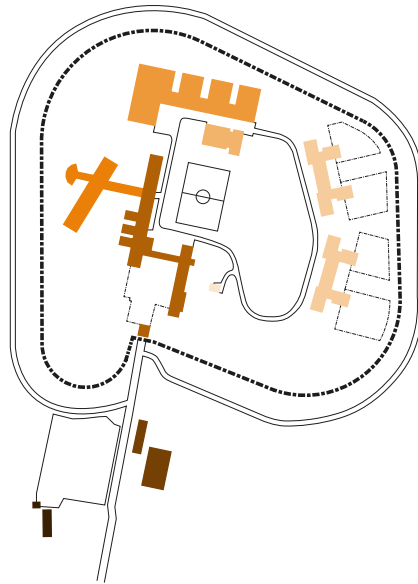
The Scandinavian prison system stands out from the rest. It has the reputation of being the most humane in the world and it seems to be working very well. The countries have remarkably low recidivism rates: 17% compared to 45% in Mexico and even 75% in the United States. However, the comparison is very difficult - or even impossible - to make because the countries have totally different backgrounds. Scandinavia is wealthy, has

a strong social welfare system, little ethnic segregation etc. But still the Scandinavian systems are performing well and there is a fundamental reason for this; the maximum sentence is 21 years. Even for murder. This means that prisons have to be an environment that prepares criminals to re-enter society. Therefore the psychological impact of how the prisoner is treated and also the psychological impact of the building

and its environment become very important. In particular, because prisoners are usually psychologically disturbed and therefore extra vulnerable.

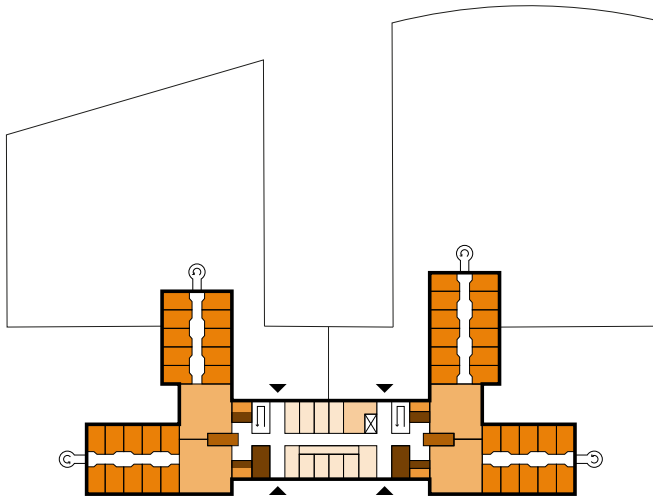
The Scandinavian system is fundamentally different from the U.S. and Mexico. In Scandinavia the primary goal is rehabilitation, in Mexico and the U.S. it is to exclude criminals from society.





Functions

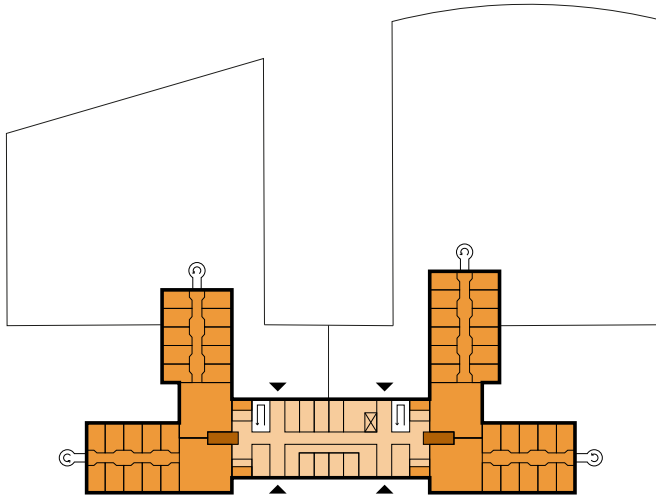
- Chalet that can be used by a prisoner and family
- Residential units
- Activities house
- Work units
- Maximum security unit
- Administration and intake
- Staff buildings
- Parking buildings



Functions

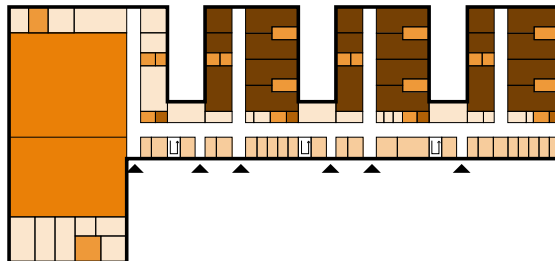
- Prisoner offices and rooms to receive guests
- Guest toilets
- Common rooms
- Laundry rooms
- Cell units
- Supervisor room (overseeing common rooms)
- Deposit rooms





Functions

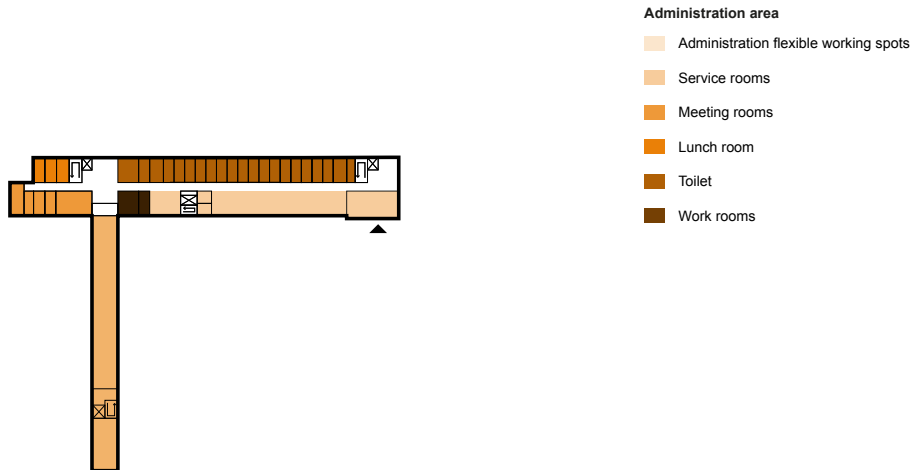
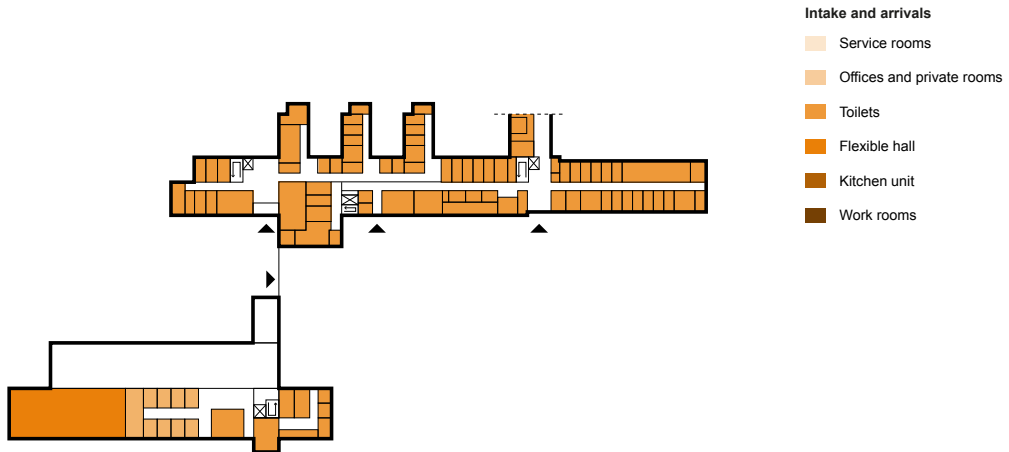
- Prisoner offices and rooms to receive guests
- Residential units
- Activities house



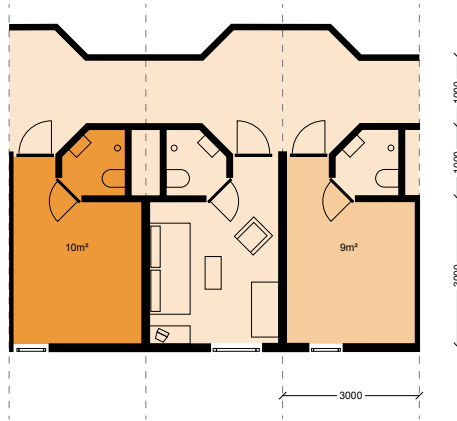
Functions

- Service rooms
- Offices and private rooms
- Toilets
- Flexible hall
- Kitchen unit
- Work rooms









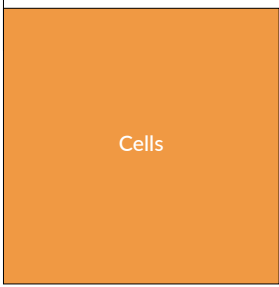
THE MOST HUMANE PRISON IN THE WORLD

The images and drawings on this and the previous pages show the prison in Halden, Norway. It is one of the many examples of a humane Scandinavian prison. Everything in these prisons is aimed to give the prisoners a sense of normality. It is a place to pick up a normal life and feel good, not to get punished. The fact that the prisoner's absolute freedom is taken from him is enough punishment.

To understand how these buildings function, I closely studied the program, security concepts and spatial organization of four of these Scandinavian prisons. From this analysis I deduced a program which I have used for my project (see the scheme on the next pages). The following are the main components for building a humane prison. Cells: 240 of them are organized in units of 12 cells and one shared living room.

Education: rooms for education and job preparation. Visitation: meeting rooms to see family, psychologists, lawyers, etc. Sports: a basketball field and a gym. Leisure: a library, cinema room and chapel. Entrance: secure check-in facilities. Staff and administration: for all the prison logistics. Services: for the daily prison management and healthcare. Outdoor space: linking it all together. And a parking facility.

2x 10 unit
12 cells
10-14m2
Bathroom
1 common living
1 kitchen
1 deposit room



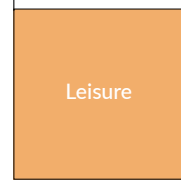
Cells

Small meeting room
Large family meeting
Case documentation
Toilets

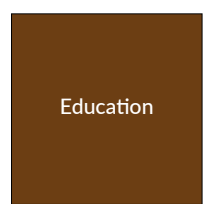


Visitation

Cinemaroom
Chapel
Priest office
Library/reading room
Library deposit
Library office
Toilets



Leisure



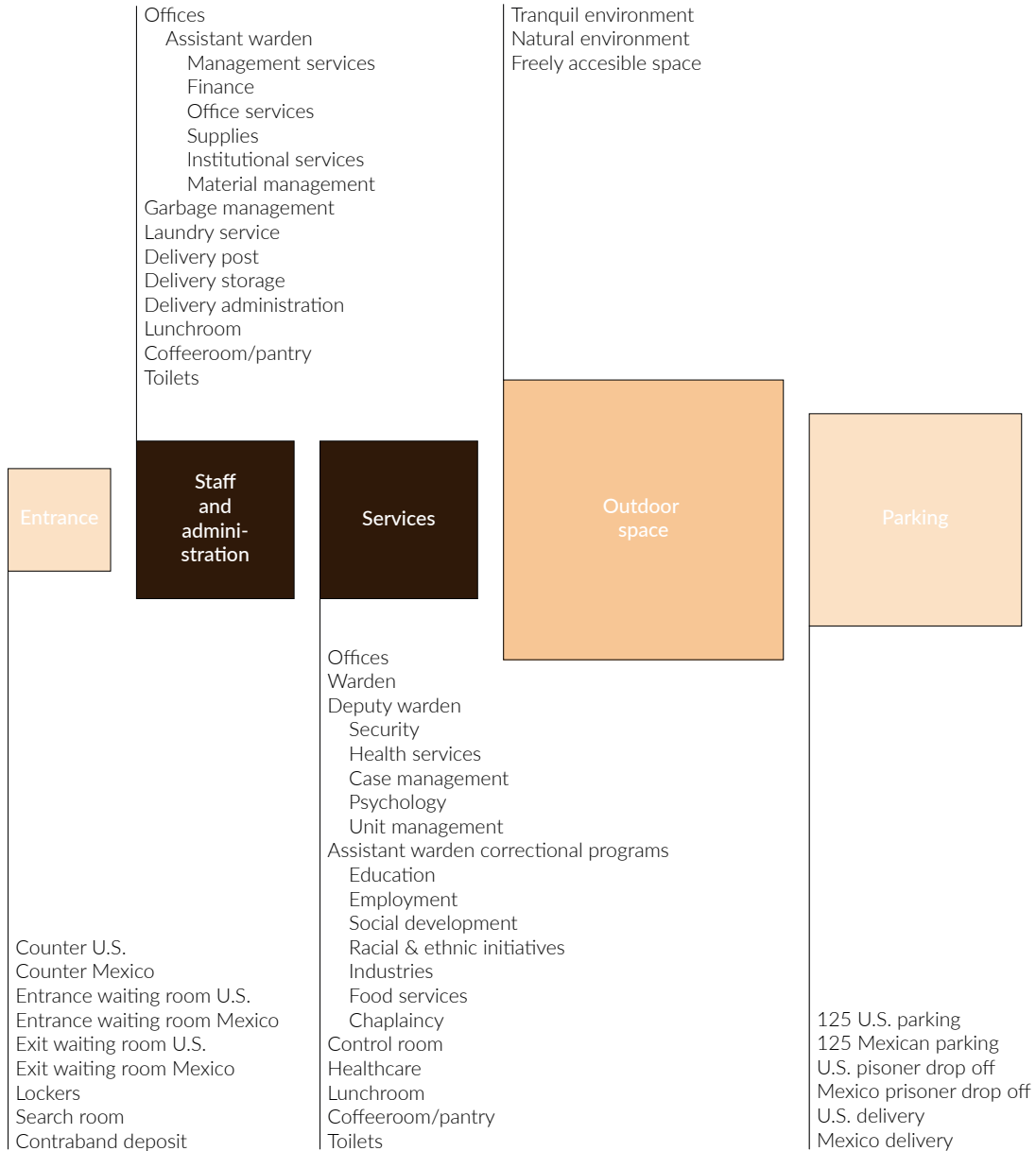
Education

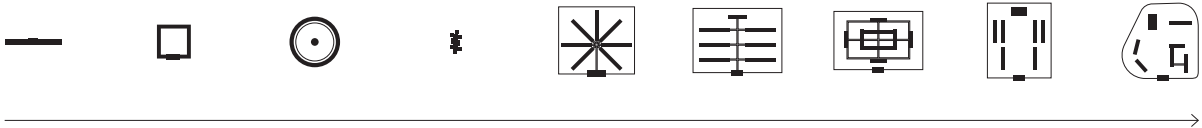
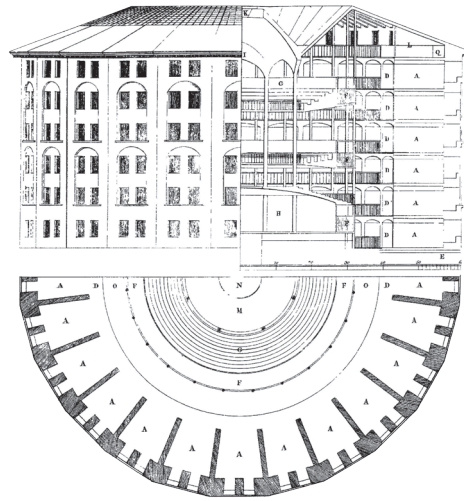
Classrooms
Production training rooms
Production rooms
Staff rooms
Lunch area
Supermarket
Supermarket stock room
Supermarket office
Toilets



Sports

Basketball court
Gym
Sports deposit
Dressing room
Showers
Lockers
Toilets





THE INVENTION OF PRISON



Prisons are only a relatively new invention. Before the enlightenment in the 18th century there were prisons, but only to hold people in debt or people that were awaiting punishment. Criminals were punished on the city square, in front of the public. Depending on the violation, they got a specific punishment. If they had stabbed someone, for example, your hand would be poured with molten lead. The reasoning behind it was very comprehensible: if someone committed

a crime, he or she settled the bill with the public by getting physical punishment. During the enlightenment the public opinion changed. Humanitarian principles became more and more important and also the way of punishment changed. The turning point was the quartering of Damiens, who had tried to assassinate Louis the 14th in 1757. His torture was such a gruesome event, that this started a shift in the public opinion. Penitentiaries were invented and criminals

were locked away in solitude. This was seen as a way that would improve a person. To be penitent means to feel regret of sorrow for wrongdoing.

Although prisons were a humanitarian gain, there was a downside; punishment became hidden from view and no longer took public responsibility. While societies became more humane, prisons have always lagged behind because of this among other reasons.

LINE

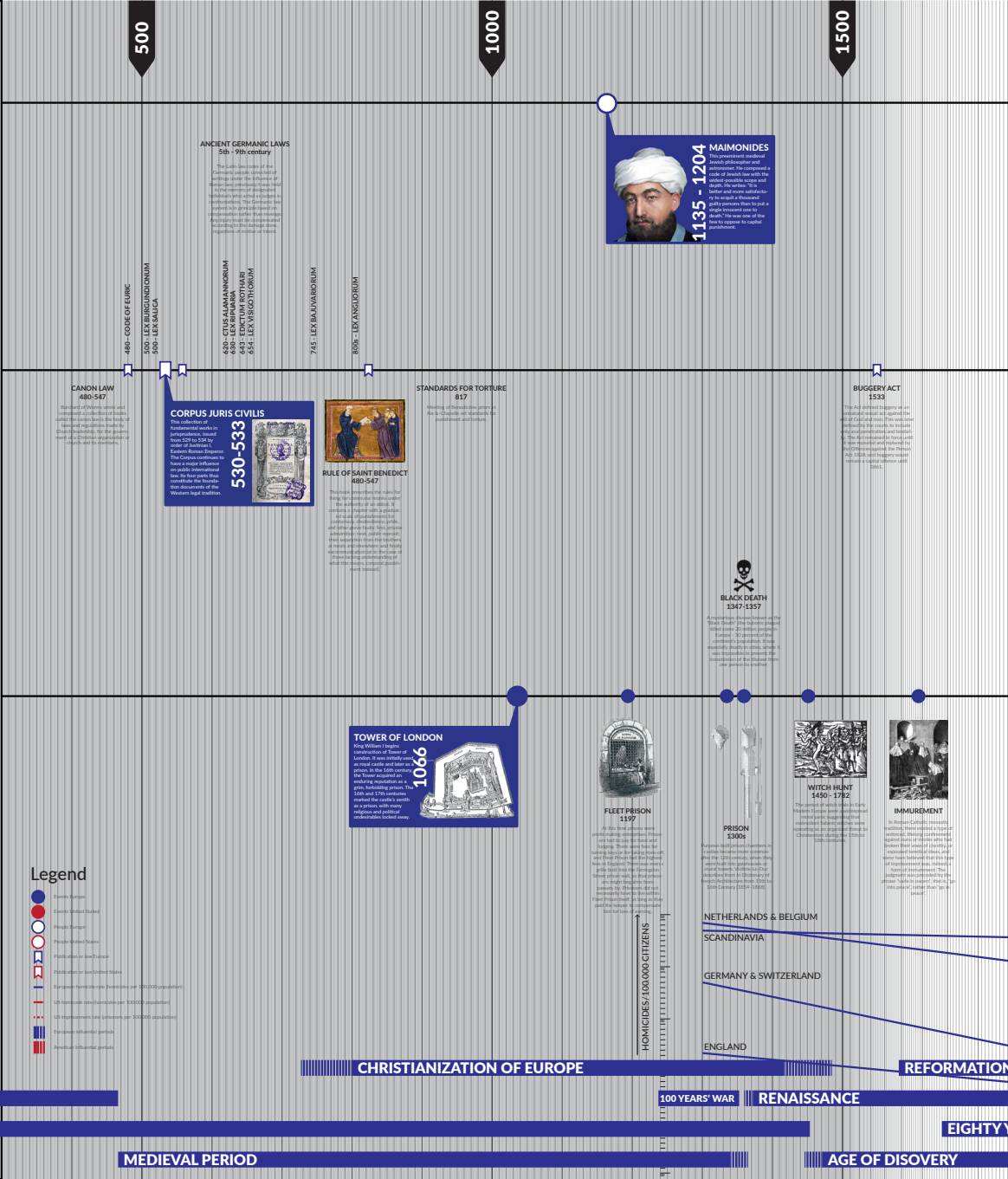
Of Western penal history and imprisonment

The history of Western prisons is reported to be the understanding of it. The Enlightenment marks a clear transition to modern prisons. It is not until within 150 years from dramatic public scenes towards humane penitentiaries. Before the Enlightenment prison appeared to be a place that was meant to be a place of punishment. However, specific control systems were used to reduce crime. This was based on written laws that were not subject to public display of punishment. The function of public would get fearful of committing crime and therefore not do it. When prisons were built and the function of punishment gradually changed to a new concept of social or even reward, the concept of the crime level. The public became a fourth when the public could be punished towards the association as well as the other way around.

Prison then became device to reduce crime through control, which means to punish or to punish for a crime or to punish for a crime. The function of punishment was to reduce crime through public display of punishment. The function of public would get fearful of committing crime and therefore not do it. When prisons were built and the function of punishment gradually changed to a new concept of social or even reward, the concept of the crime level. The public became a fourth when the public could be punished towards the association as well as the other way around.

being washed, because the cells are for the observation of a desk. Therefore this became a strong group of prison. It marks the start of a new era in the history of Western penitentiaries. Before the Enlightenment prison appeared to be a place that was meant to be a place of punishment. However, specific control systems were used to reduce crime. This was based on written laws that were not subject to public display of punishment. The function of public would get fearful of committing crime and therefore not do it. When prisons were built and the function of punishment gradually changed to a new concept of social or even reward, the concept of the crime level. The public became a fourth when the public could be punished towards the association as well as the other way around.

Paul de Wille, January 2014



500

1000

1500

ANCIENT GERMANIC LAWS 5th - 9th century

The Latin law books of the Germanic peoples are a collection of laws that were compiled in the 5th to 9th centuries. They are the earliest written laws of the Germanic peoples. The laws are written in Latin and are based on the oral traditions of the Germanic peoples. The laws are divided into three main groups: the Lex Saxonum, the Lex Ribuaria, and the Lex Frisionum.

480 - CODE OF EURIC
500 - LEX BURGUNDIONUM
500 - LEX SAUCIA

420 - LEX ALAMANORUM
443 - EDICTUM ROTARI
551 - LEX VISIGOTHORUM

745 - LEX BAVARORUM

800 - LEX ANGLO-SAXONUM

CANON LAW 480-547

Canon law is a body of laws that is based on the Bible and the teachings of the Church. It is the law of the Church and is used to govern the behavior of Christians. Canon law is a part of the legal system of many countries and is used to resolve disputes between Christians.

CORPUS JURIS CIVILIS
530-533

The Corpus Juris Civilis is a collection of laws that was compiled by the Roman Emperor Justinian I in the 6th century. It is the most important work of Roman law and is the basis of modern civil law. The Corpus Juris Civilis is divided into three main parts: the Digest, the Code, and the Institutes.



RULE OF SAINT BENEDICT
480-547

The Rule of Saint Benedict is a set of guidelines for the behavior of monks in a monastery. It was written by Saint Benedict of Nursia in the 6th century. The Rule of Saint Benedict is one of the most important works of Western monasticism and has influenced the development of the Western legal tradition.

STANDARDS FOR TORTURE 817

The standards for torture were established in the 9th century. They were a set of guidelines that were used to determine the amount of pain that was inflicted on a prisoner. The standards for torture were a reflection of the belief that pain was a necessary part of punishment.

BUGGER ACT 1533

The Buggery Act was a law that was passed in 1533. It was a law that was designed to punish people who engaged in homosexual acts. The Buggery Act was one of the earliest laws that were specifically designed to punish homosexuality.

1135 - 1204 MAIMONIDES

Maimonides was a Jewish philosopher and jurist who lived in the 12th and 13th centuries. He was one of the most important figures in Jewish history and is known for his work on Jewish law and philosophy. Maimonides was a leader of the Jewish community in Egypt and was one of the most influential Jewish scholars of his time.



BLACK DEATH
1347-1357

The Black Death was a pandemic that killed about one-third of the population of Europe in the 14th century. It was caused by a bacterium called Yersinia pestis and is one of the most devastating pandemics in human history. The Black Death was a major factor in the decline of the medieval world and the rise of the modern world.



FLEET PRISON
1197

The Fleet Prison was a prison that was built in the 12th century. It was one of the earliest prisons in England and was used to hold prisoners who were awaiting trial. The Fleet Prison was a very crowded and unsanitary place and was known for its harsh conditions.



PRISON
1300s

The prison was a place where people were held until they were tried and sentenced. It was a place of punishment and was used to control the behavior of people who were considered to be a threat to society. The prison was a key part of the legal system and was used to enforce the law.



WITCH HUNT
1450-1752

Witch hunts were a series of persecutions that were carried out in the 15th and 16th centuries. They were a result of the belief that witches were people who had made a pact with the devil and were using their powers to harm others. Witch hunts were a major part of the religious persecution of the time and led to the deaths of many innocent people.



IMMUREMENT

Immurement was a form of punishment that was used in the 15th and 16th centuries. It was a form of public humiliation and was used to punish people who were considered to be a threat to society. Immurement was a very harsh and painful form of punishment and was used to control the behavior of people who were considered to be a threat to society.

CHRISTIANIZATION OF EUROPE

REFORMATION

100 YEARS' WAR RENAISSANCE

EIGHTY YEARS' WAR

AGE OF DISCOVERY

WESTERN ROMAN EMPIRE

EASTERN ROMAN EMPIRE

PAX ROMANA

MEDIEVAL PERIOD

1600

1700

1800

JOHN HOWARD
Inspired by the horrors of the French Revolution, the conditions of prisons in Britain and on the continent, he advocated a system of state-controlled prisons in which the regime would be based on health. The 1797 Penitentiary Act was largely based on his work and set the construction of new prisons in accordance with his theories.



JEREMIAH BENTHAM
1748-1832

He was an English utilitarian philosopher, social reformer and lawyer of the 18th and 19th centuries. He is best known for his theory of utilitarianism, which states that actions should be judged on their merits, based on their effects on the greatest number of people.



QUAKERS' RELIGIOUS SOCIETY OF FRIENDS

Quakers are members of a sect of religious Christians known as the Religious Society of Friends. The movement is nonconformist, nonsectarian, nonhierarchical, and non-episcopal. It is a Quaker meeting in London in 1815, showing the Quakers' religious and social reforms and their role in the abolition of slavery, the reform of the prison system, and the promotion of peace.



ELIZABETH FRY

For many an English prison had closed doors. She was a pioneer among those who were to open them. Since 2005, she has been recognized for her work in England and the USA.



JOHN AUGUSTUS
1765 - 1829

In 1800 he became the first of the "free" system. He was a philanthropist, in England in the first half of the 19th century. He was a pioneer among those who were to open them. Since 2005, she has been recognized for her work in England and the USA.



ALEXANDER MACNOCHIE
1787 - 1860

In 1840 he became the first of the "free" system. He was a philanthropist, in England in the first half of the 19th century. He was a pioneer among those who were to open them. Since 2005, she has been recognized for her work in England and the USA.

RUSSIAN CODE
1767

This Russian code of laws was the first of its kind in Europe. It was a comprehensive code of laws that covered all aspects of life, from criminal law to family law.

BRITISH PENITENTIARY ACT
1779

This Act was a landmark in the history of the British prison system. It established the principle of separate confinement, which was a major step towards the modern penitentiary system.

FRENCH PENAL CODE
1791, 1804, 1808, 1810

The French Penal Code of 1791 was a landmark in the history of the French legal system. It established the principle of separate confinement, which was a major step towards the modern penitentiary system.

PRUSSIAN CODE
1794

The Prussian Code of 1794 was a landmark in the history of the Prussian legal system. It established the principle of separate confinement, which was a major step towards the modern penitentiary system.

CARICER D'INVENZIONE
Giovanni Battista Pansani
1761

This was a type of prison in which the prisoners were kept in a state of constant motion. It was a major step towards the modern penitentiary system.



PUBLIC EXECUTION OF DAMIEN
1757

This was a public execution in which the prisoner was killed by a guillotine. It was a major step towards the modern penitentiary system.



WALNUT STREET PRISON
1773

This was the first penitentiary in the United States. It was a major step towards the modern penitentiary system.



PANOPTICON
1791

This was a type of prison in which the prisoners were kept in a state of constant motion. It was a major step towards the modern penitentiary system.



REIGN OFFSHORE
1793-1794

This was a type of prison in which the prisoners were kept in a state of constant motion. It was a major step towards the modern penitentiary system.



FIRST NATIONAL PENITENTIARY
Millbank, London
1816

This was the first national penitentiary in the world. It was a major step towards the modern penitentiary system.



EASTERN STATE PENITENTIARY
Philadelphia
1829

This was the first penitentiary in the United States. It was a major step towards the modern penitentiary system.

WITCH TRIALS
1692

This was a series of trials in which the accused were charged with witchcraft. It was a major step towards the modern penitentiary system.

USA

THIRTY YEARS WAR

AGE OF ENLIGHTENMENT

FRENCH REVOLUTION

JACKSONIAN ERA

VICTORIAN

1ST INDUSTRIAL REVOLUTION

2ND

1500

1600


1700

1135 - 1204



MAIMONIDES
A Jewish philosopher and astronomer. He composed a code of Jewish law with the title Mishneh Torah, the most influential and most authoritative of his works. He was one of the first to put a rationalist view on the religion.

1726 - 1790



JOHN HOWARD
He was an English abolitionist, a pioneering prison reformer and a philanthropist. He is best known for his work on prison reform in Britain and on the continent. He introduced a system of administrative management which the modern world has adopted. He is best known for his work on prison reform in Britain and on the continent. He introduced a system of administrative management which the modern world has adopted.



JEREMY BENTHAM
1748-1832



BLACK DEATH
1347-1357

A pandemic of bubonic plague that struck Europe and other parts of the world in 1347. It is estimated that 25 million people died in Europe as a result of the pandemic. It was the most devastating pandemic in the history of the world.

BUGGERY ACT
1533

The Buggery Act of 1533 was an act of the Parliament of England that made sodomy a crime. It was the first time that sodomy was made a crime in England. It was a significant step in the development of the law of sodomy in England.

RUSSIAN CODE
1767

The Russian Code of Laws was a collection of laws that were compiled by Catherine the Great. It was the first time that a code of laws was compiled in Russia. It was a significant step in the development of the law in Russia.

BRITISH PENITENT
1779

The British Penitentiary Act of 1779 was an act of the Parliament of Great Britain that established the first penitentiary in the world. It was a significant step in the development of the prison system in the world.

CAREER D'INVENZIONE
Giovanni Battista Piranesi
1763



FLEET PRISON
1197

Fleet Prison was a prison in London, England. It was one of the oldest prisons in the world. It was a significant step in the development of the prison system in the world.



PRISON
1300s

The prison system in the 1300s was a significant step in the development of the prison system in the world. It was a significant step in the development of the prison system in the world.



WITCH HUNT
1490-1732

The period of witch hunts in Europe was a significant step in the development of the prison system in the world. It was a significant step in the development of the prison system in the world.



IMMURMENT

Immurement was a form of punishment in which a person was confined in a stocks. It was a significant step in the development of the prison system in the world. It was a significant step in the development of the prison system in the world.



WITCH TRIALS
1692

The witch trials in Salem, Massachusetts, in 1692 were a significant step in the development of the prison system in the world. It was a significant step in the development of the prison system in the world.

PUBLIC EXECUTION OF DAMIENS
1757

The public execution of Jean-Baptiste de La Motte Fouquet in 1757 was a significant step in the development of the prison system in the world. It was a significant step in the development of the prison system in the world.

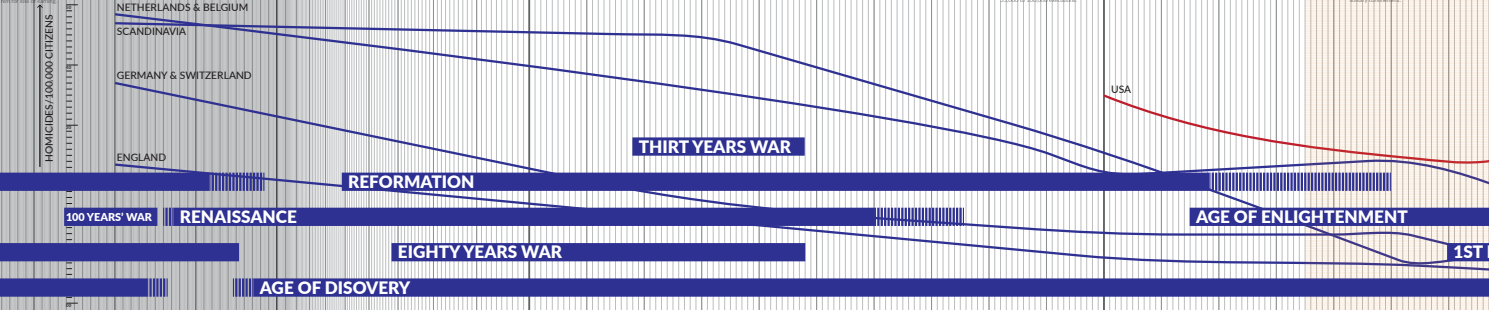


WALNUT STREET PRISON
1773

The Walnut Street Prison in Philadelphia was a significant step in the development of the prison system in the world. It was a significant step in the development of the prison system in the world.

PANOPTICON

The panopticon was a type of prison designed by Jeremy Bentham. It was a significant step in the development of the prison system in the world. It was a significant step in the development of the prison system in the world.



1800

1900

2000

WOMEN'S RELIGIOUS SOCIETY OF FRIENDS

1780 - 1845

ELIZABETH FRY

Elizabeth Fry was an English prison reformer who was a pioneer of the Quaker movement. She was instrumental in making the treatment of prisoners more humane. She was also the first woman to be elected to the House of Commons in 1841. She has been recognized by the United Kingdom's Royal Mail.



JOHN WALSHGUTIN
1785 - 1829



ALEXANDER MACDONOCHIE
1787 - 1860



CHARLES CHALKINS
1812 - 1870



FYODOR DOSTOEVSKY
1812 - 1881



GEORGE ORWELL
1903 - 1950



1926 - 1984

MICHEL FOUCAULT

Foucault was a French philosopher, historian of ideas, social theorist, and literary critic. He is best known for his work on the history of madness and the history of sexuality. He was also a prominent figure in the French New Criticism movement.




ROBERT MARSHTON
1927 - 1979



1913 - 1994

RICHARD NIXON

Nixon was an American politician who served as the 37th president of the United States from 1969 to 1974. He is best known for his role in the Vietnam War and the Watergate scandal.



FRENCH PENAL CODE
1791, 1804, 1808, 1810

PRUSSIAN CODE
1794

GAULS ACT & PRISONS ACTS
1823, 1835, 1877




CRIME BIBLE
1991



DISCIPLINE AND PUNISH: THE BIRTH OF A PRISON

This book by Michel Foucault explores the history of the prison and the development of the modern penal system. It is a key text in the history of criminology and the study of power and resistance.



1791

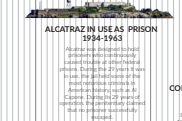
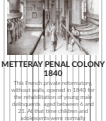
1791




1829

EASTERN STATE PENITENTIARY Philadelphia

This prison was the first to use the concept of the separate cell. It was designed by John Howard and was a model for other prisons in the United States.

REIGN OF TERROR
1793-1794

The period of the French Revolution when the Reign of Terror was in effect. It was a time of extreme violence and the use of the guillotine.

FIRST NATIONAL PENITENTIARY
Millbank, London
1821

The first national penitentiary in the United Kingdom. It was a model for other prisons in the United Kingdom.

METTERPEY PENAL COLONY
1840

A penal colony in Australia. It was a place where prisoners were sent to work on the land.

HMP PENTONVILLE PRISON
1842

A prison in London. It was a model for other prisons in the United Kingdom.

ALCATRAZ IN USE AS PRISON
1934-1963

A federal prison in California. It was a maximum security prison for men.

NAZI GERMANY CONCENTRATION CAMPS
1933-1945

Prisons in Germany used by the Nazis to imprison and kill their political opponents and other groups.

GULAG FORCED LABOR CAMPS
1918-1956

Prisons in the Soviet Union where prisoners were forced to work on the land.

BASTOY PRISON NORWAY
1982

A prison in Norway. It was a model for other prisons in the world.

GUANTANAMO BAY DETENTION CAMP
2002

A detention camp in Cuba. It was used by the United States to hold prisoners of war and suspected terrorists.

HALDEN PRISON NORWAY
2010

A prison in Norway. It was a model for other prisons in the world.

FRENCH REVOLUTION

JACKSONIAN ERA

PROGRESSIVE ERA

WAR ON DRUGS

INDUSTRIAL REVOLUTION

2ND

WWI

WWII

DIGITAL REVOLUTION

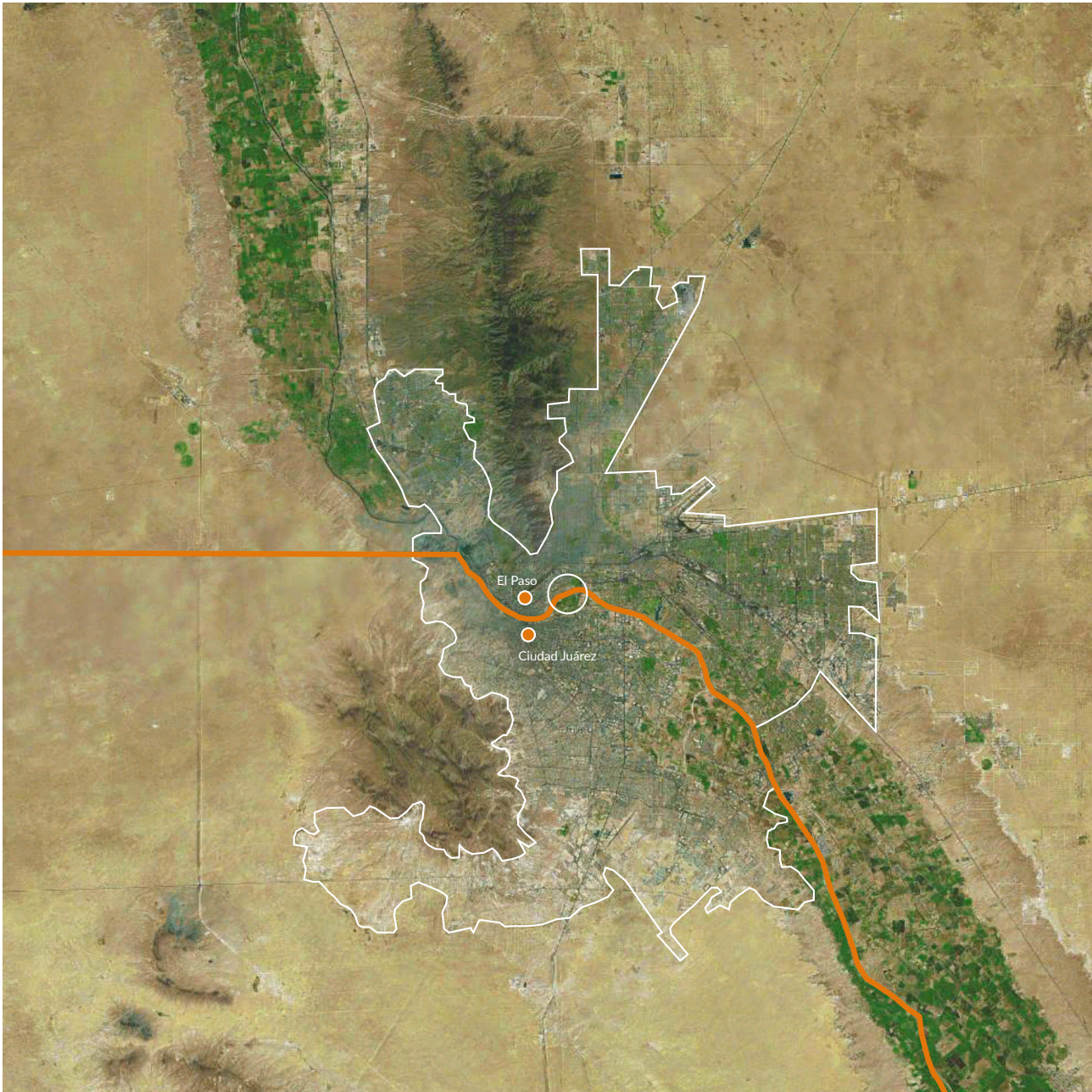


BORDER PRISONERS

Rethinking prison typology in the U.S. - Mexican border condition

design





PROJECT SITE



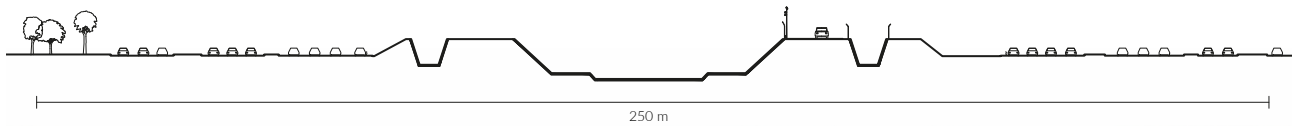
The location for this project is the twin city of El Paso (U.S.) and Ciudad Juárez (Mexico). This is one of the many twin cities that economically and culturally depend on each other. The North American Free Trade Agreement allows for tax free shipping between the U.S. and Mexico, as a result many American companies settle along the

border and have their products produced in Mexico for 1/6th of the wages. This is also the economic situation in El Paso - Juárez and most inhabitants rely on it.

This twin city accommodates 2 million inhabitants and is situated right on the point where the border changes from the linear

path to the irregular path of the Rio Grande. It lies in the Chihuahuan desert which has a combination of a hot and a cold desert climate, with hot dry summers and mild dry winters. The city sits in between two mountain ridges, hence the name El Paso. The project site is situated close to both city centres.





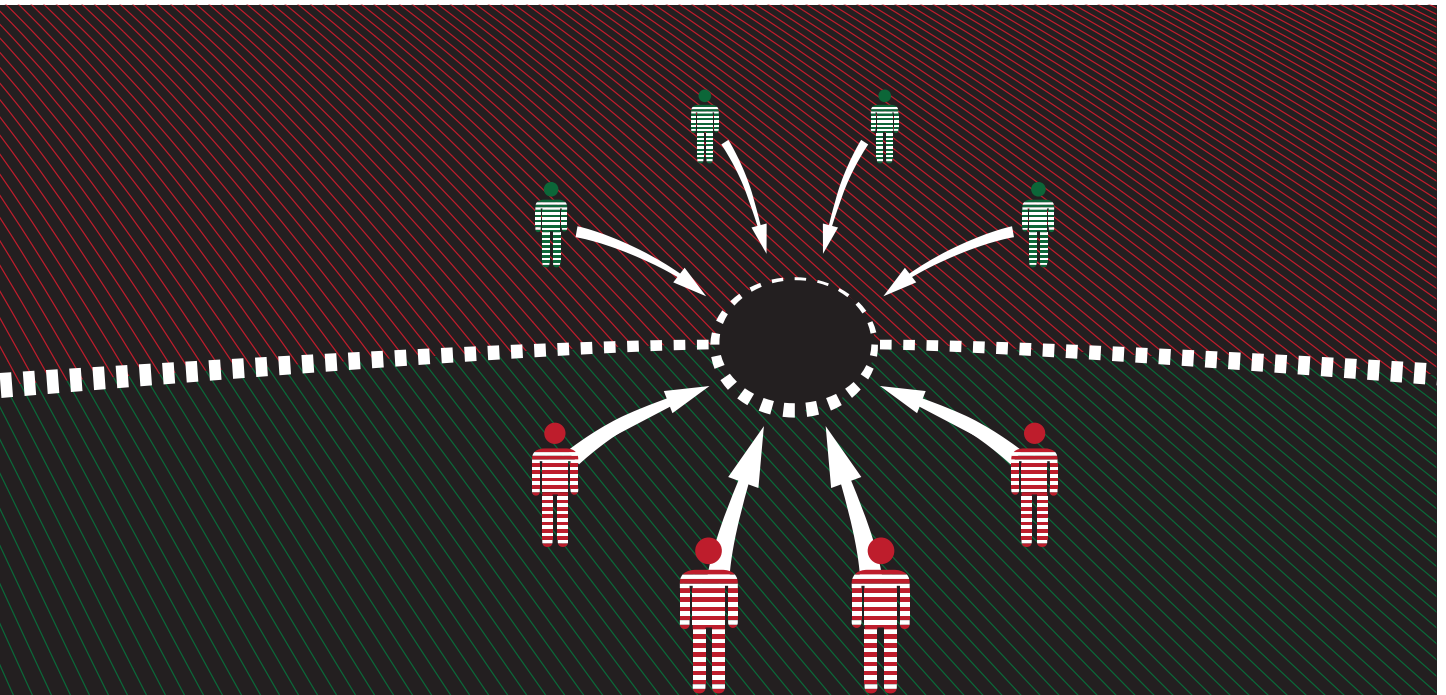
The area of the project site is called the Chamizal, it is known for an agreement between Mexico and the U.S. in 1963. After a series of floods, the Rio Grande changed its path. This led to tense international relations because the path of the river is also the path of the border. The countries settled on an exchange of land and fixed the Rio Grande by creating a concrete canal. Both countries are still proud of this, as it was an action of reconciliation during the height of

the Cold War. The contours of the Chamizal as it was before the floods can still be seen in the urban fabric. On the American side are sports facilities and a Chamizal memorial. On the Mexican side a large park is situated.

The profile of the border consists of the Rio Grande in the middle, an irrigation canal on the American side and on both sides 9 lanes of highway. This border occupies a huge zone that cuts right through the city. In terms

of safety there are three rows of fences, security cameras and a border patrol zone; it is highly secured and over 200 meters wide. This zone of no man's land is used in the project in order to break free from the dysfunctional prison systems on both sides. Symmetry has become very important in this project due to the symmetry of the canal and since the prison is meant for both Mexican and American prisoners without valuing one more than the other.





BORDER PRISONERS

The border region has been the epicentre of drugs smuggle and violence since the beginning of the 20th century. The U.S. and Mexican drug markets are strongly interwoven; the majority of the drugs that are produced in Mexico, are used in the U.S. This is a problem that cannot be solved by either country on its own; it needs a bi-national solution.

Prisons are an important link in the chain towards a better future. Prisons that prepare prisoners for re-entry in society, like the Scandinavian prisons, show that the fall-back rate into crime can be reduced. However, neither the U.S. nor Mexico aims to rehabilitate prisoners and therewith sustains a downward spiral of violence and abuse.

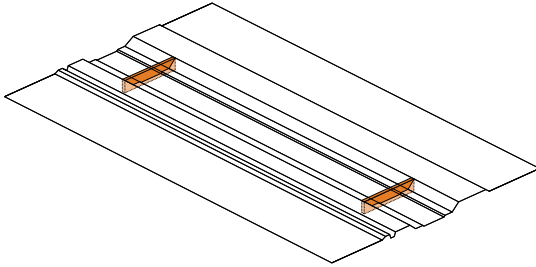
In addition the U.S. prison system is coping with racial inequality and extortion of prisoners for labor, it is therefore referred to as the *reinvention of slavery*. Mexican prisons are corrupt, violent and overcrowded. Hundreds of prisoners die in riots each year.

It is highly unlikely this situation in either country will improve. *Law and order* president Donald Trump openly supports the dysfunctional private prisons. The Mexican government is trying to improve the situation but corruption and a lack of resources are hampering the process.

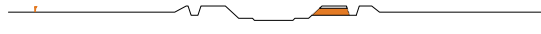
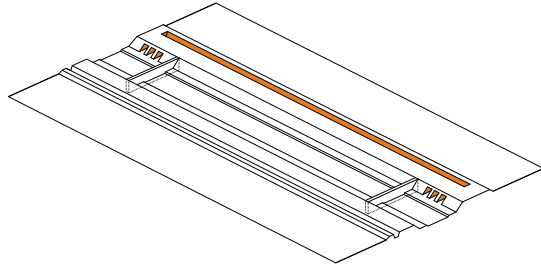
This project addresses these urgent issues and furthermore envisions a humane, rehabilitating prison environment, which is based on *the most humane prisons in*

the world in Scandinavia. The zone of no man's land on the border is used to unite the countries rather than separating them, by situating the prison on the border in the twin city of El Paso and Juárez. It accommodates Mexicans that are in prison in the U.S. and Americans that are in prison in Mexico for a border related offence: *Border Prisoners*.

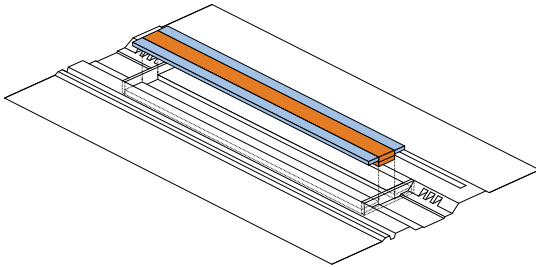
The *Border Prison* also offers prisoners the opportunity to see friends, family, lawyers and psychologists. This is usually impossible for this group of prisoners, because crossing the border is difficult and because of the language barrier. In addition, it simplifies the logistics of prisoner transportation between the countries.



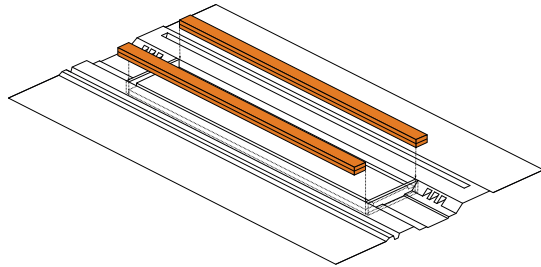
Retaining walls



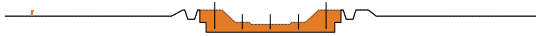
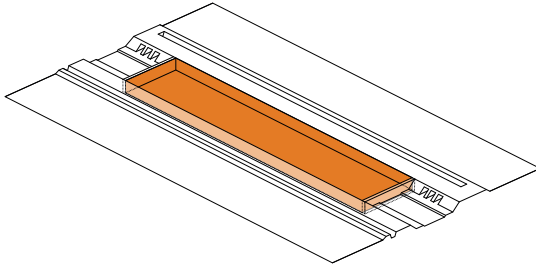
Overflow canal



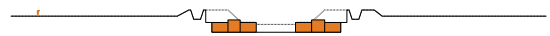
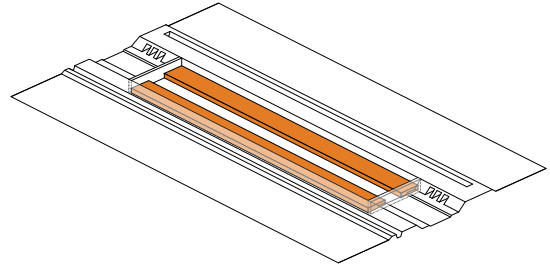
Canal ducts & machine rooms



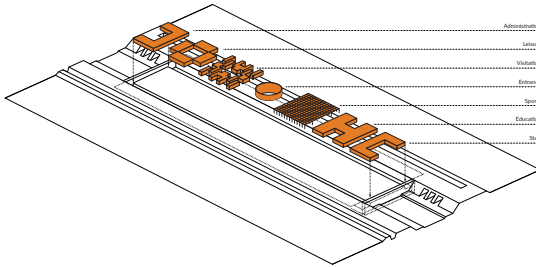
Two layers of cells on the U.S. and Mexican side



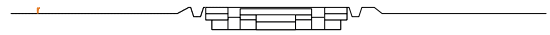
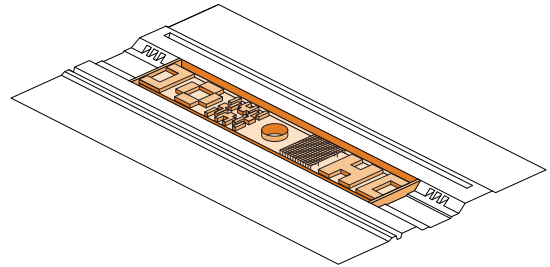
Use of the canal profile



Parking garages on the U.S. and Mexico side



Facilities connect both sides



The Border Prison



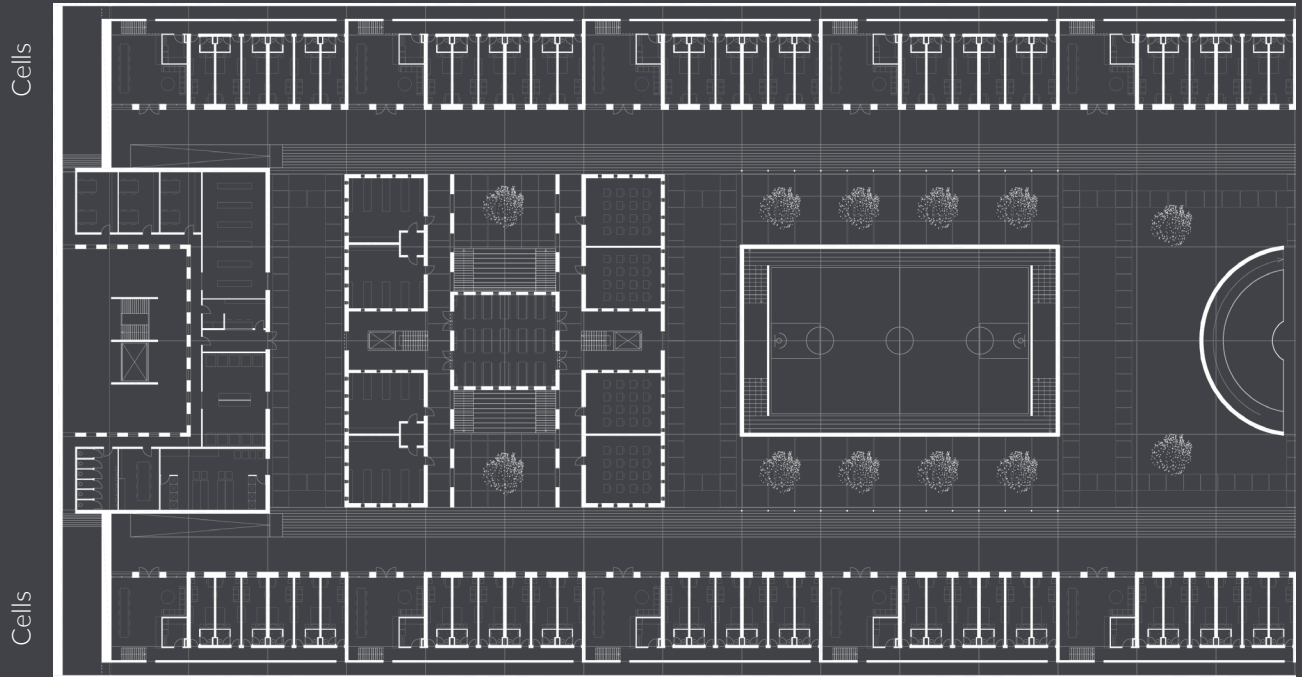
THE BORDER PRISON



The building is fully emerged in the profile of the canalized Rio Grande. The dikes on both sides of the river prevent that the building can be seen from the outside. The only thing that can be seen from the outside are the entrances to the underground parking from the highway and two small pedestrian entrance buildings. These small buildings lead to the central entrance in the building. Behind this building you can see the highway and the canal dike.

You can also catch the first glimpse of the building material that is used. It is called rammed earth i.e. earth that is rammed. The earth that is used to make it, comes from different places in the surroundings on American and on Mexican soil. It is a symbolic gesture to unite the countries in one place and at the same time a way to embed the building in its surroundings. The construction process and characteristics of rammed earth are explained on page 78-79.

This building is designed for 240 prisoners, which is a relatively low amount for American and Mexican prisons. The concept of a small-scale prison comes from the Scandinavian model and allows for personal contact and guidance of prisoners by the staff. The amount of cells as well as the capacity of the facilities and outdoor space guarantees a safe and appropriate environment for the rehabilitation process.



Staff & healthcare

Education

Sports

Entr

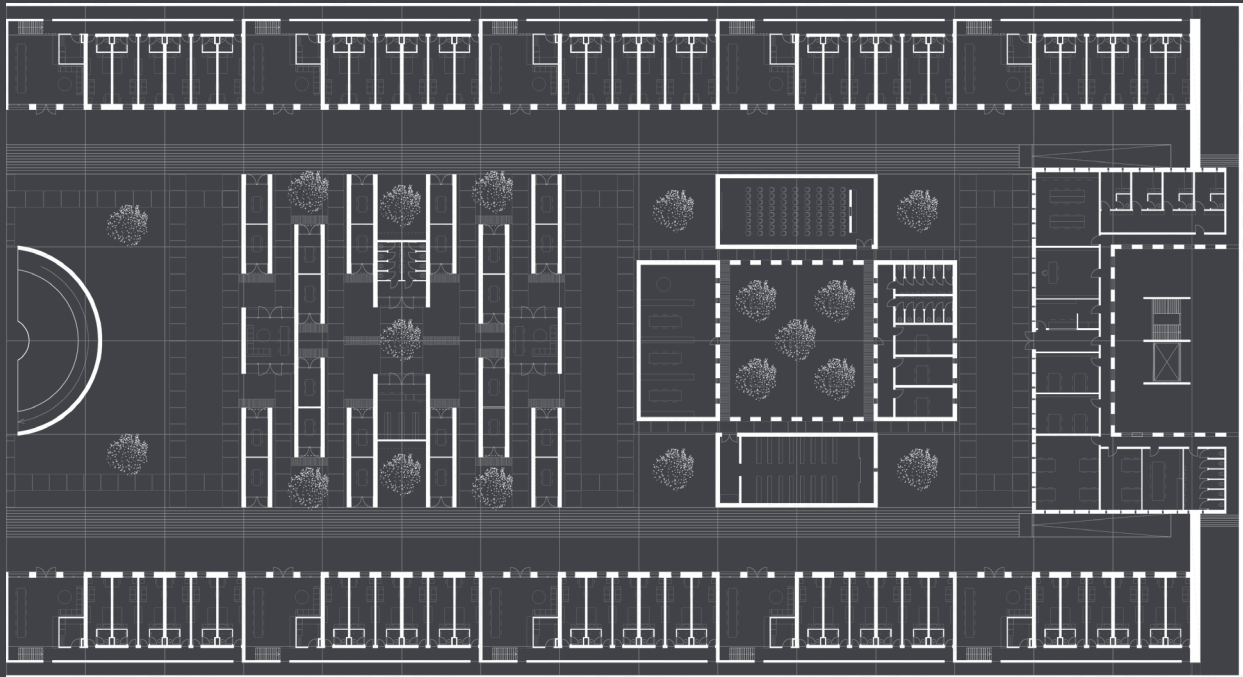


ARCHITECTURAL EXPRESSION

It is important that prisoners have a calm and clear state of mind, because this allows them to focus better on preparing themselves for life after prison. This means that they should

have a sense of comfort and normality in prison; they should be happy. Their environment plays an important role to achieve this. If the scale of a building is too large, the prisoners could feel

alienated from their environment, which can be discomforting. Human scale is therefore an important factor in the design of this prison. Even though it is a large and highly systematized



Cells

Cells

ance

Meeting rooms

Leisure

Staff & administration

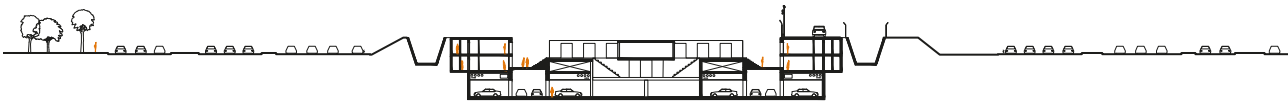
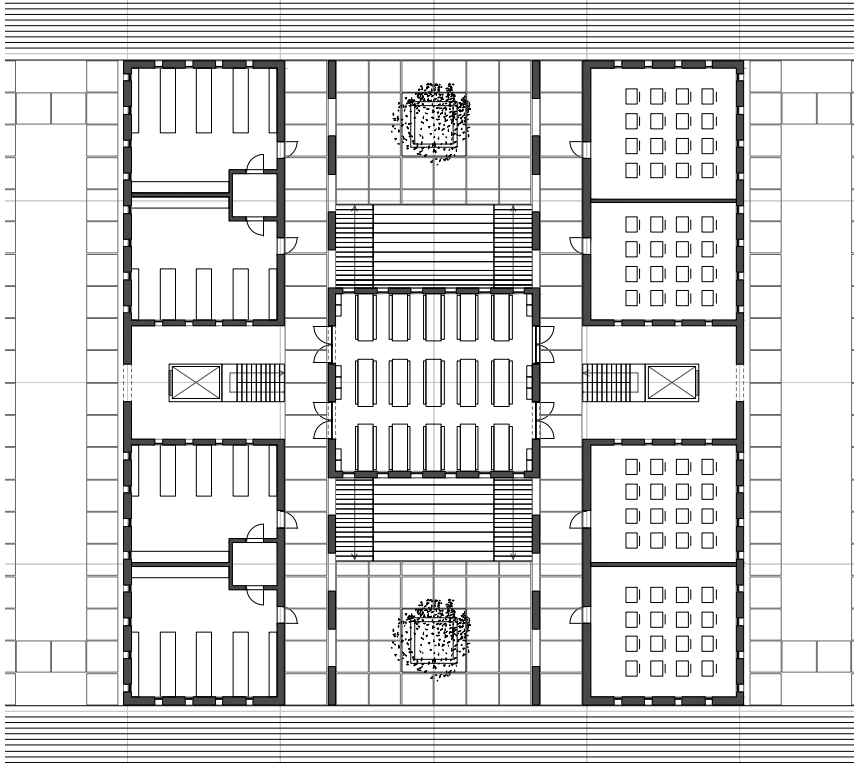


building, from a human point of view the building always feels relatively small and comfortable. This effect is established by making the building volumes low and by creating a high

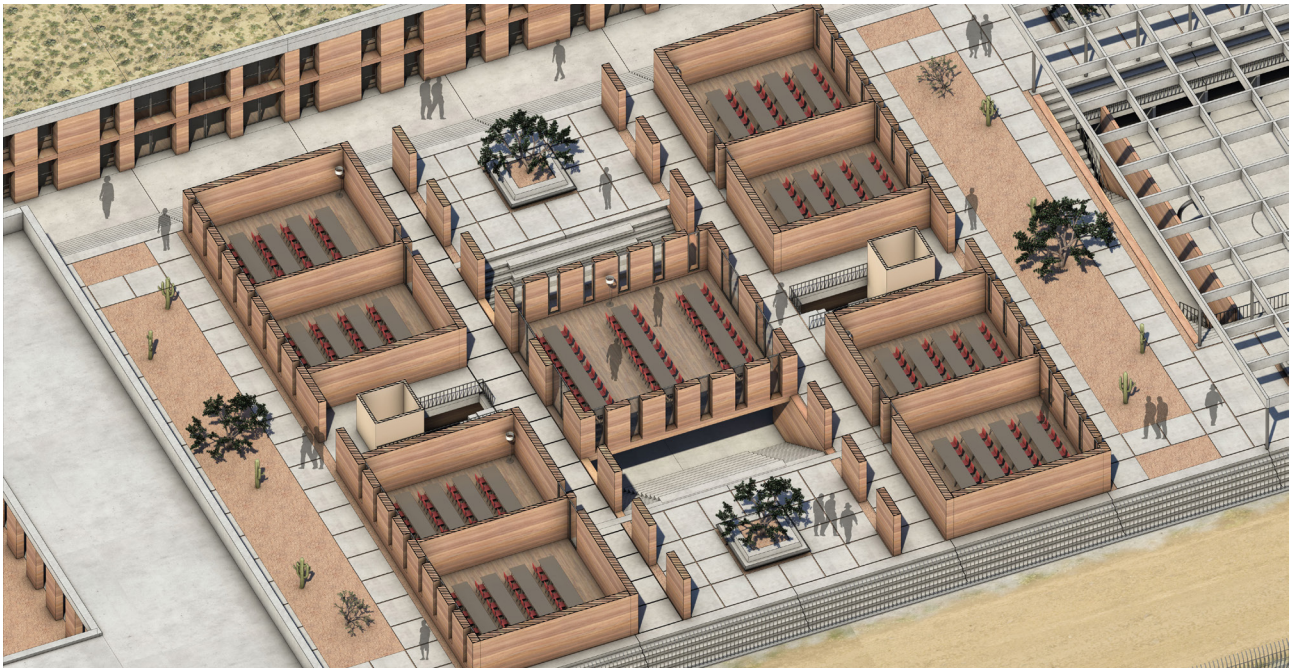
level of architectural variation. At the same time the architectural form is consistent to create a harmonious and calm arrangement of building volumes that will not distress the prisoners. The

amount of different materials is kept low and the quality of these materials is high.

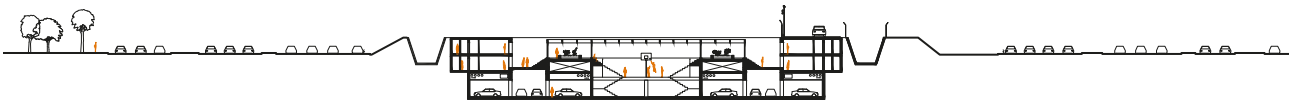
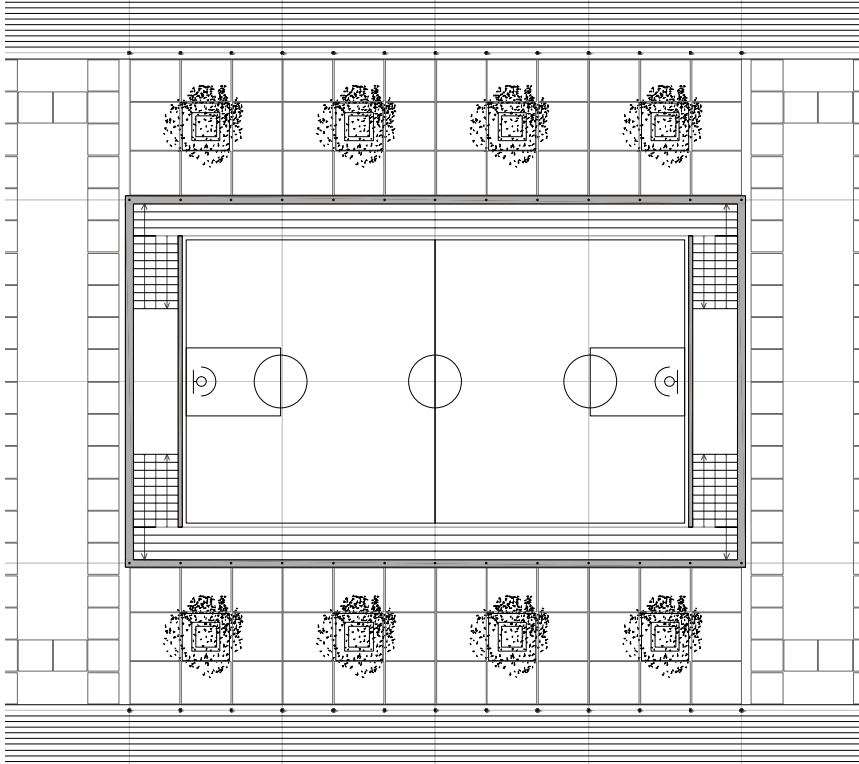
EDUCATION



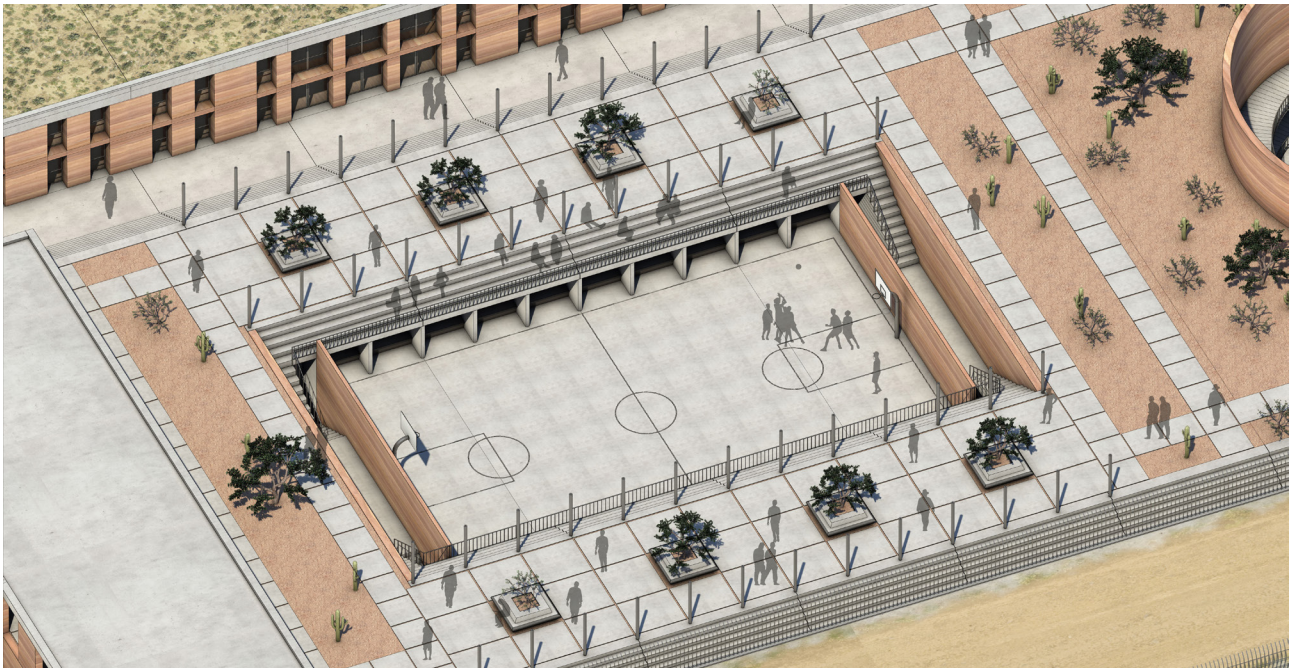
Investing in education programs helps released prisoners get back on their feet — and stay on their feet — when they return to society. On the left side are four workshop rooms where vocational skills are taught like wood- and metalworking. In the classrooms on the right, prisoners are educated at different degrees of difficulty and different subjects. In the centre is a lunch room and on both sides large stairs go down where prisoners can sit in the shade and also have their lunch. On minus 1 is the canteen, kitchen and a small supermarket.



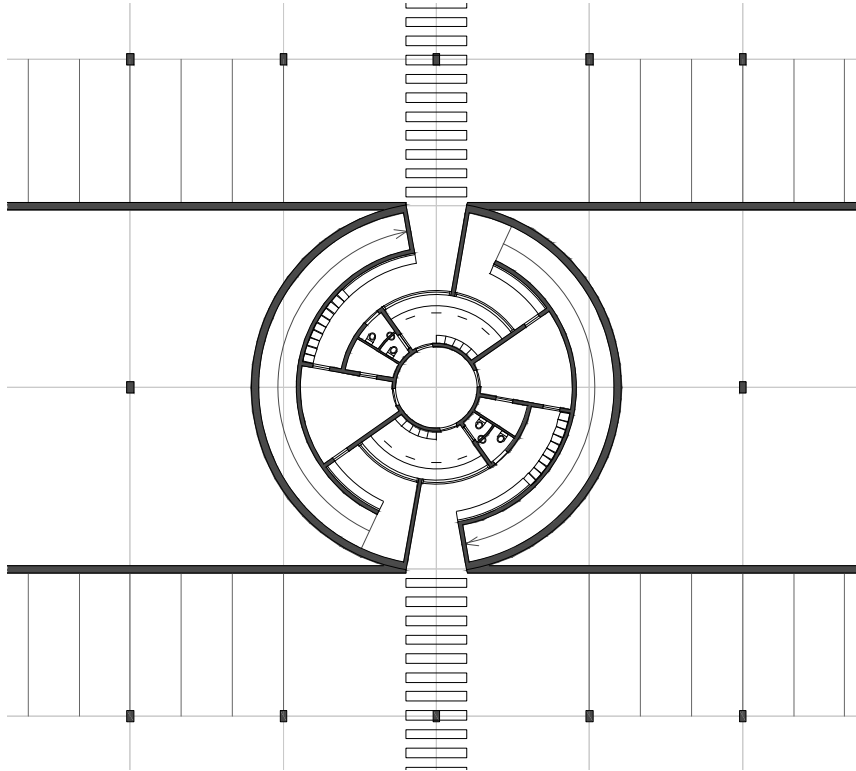
SPORTS



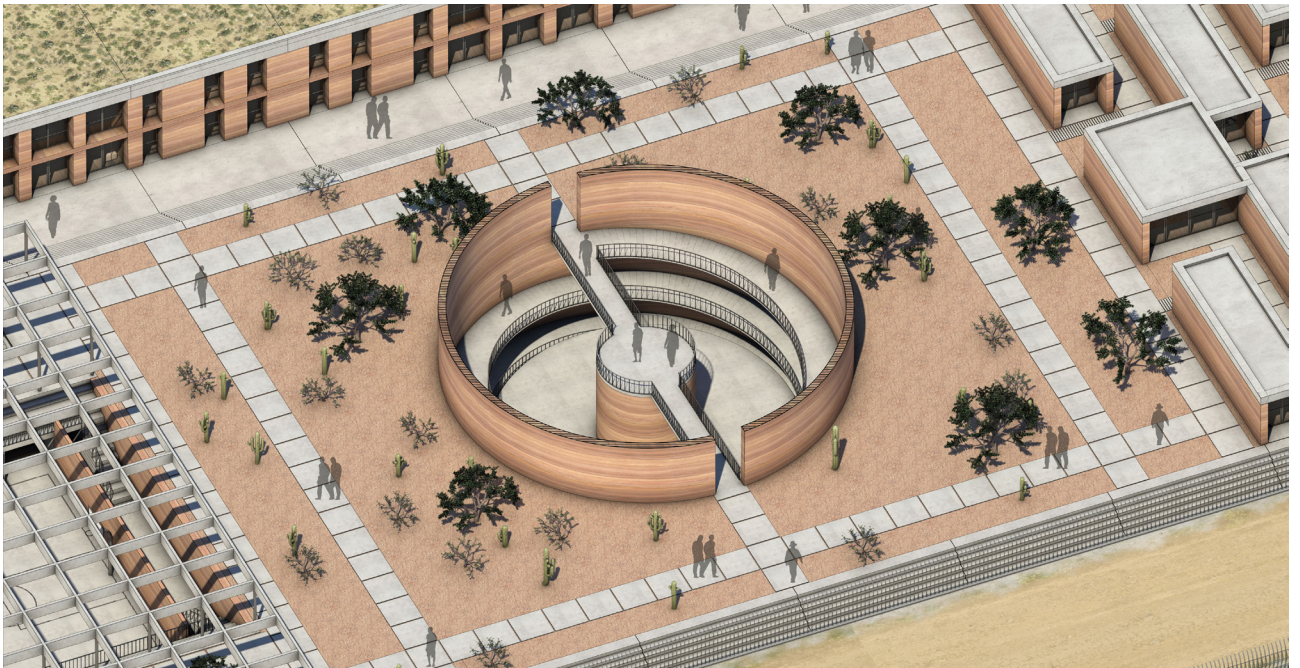
Physical activity is an important aspect of prisoner's daily lives to maintain fit and healthy, release energy and to engage in social interaction. The basketball field is a place where a monthly tournament can be played between Mexico and the U.S. The stairs on both sides are stands for spectators and lead to the gym on minus 1.



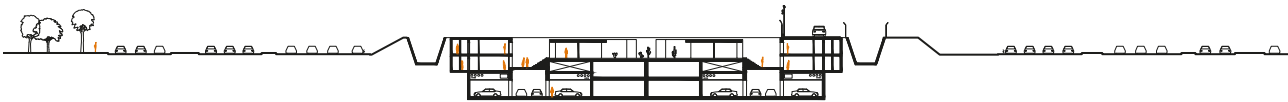
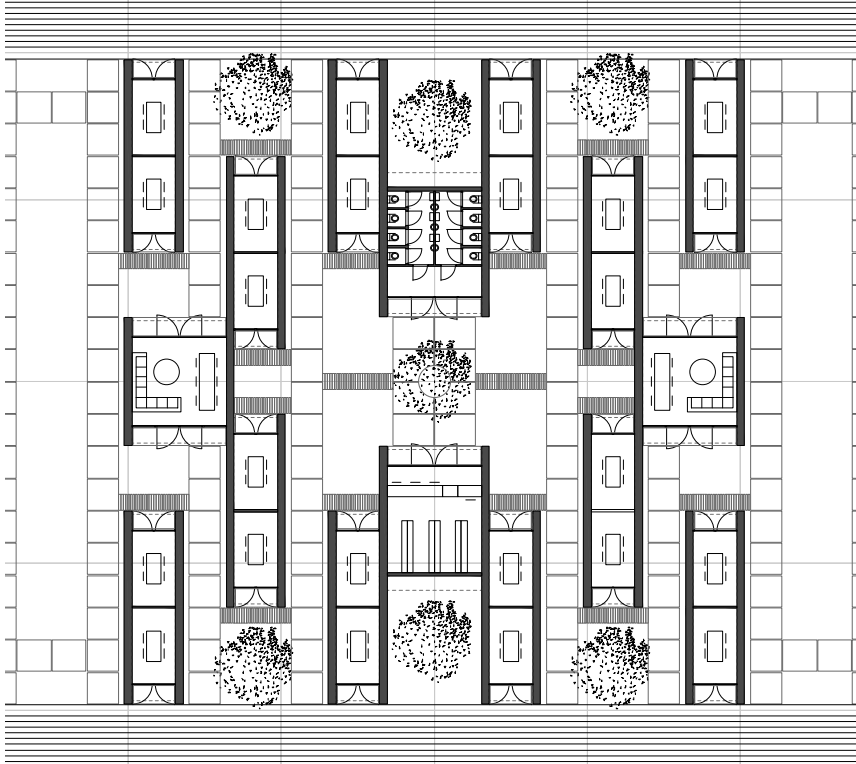
ENTRANCE



This is where visitors enter the building. They enter through the small buildings (p. 53) and walk through tunnels towards the centre of the prison and the border. Up to this point visitors are still on their own soil. Exactly on the border and in the middle of the building is a double lock system that allows visitors from both sides to enter the prison itself. Mexican visitors walk in after they have parked their car or entered through the pedestrian entrance. They check in at the counter and wait until they are called into the next room where they are checked for any prohibited items. Once cleared, they go to the next room where they can wait for the rest of the family or enter right away. This ramp leads into the prison. This process is reversed if they want to go out again. The same system - but then mirrored in floor plan - applies for the U.S. side. These two ramps circle around each other like a double helix and only meet at the top, where you can choose which side you go to enter. From this point you enter the outdoor space, this links all the functions and the cells together. This outdoor space is an imitation of the desert landscape, due to the desert dirt on the floor and native plants.



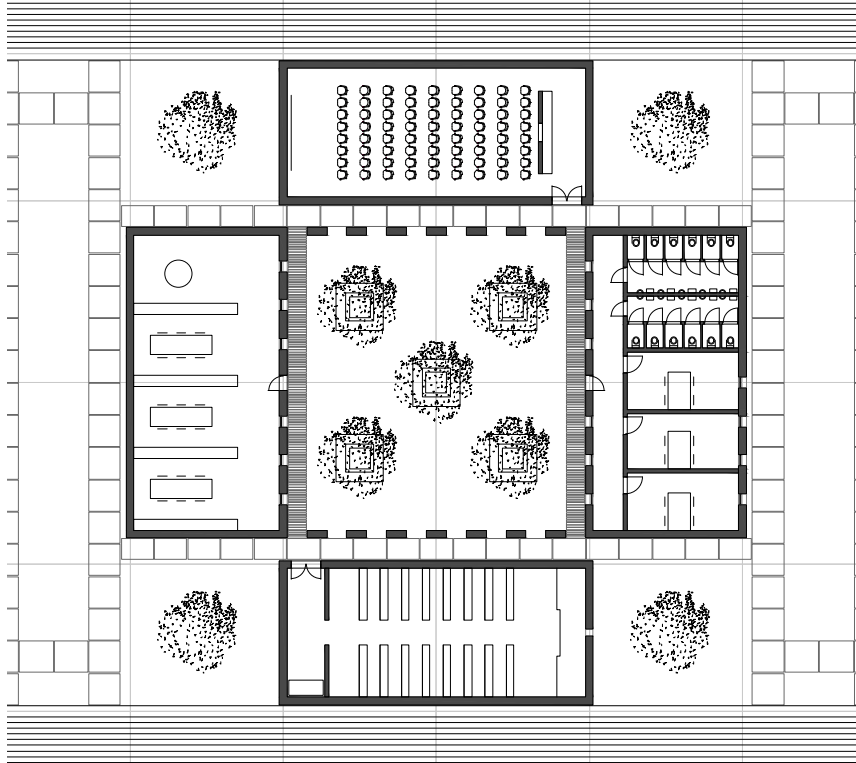
MEETING ROOMS



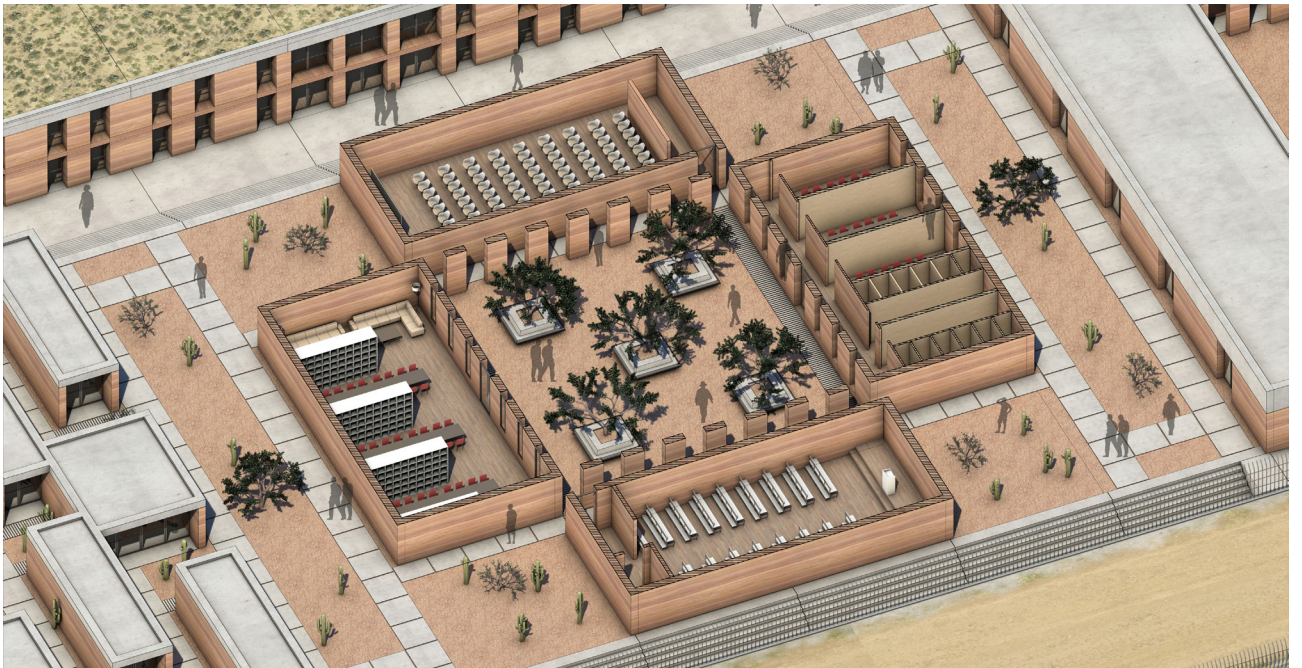
Meeting rooms are also an important part of this prison. These are rooms of different sizes where prisoners can meet their family, lawyer, psychologist etc. The much more informal architecture creates a setting where the prisoners and their visitors can feel comfortable for the more intimate conversations.



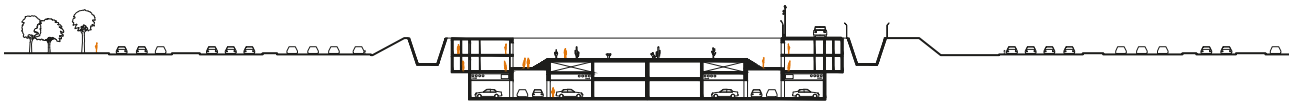
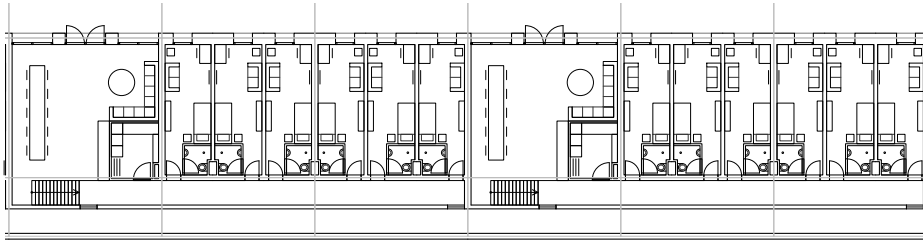
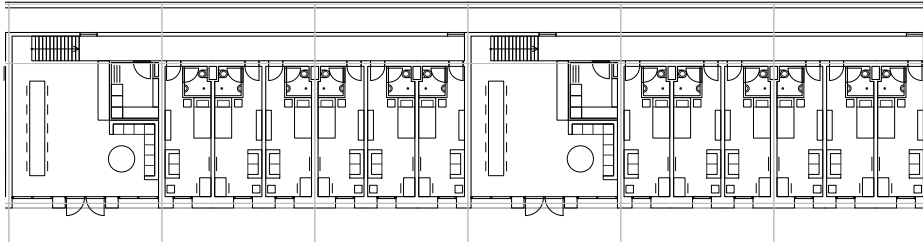
LEISURE



The leisure area is much more inward oriented. It is a place where prisoners can retreat. There is a library, a cinema room and a chapel. The courtyard is a place where prisoners can relax, have a chat or read a book in the shade of the trees.



CELLS

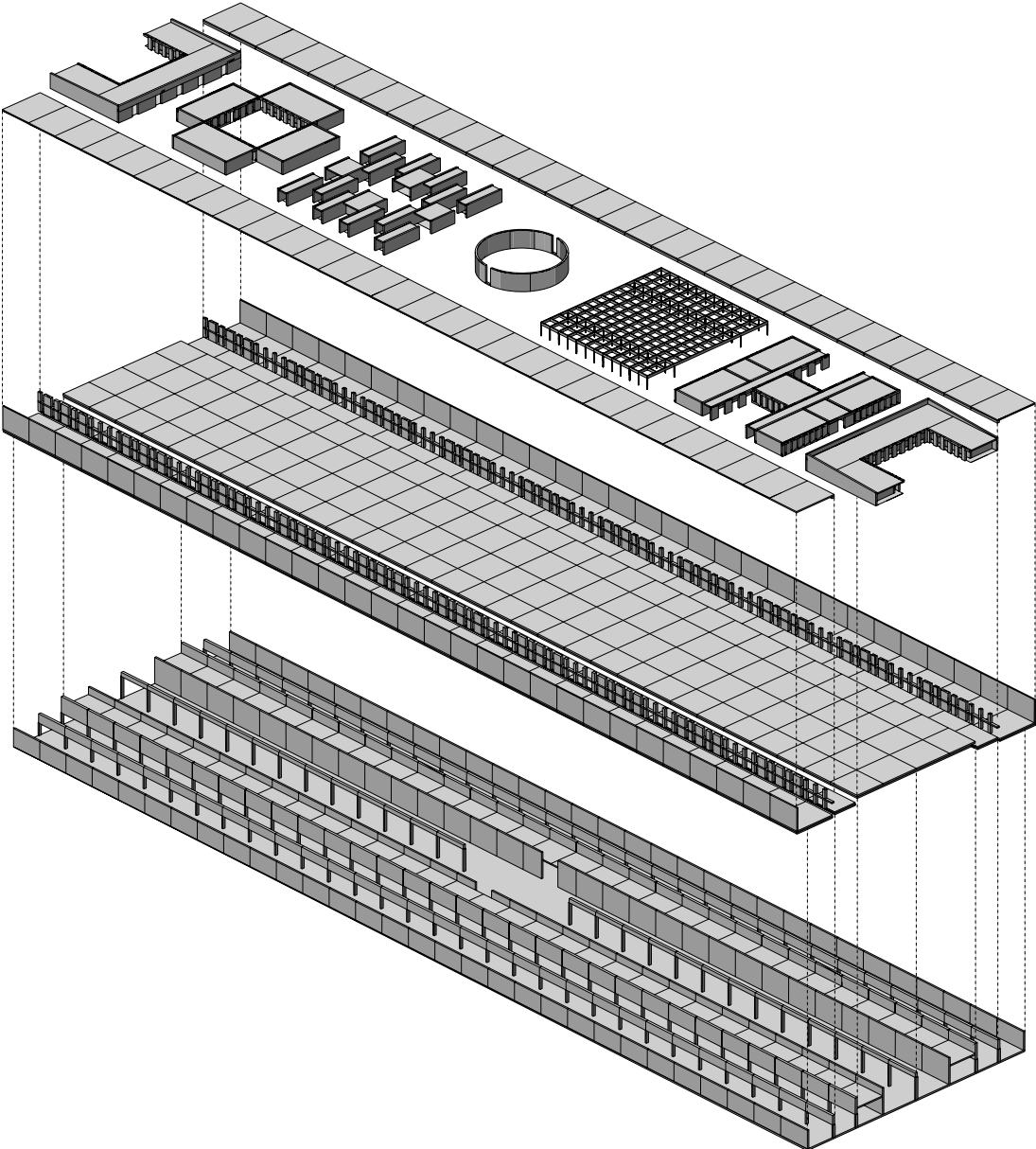


On both sides of the prison are ten units of 12 cells and a shared living room. The setup is much like student housing and the aim is to stimulate social interaction which prepares the prisoners for a return in society. The structural grid is based on 2,7 meters, this is because it is a suitable size for both a cell and the parking places below it. On the right you see one of the shared living rooms. Prisoners can cook themselves, have dinner, watch some television. Anything a normal person can do too. The interaction between the cells and the exterior space is very important and can be seen especially at night.

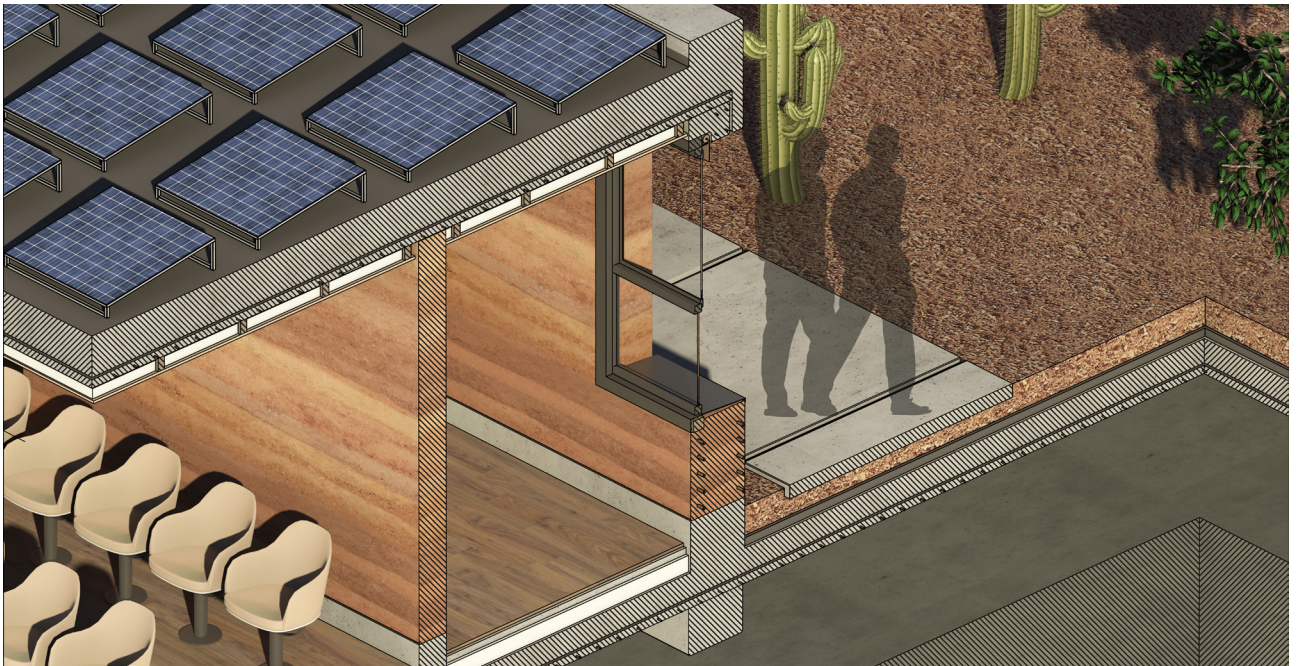
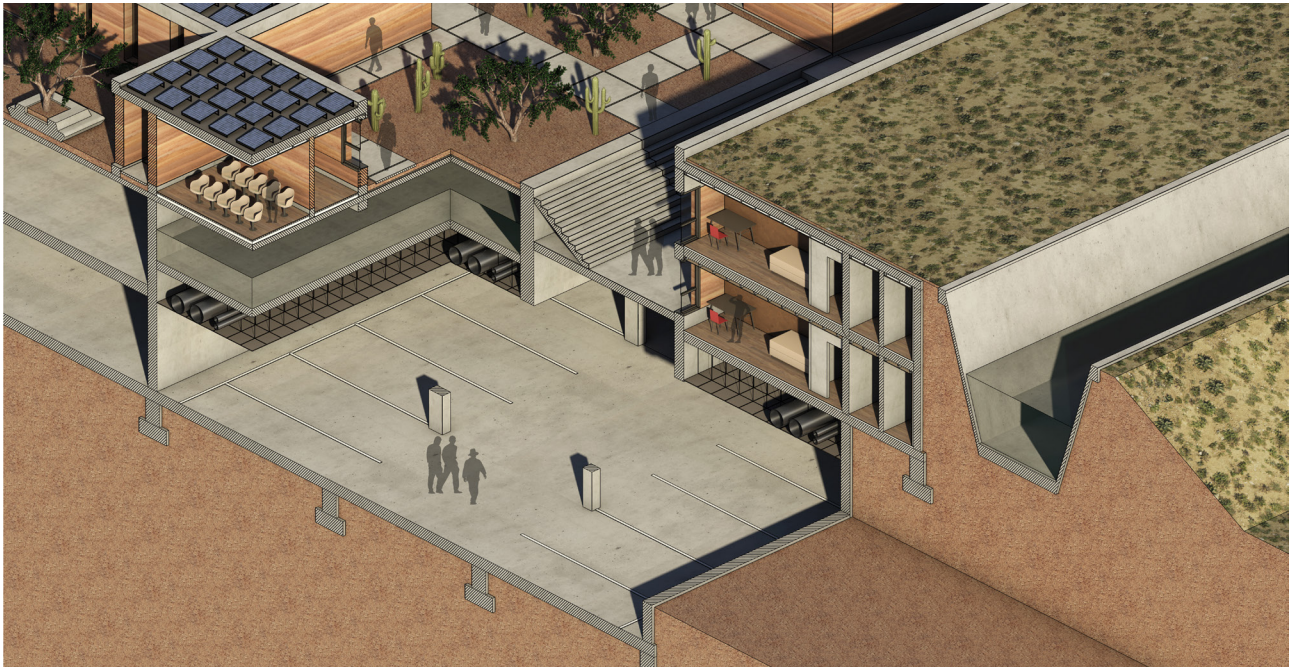


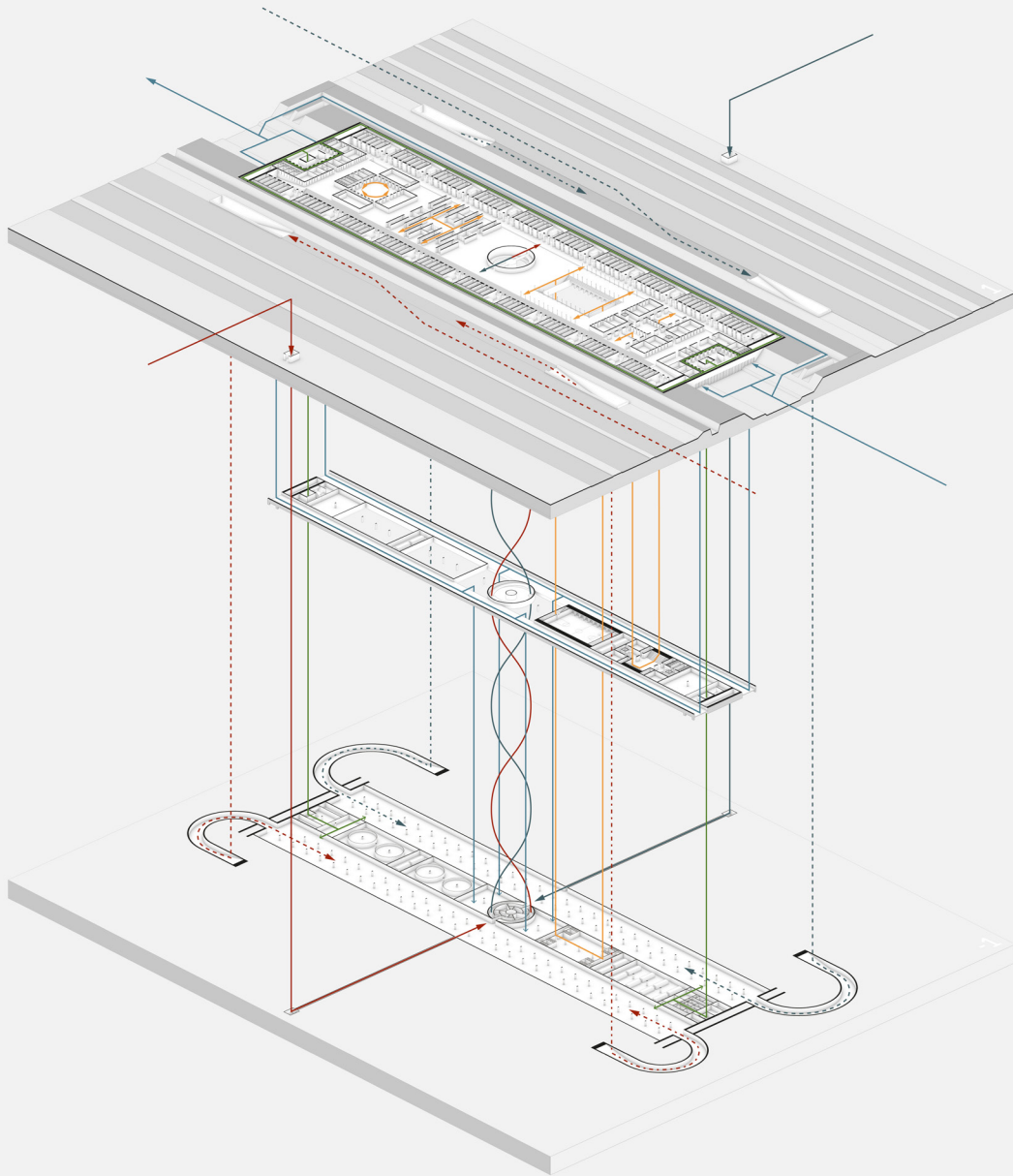






BUILDING TECHNOLOGY





US PEDESTRIAN ENTRANCE

MEXICO PEDESTRIAN ENTRANCE

US VEHICLE ENTRANCE

MEXICO VEHICLE ENTRANCE

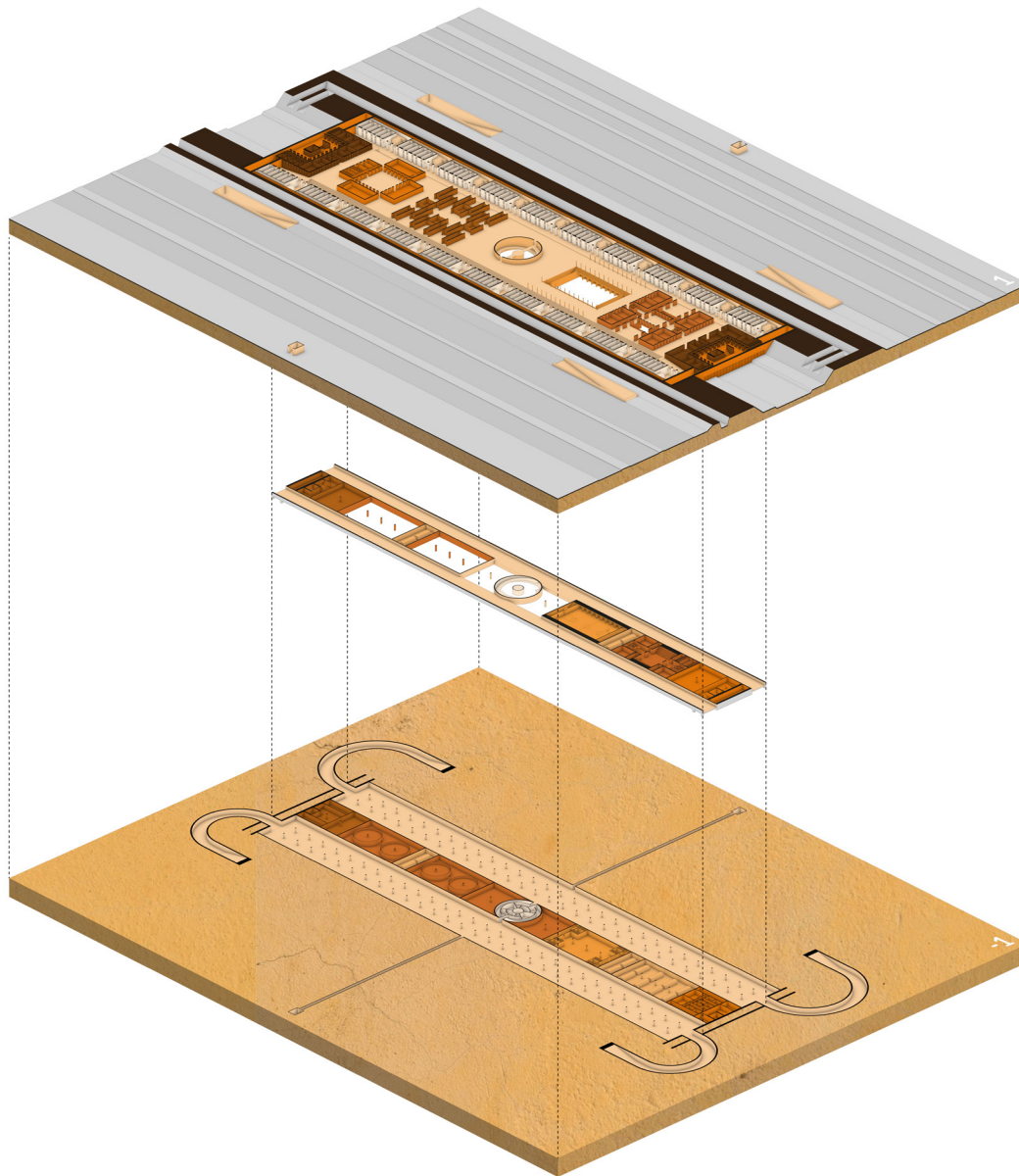
US VEHICLE EXIT

MEXICO VEHICLE EXIT

PRISONER INTAKE + DELIVERIES & EMPLOYEE CIRCULATION

PRISONER OUTDOOR CIRCULATION

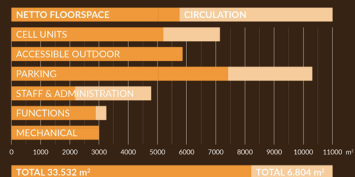
RIO GRANDE FLOW CANALS & WATER DEPOT & EMERGENCY OVERFLOW CANAL

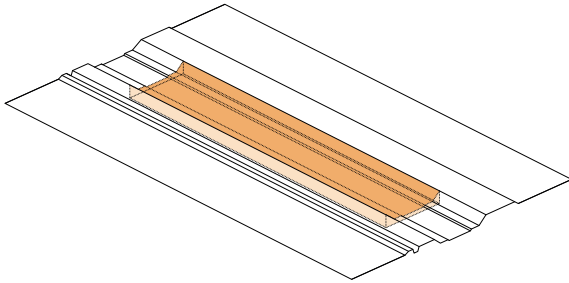


0	DOUBLE LOCK VISITOR ENTRANCE
1	CAR & PEDESTRIAN ENTRANCE + PARKING
-1	MECHANICAL ROOMS
-1	GYM + DRESSING ROOMS
-1	PRISONER INTAKE + EMPLOYEE ENTRANCE
-1	WATER TREATMENT
-1	DELIVERIES
-1	SOIL

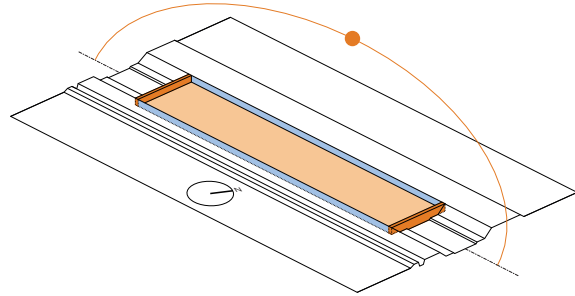
0	DOUBLE HELIX ENTRANCE
0	CANAL TUBES
0	MECHANICAL ROOMS
0	BASKETBALL COURT
0	STORAGE & STAIRS ELEVATOR
0	STORAGE & STAIRS ELEVATOR
0	KITCHEN & ROOFED LUNCHROOM
0	SUPERMARKET + STOCKROOM

0	CELL UNITS
1	ACCESSIBLE OUTDOOR
1	ENTRANCE BRIDGE
1	BASKETBALL TRIBUNE
1	LEISURE
1	GUARD CIRCULATION
1	MEETING ROOMS
1	STAFF & ADMINISTRATION
1	SERVICE & HEALTH-CARE

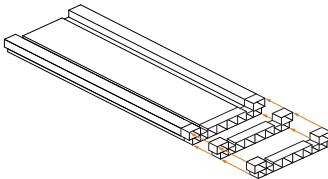




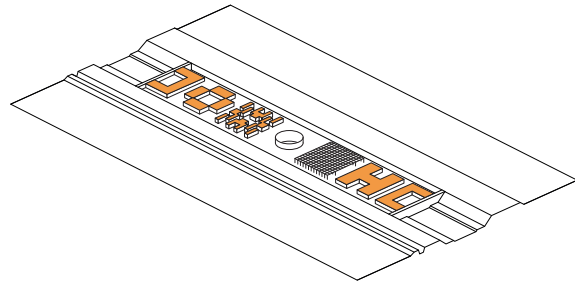
The building is dug into the ground which provides passive cooling by the cool ground. The cells are in the dikes on both sides.



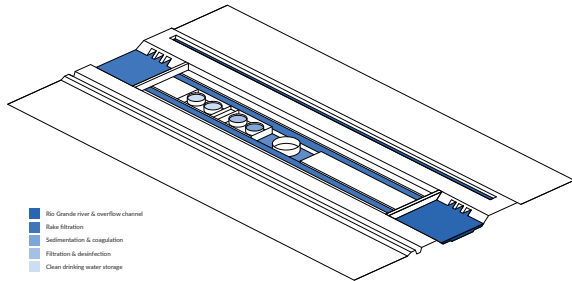
The building is oriented east-west, so most sun load will be on the short walls. The windows sit deep into the walls to keep the sun out.



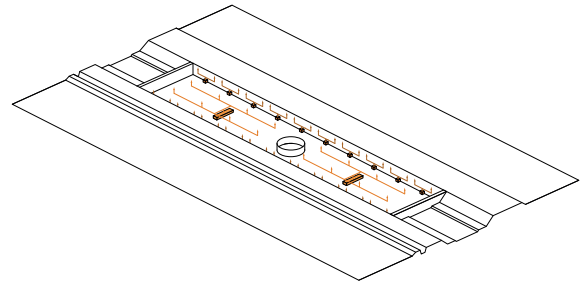
The building consists of a standardized unit that is symmetrical and repeated over the entire length to reduce building time and cost.



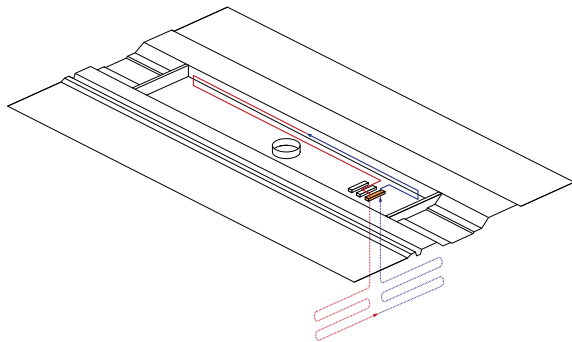
The building is in no man's land so there is no access to water or electricity. It has to be self-sufficient. Energy is collected by PV cells on the roofs of the functions.



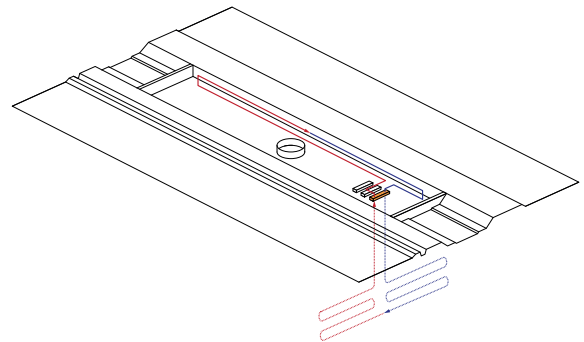
The water that flows through the building is collected in basins and filtered in two steps. It provides enough water to be self-sufficient.



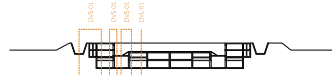
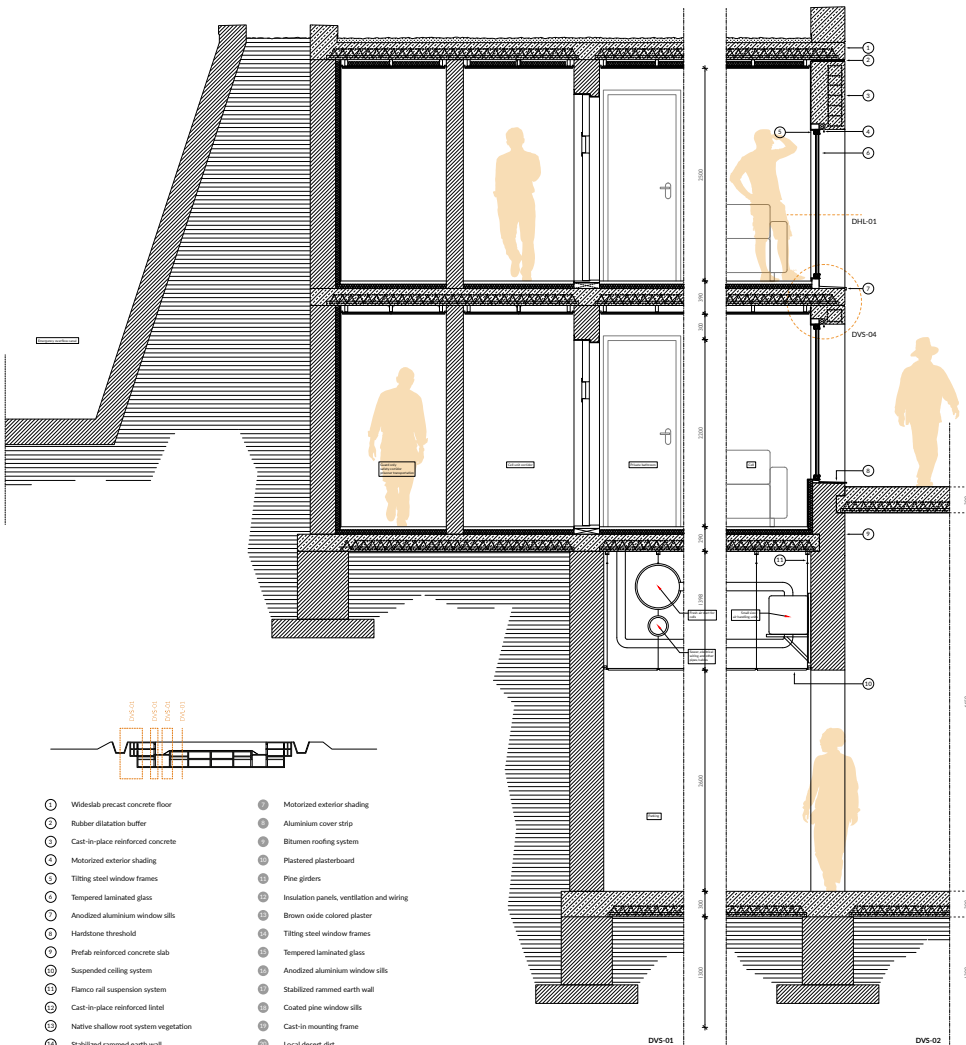
Large air handling units provide fresh air in the middle, smaller units provide specific ventilation for the cells when needed.



The climate is a combination between a hot and a cold desert climate. In the summer excess heat is stored in the soil.



This stored heat can be used again in winter to heat up the building. At the same time the cold is stored for cooling in the summer.



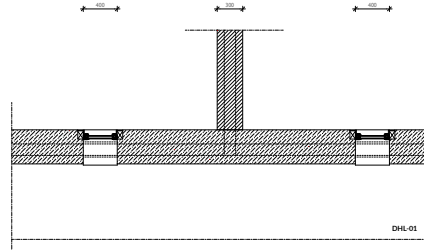
- ① Widelab precast concrete floor
- ② Rubber dilatation buffer
- ③ Cast-in-place reinforced concrete
- ④ Motorized exterior shading
- ⑤ Tilting steel window frames
- ⑥ Tempered laminated glass
- ⑦ Anodized aluminium window sills
- ⑧ Hardstone threshold
- ⑨ Prefab reinforced concrete slab
- ⑩ Suspended ceiling system
- ⑪ Flanco rail suspension system
- ⑫ Cast-in-place reinforced lintel
- ⑬ Native shallow root system vegetation
- ⑭ Stabilized rammed earth wall
- ⑮ Drainage layer
- ⑯ Local desert dirt
- ⑰ Cast-in-place reinforced concrete
- ⑱ Recessed concrete joint seam
- ⑲ Widelab precast concrete floor
- Ⓜ Rubber dilatation buffer and ventilation
- Ⓝ Drip groove
- Ⓞ Dilatation and ventilation
- Motorized exterior shading
- Aluminium cover strip
- Bitumen roofing system
- Plastered plasterboard
- Pine girders
- Insulation panels, ventilation and wiring
- Brown oxide colored plaster
- Tilting steel window frames
- Tempered laminated glass
- Anodized aluminium window sills
- Stabilized rammed earth wall
- Coated pine window sills
- Cast-in mounting frame
- Local desert dirt
- Drainage layer
- Rigid insulation panels
- Equalization layer
- Vinyl wood plank flooring
- Drainage cap
- Gooesneck odor trap
- Rio Granite canal duct
- Self-bailer storm drain

- ▨ Prefab reinforced concrete
- ▨ Cast-in-place reinforced concrete
- ▨ Stabilized rammed earth (horizontal)
- ▨ Local desert dirt
- ▨ Stabilized rammed earth (vertical)
- ▨ Compacted soil
- ▨ Rigid insulation panels
- ▨ Rubber dilatation buffer

DVS-01

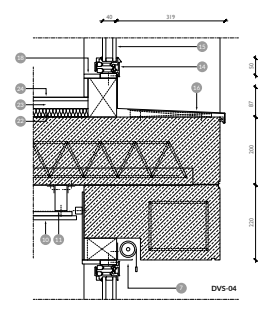
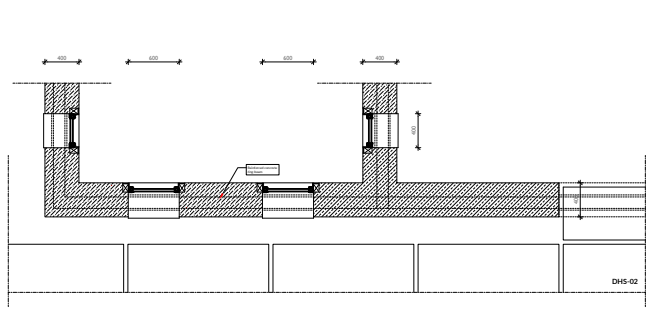
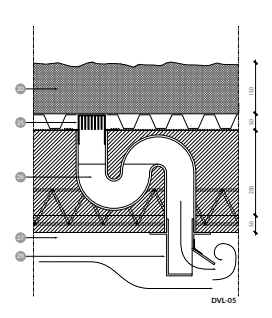
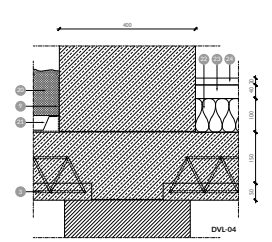
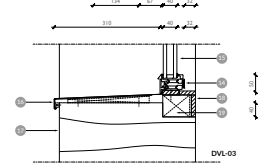
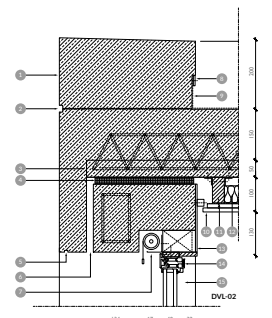
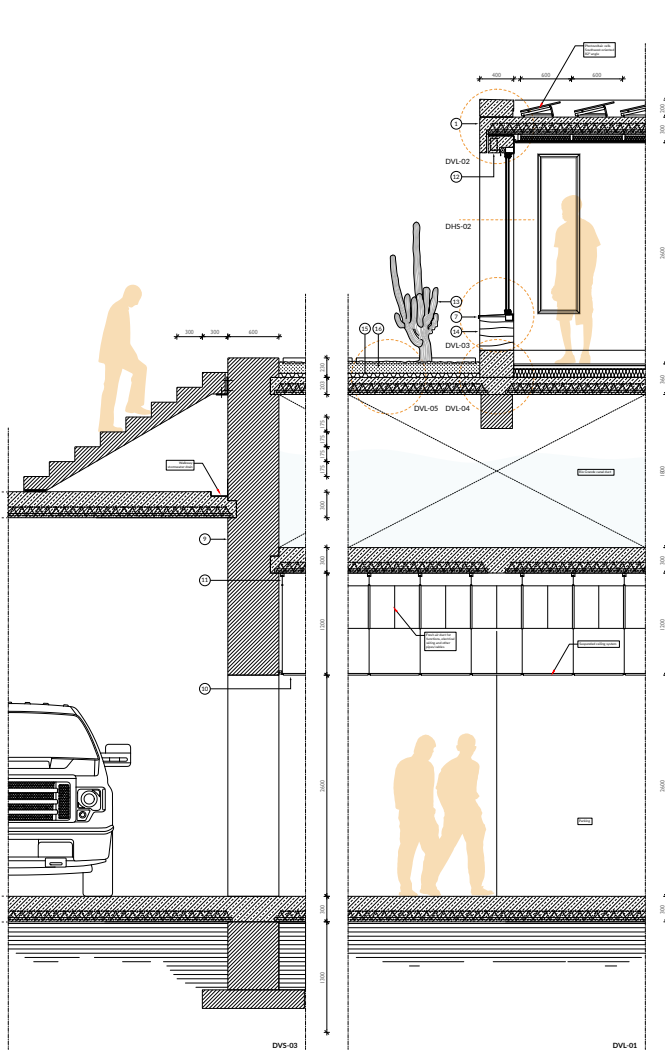
DVS-02

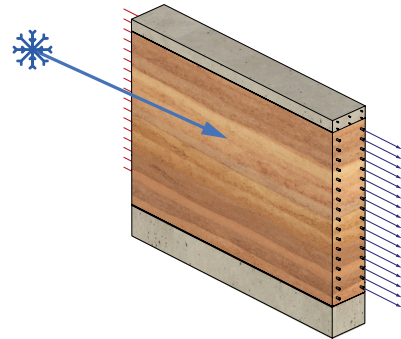
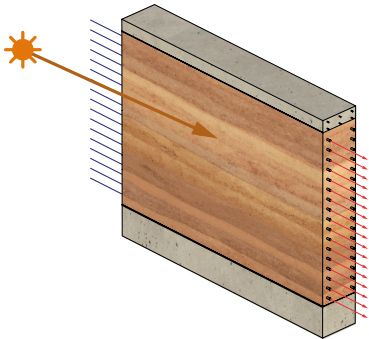
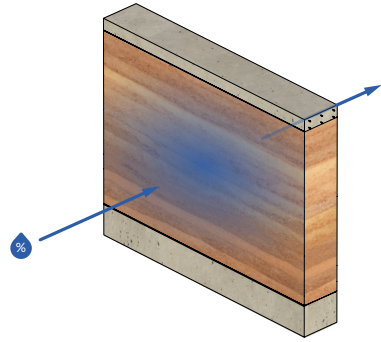
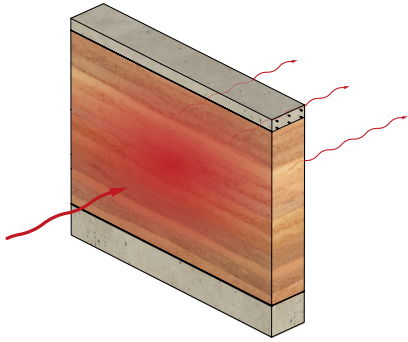
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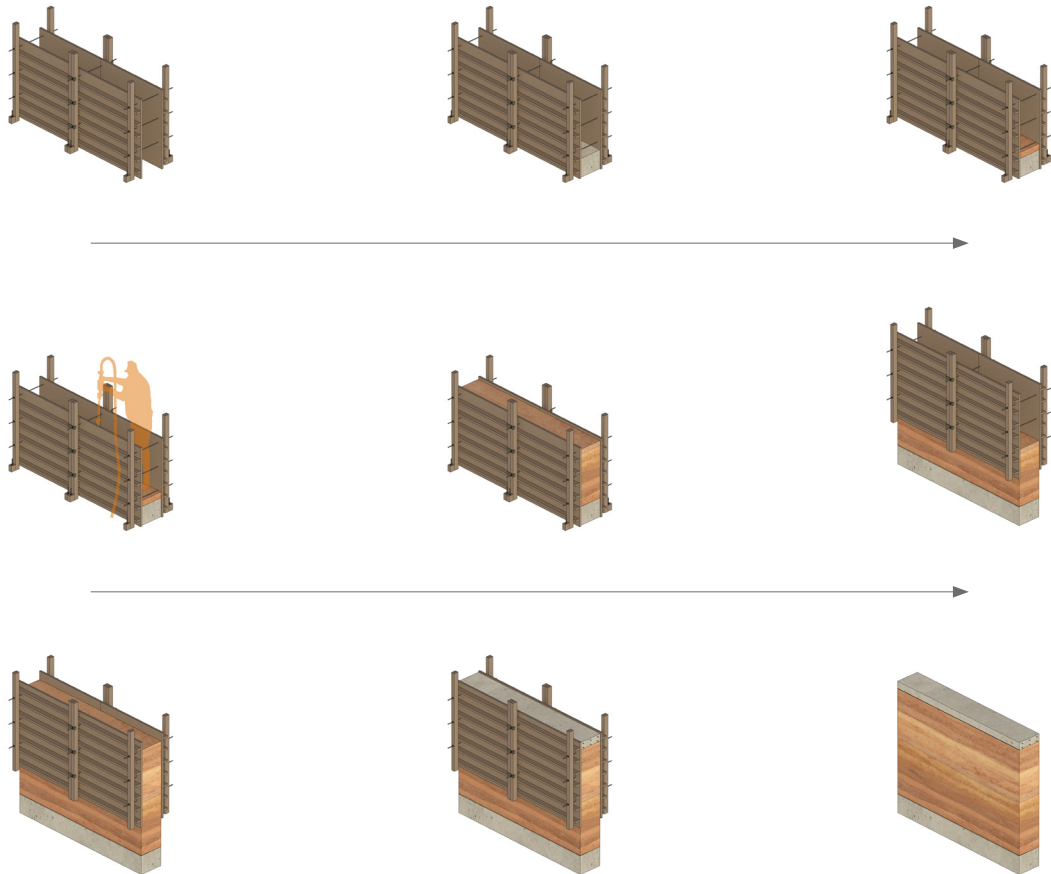
DHL-01

DETAILING





RAMMED EARTH



Rammed earth consists of a mixture of gravel, sand, silt (very fine sand) and clay. Lastly, 5-10% cement is added to protect it from weather influences. For this project American and Mexican soil is brought together in the building to create the rammed earth walls. It is a symbolic gesture to unite the countries in one place and at the same time a way to embed the building in its surroundings. The soil will be taken from different places in the surroundings to get a differentiation in color.

There is a long tradition of building with earth in desert areas. In the first place, this is because there is plenty of the material at hand and in the second place because it has great physical properties for the desert climate. It can store heat very well, so it slowly heats up in the hot sun and during the cold night it slowly cools down again. The 40 centimetres thick walls provide the optimal passive heat regulation for a constant and comfortable indoor climate temperature.

However, in the summer there is an excess of heat which is collected by water filled tubes in the facade and it is geothermally stored. In the winter this is used to heat the building when needed. In the summer this process can be reversed for cooling.

Another positive property of rammed earth is that it automatically regulates the humidity level between the inside and outside and therewith provides a comfortable climate.

SUMMARY

The border region has been the epicentre of drugs smuggle and violence since the beginning of the 20th century. The U.S. and Mexican drug markets are strongly interwoven; the majority of the drugs that are produced in Mexico, are used in the U.S. This is a problem that cannot be solved by either country on its own; it needs a bi-national solution.

Prisons are an important link in the chain towards a better future. Prisons that prepare prisoners for re-entry in society, like the Scandinavian prisons, show that the fall-back rate into crime can be reduced. However, neither the U.S. nor Mexico aims to rehabilitate prisoners and therewith sustains a downward spiral of violence and abuse. In addition the U.S. prison system is coping with racial inequality and extortion of prisoners for labor, it is therefore referred to as the *reinvention of slavery*. Mexican prisons are corrupt, violent and overcrowded. Hundreds of prisoners die in riots each year.

It is highly unlikely this situation in either country will improve. *Law and order* president Donald Trump openly supports the dysfunctional private prisons. The Mexican government is trying to improve the situation but corruption and a lack of resources are hampering the process.

This project addresses these urgent issues and furthermore envisions a humane, rehabilitating prison environment, which is based on *the most humane prisons in the*

world in Scandinavia. The no man's zone of the border is used to unite the countries rather than separating them, by situating the prison on the border in the twin city of El Paso and Juárez. It accommodates Mexicans that are in prison in the U.S. and Americans that are in prison in Mexico for a border related offence: *Border Prisoners*.

The *Border Prison* also offers prisoners the opportunity to see friends, family, lawyers and psychologists. This is usually impossible for this group of prisoners, because crossing the border is difficult and because of the language barrier. In addition, it simplifies the logistics of prisoner transportation between the countries.

The building is fully emerged in the profile of the canalized Rio Grande. The dikes on both sides of the river prevent that the building can be seen from the outside. The prison is designed for 240 prisoners, which is a relatively low amount for American and Mexican prisons. The concept of a small-scale prison comes from the Scandinavian model and allows for personal contact and guidance of prisoners by the staff. The amount of cells as well as the capacity of the facilities and outdoor space guarantees a safe and appropriate environment for the rehabilitation process.

It is important that prisoners have a calm and clear state of mind, because this allows them to focus better on preparing themselves for life after prison. This means

that they should have a sense of comfort and normality in prison; they should be happy. Their environment plays an important role to achieve this. If the scale of a building is too large, the prisoners could feel alienated from their environment, which can be disconcerting. Human scale is therefore an important factor in the design of this prison. Even though it is a large and highly systematized building, from a human point of view the building always feels relatively small and comfortable. This effect is established by making the building volumes low and by creating a high level of architectural variation. At the same time the architectural form is consistent to create a harmonious and calm arrangement of building volumes that will not distress the prisoners. The amount of different materials is kept low and the quality of these materials is high.

Several sustainability concepts are applied in order to realize a fully self-sustaining building. This is done from an environmental point of view and it is done because the building cannot be connected to electricity, water etc. since it is located on a piece of no man's land.

The use of the building material rammed earth is also a sustainable choice, as well as an allegorical choice; American and Mexican soil is brought together in the building to create the rammed earth walls. It is a symbolic gesture to unite the countries in one place.

BORDER PRISONERS

Rethinking prison typology in the U.S. - Mexican border condition

2016 | 2017

Graduation thesis by Paul de Wilde

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