

NEAC

Netherlands American Cemetery Visitor Center

CFA meeting Overflow Parking & Restroom Facility
2023.04.06



dGm^R

hp engineers

Pieters
BOUWTECHNIEK

SmitsRinsma
Adviseurs groenvoorziening en terreininrichting

KAAN Architecten



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NEAC EUROPE





Amsterdam

Brussels

+ Netherlands American Cemetery

+ Henry-Chapelle Cemetery

Ardennes Cemetery +

Luxemburg

NEAC BENELUX

SITEPLAN



◀ *Maastricht*



Margraten ▶

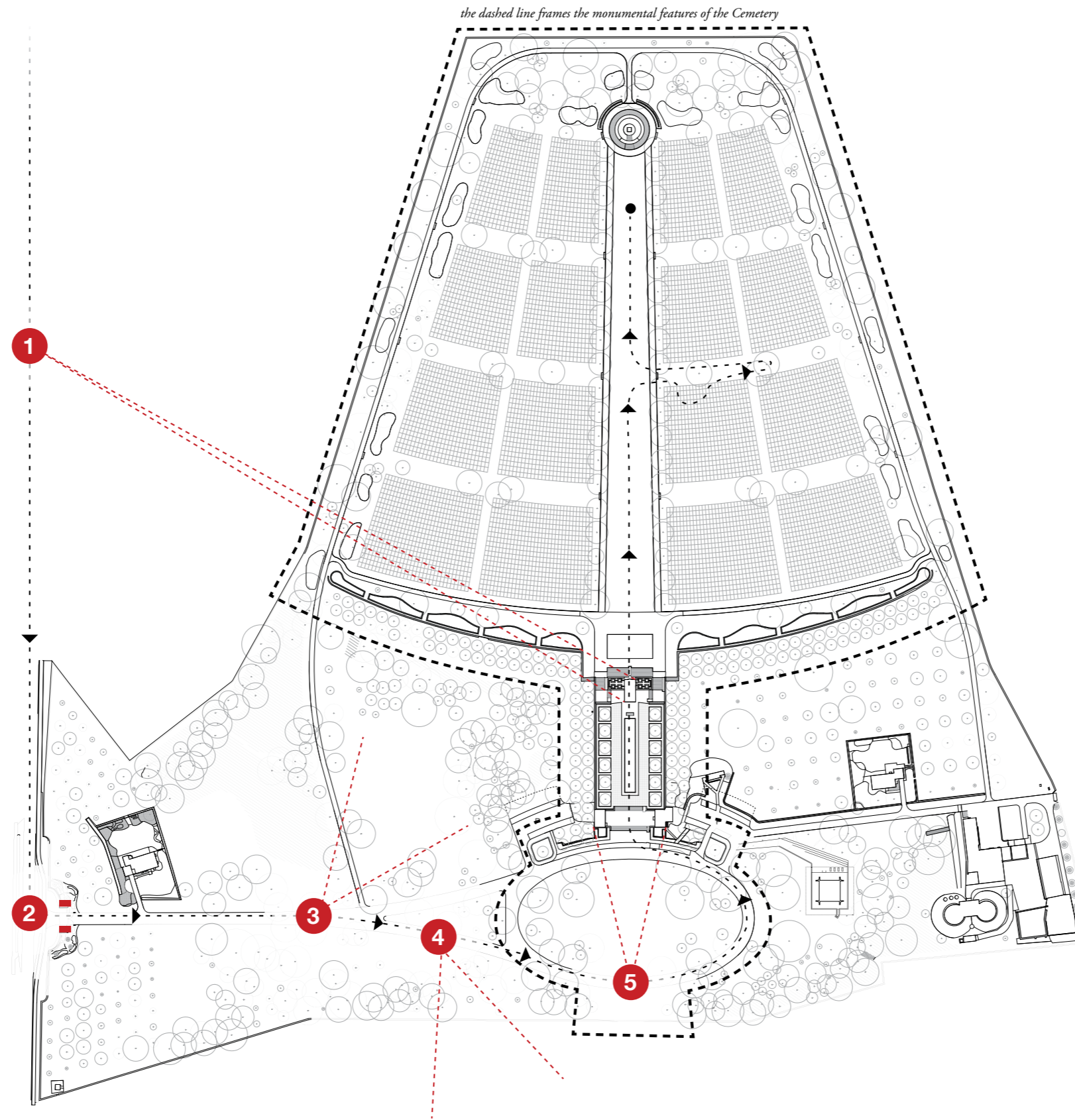
Honthem



VISITOR EXPERIENCES



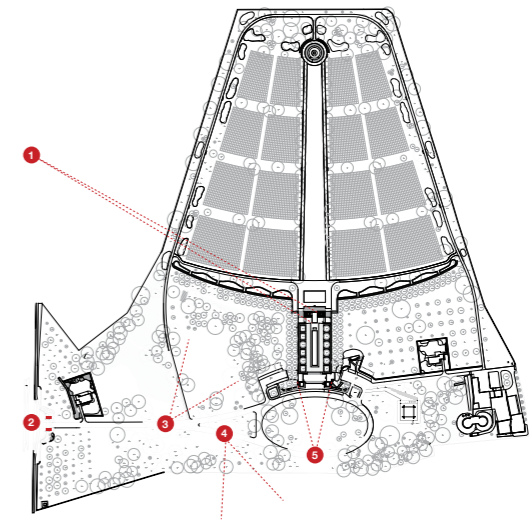
VISITOR EXPERIENCES - ARRIVAL



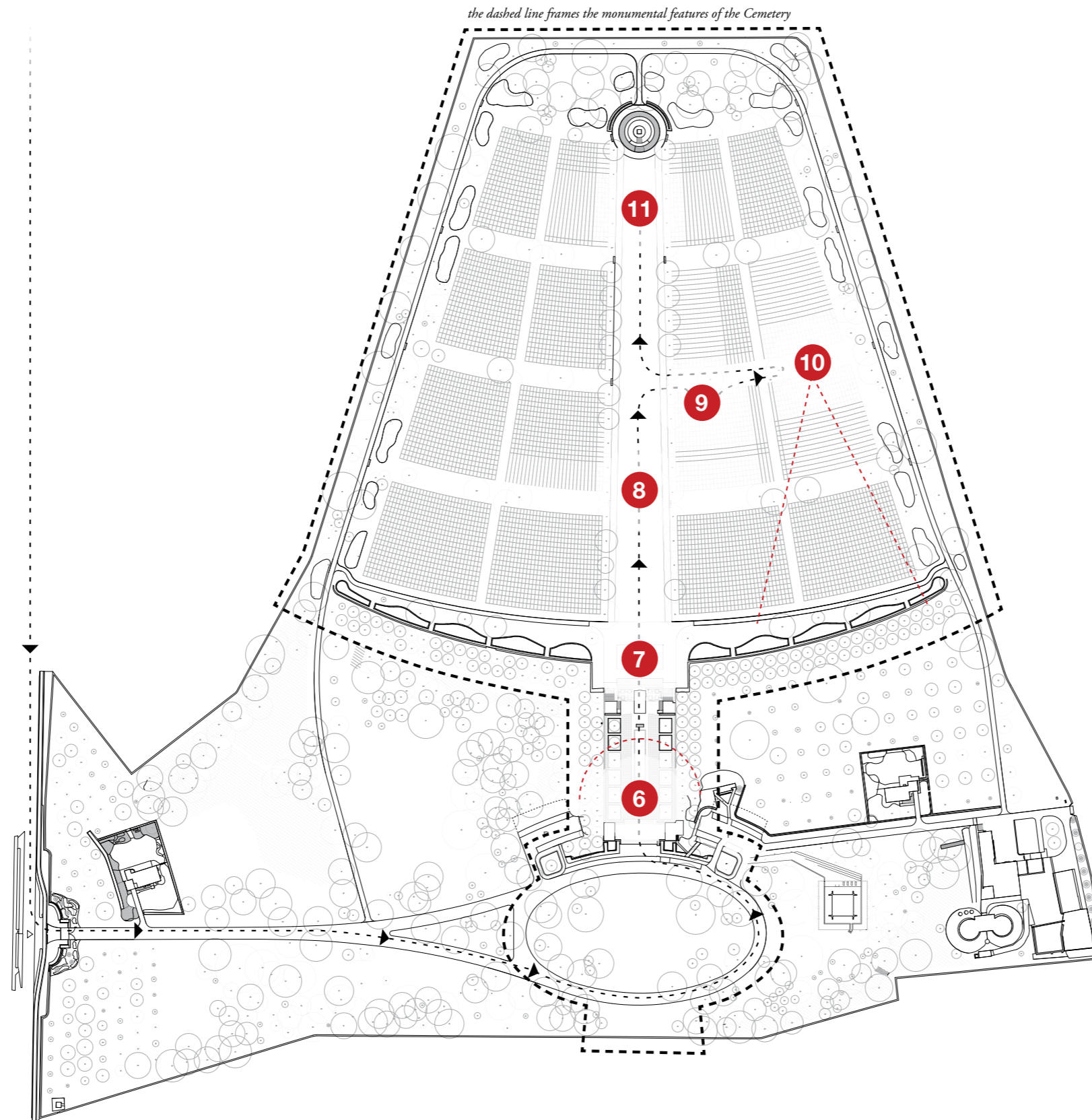
VISITOR EXPERIENCES - ARRIVAL

This phase considers the Sequence of 'Arrival' Experiences and discoveries, and is intentionally designed in a way to set the mood for the visitor;

- The glimpse of the Cemetery (1);
- The first impression of the Cemetery landscape (2);
- The drive through the lawns and trees - a moment of absolute calm and silence (3);
- The visual connection with the contrasting surrounding landscape (4); and
- The glimpse of the Court of Honor (4), followed by the symmetry perceived from the Ellipse (5).



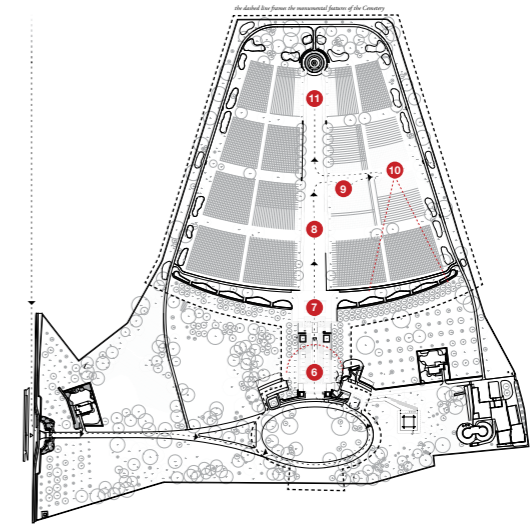
VISITOR EXPERIENCES - MONUMENT



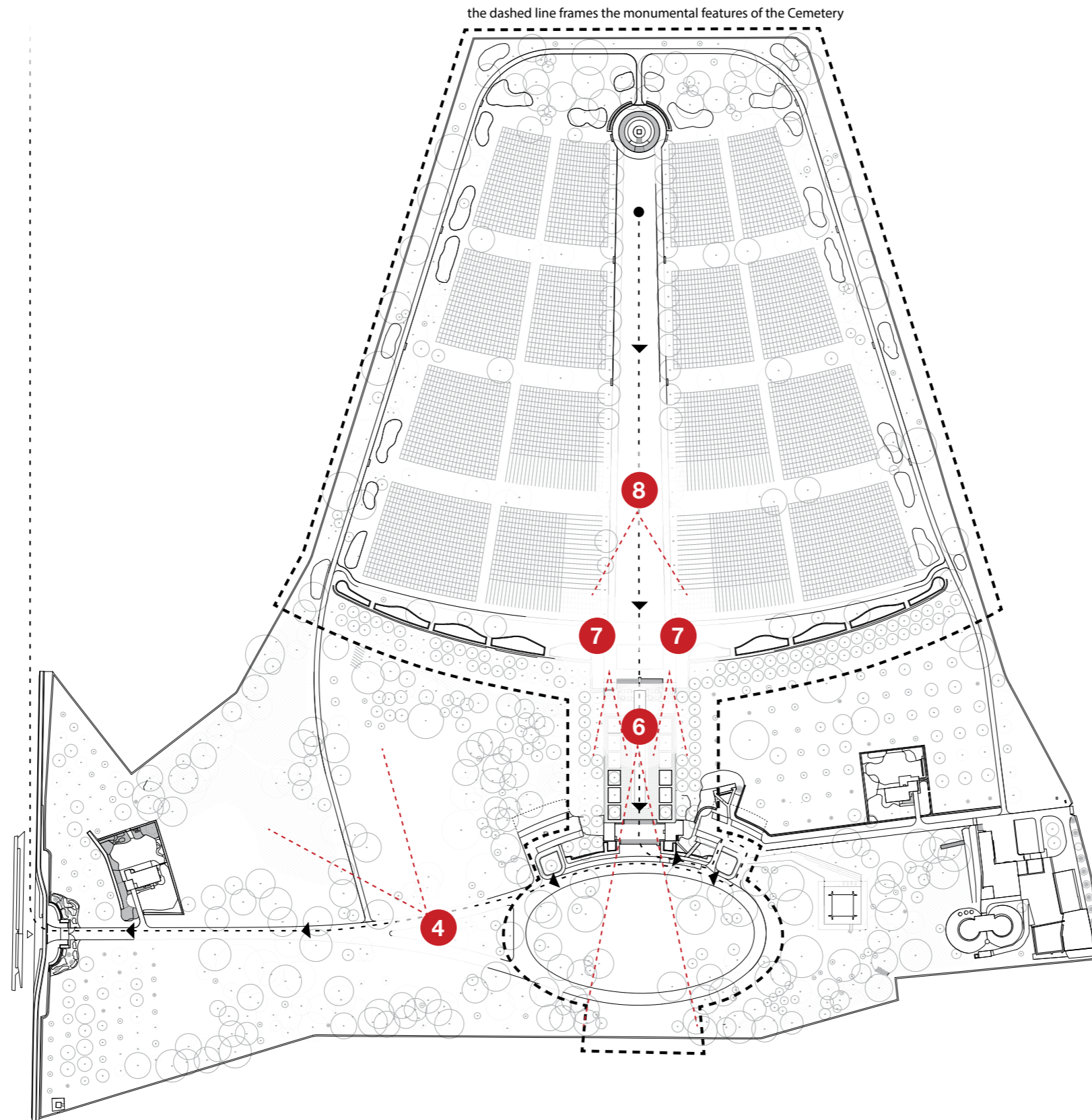
VISITOR EXPERIENCES - MONUMENT

This phase is about commemoration and contemplation and can be considered as the Visitor Experience of the Monument. First, the Visitor gets exposed to information about the relevance of the Cemetery and why it is located at Margraten. Followed by a sequence of sacred spaces to honor the fallen soldiers. These Sacred Spaces are considered untouchable.

- The open viewshed on the entire Court of Honor (6);
- The Reflecting Pool and the two parallel Walls of the Missing (6);
- The Statue of the Mourning Women (6)
- The steps towards the Chapel and the artwork representing the Royal Dutch Crown (7);
- The pure sacred view of the Burial Field (7), the Plots (8) and the white marble Head Stones (9);
- The view on the Chapel Tower and the Orchard from within the Burial Field (10).



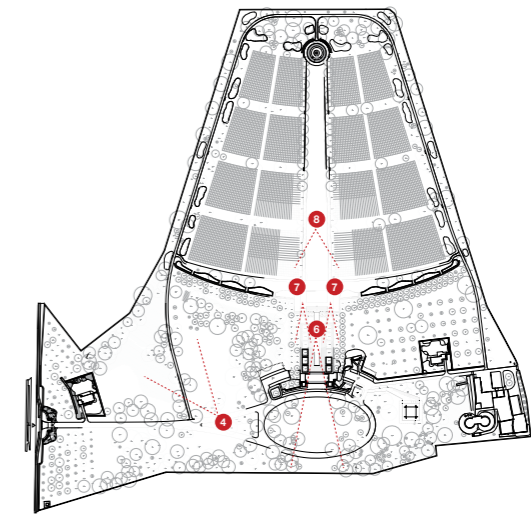
VISITOR EXPERIENCES - DEPARTURE



VISITOR EXPERIENCES - DEPARTURE

This phase can be considered as the Sequence of 'Departure' Experiences. The Visitors gets on more moment of commemoration and contemplation when they descend from next to the Tower towards the Court of Honor, down to the steps at the Entry of the Court of Honor, before they depart from the Cemetery;

- The view on the Chapel Tower (8),
- followed by the view over the steps descending to the Court of Honor (7),
- overlooking the Reflecting Pool, as the first steps of traveling back (7);
- a last view on the surrounding Limburg Landscape and the Court of Honor entrance area (6); and
- the drive through the Cemetery lawns and trees, a moment of absolute calm and silence (4).



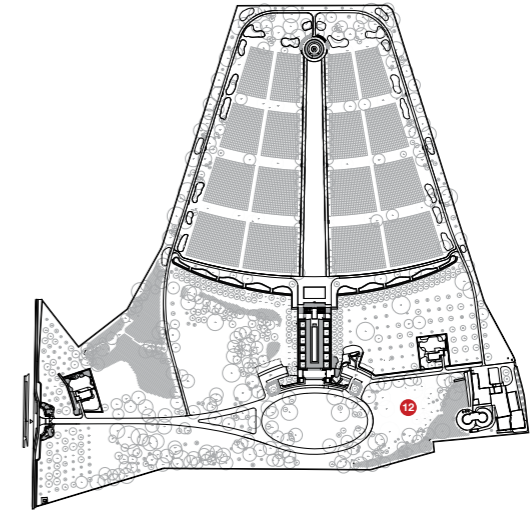
VISITOR EXPERIENCES - VISITOR CENTER



VISITOR CENTER - CONSTRUCTION

A visit to the new Visitor Center can be made once one completed the 'Arrival Experience' and before one enters the Court of Honor and the Burial field. One will hear about the story before they enter the commemorative area of the cemetery in order to create more context and knowledge about the historic events before one arrives at the plots.

The visitor flow is not determined explicitly in a way that one is forced into the Visitor Center first before one continues their journey. One can always go the Monumental Area first and decide to visit the Visitor Center last. A visit to this new building does not interrupt the visitor experience, it contributes.



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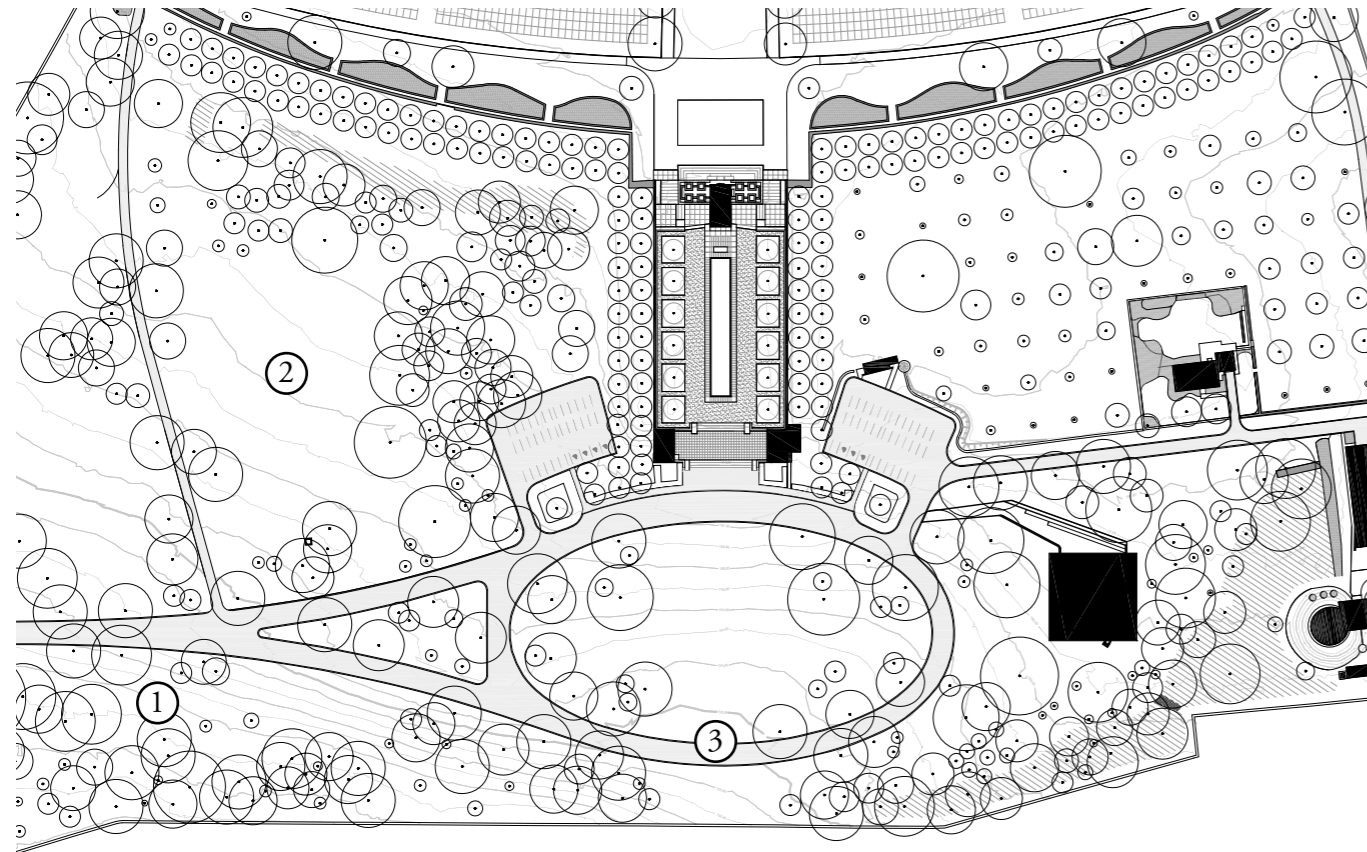
IMPACT

OVERFLOW PARKING - CURRENT SITUATION

Analysis of Existing Overflow Parking

The existing overflow parking (OP) is comprised of an unformalized system of open spaces around the site. In this three main areas of overflow can be seen – on the roads, at the entrance orchard and on the open field. In total an estimated amount of 165 spaces are available. These facilities for overflow parking are used approximately 100 days each year, predominantly in the summer months.

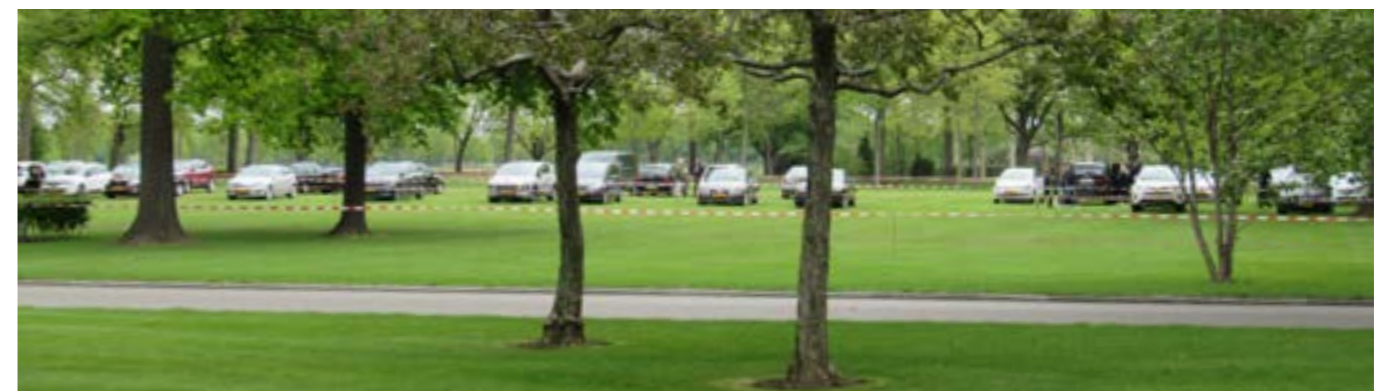
1. OP orchard
2. OP lawn
3. OP ellipse



Situation of overflow parking during special event in 2016



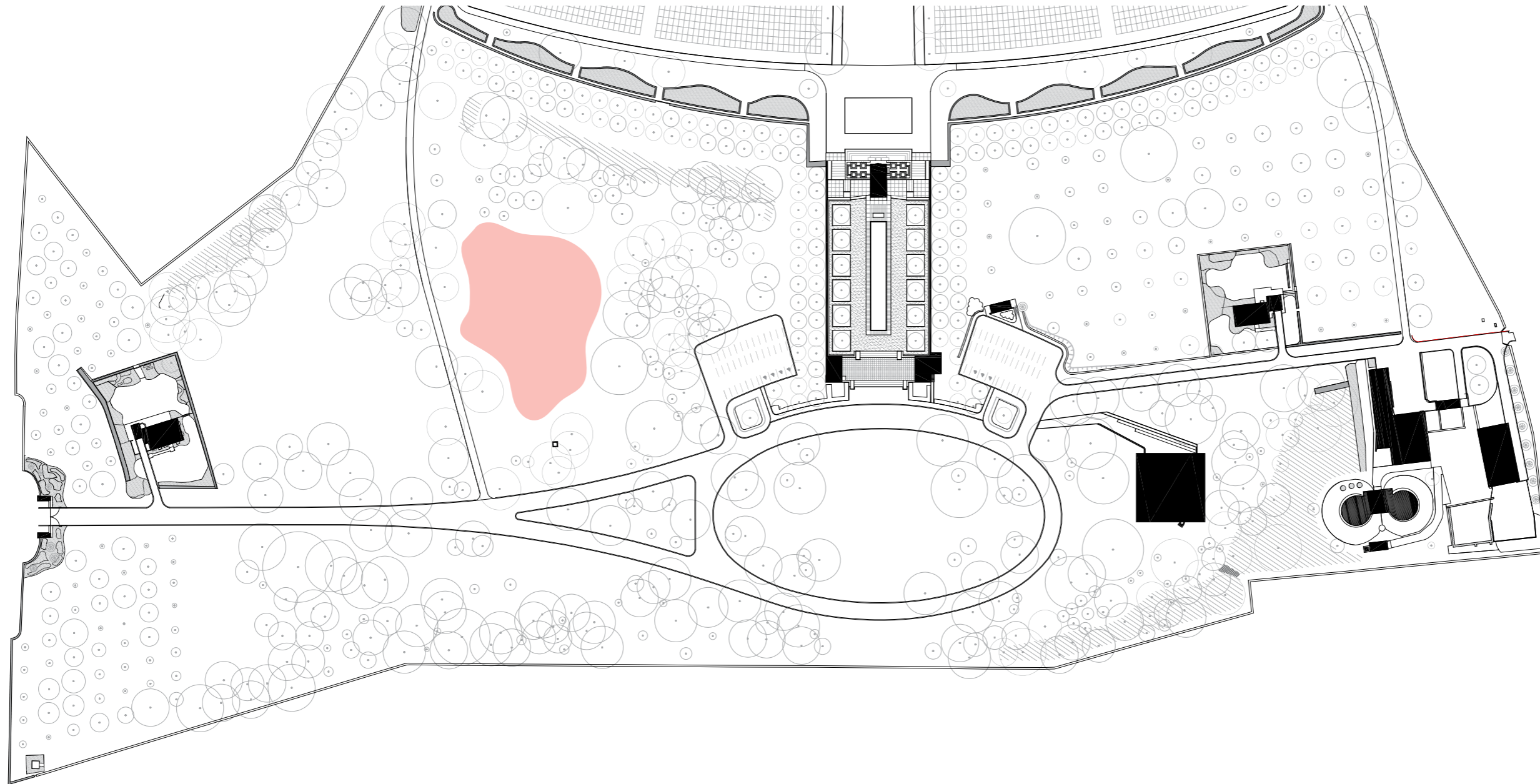
Overflow parking on orchard during Memorial Day 2019



Overflow parking on lawns during Memorial Day 2019

OVERFLOW PARKING - CURRENT SITUATION

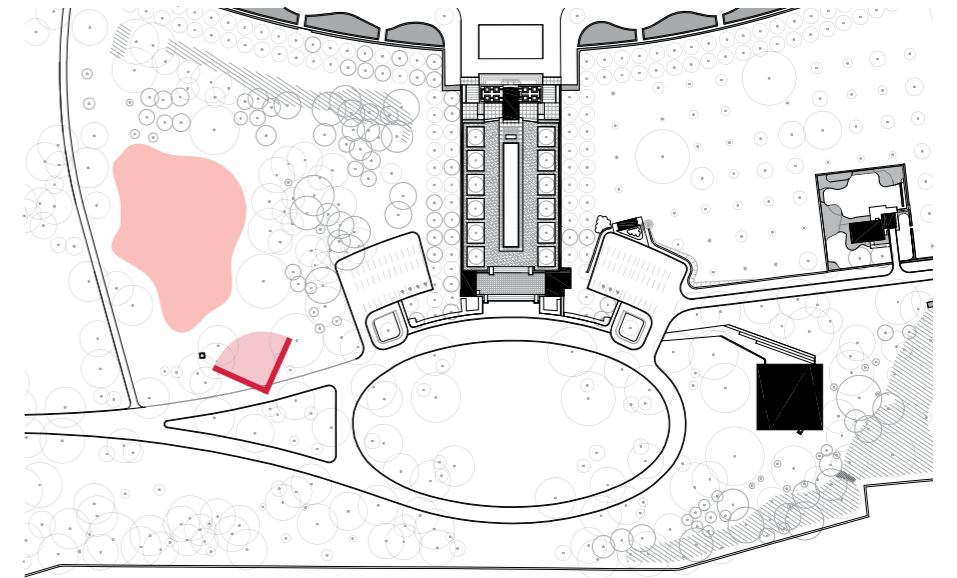
The meadow south of the superintendent's residence and north of the north parking lot is currently used at peak visitation times (such as special events) for overflow parking. Formalizing the site with a reinforced grass surface is the preferred alternative.



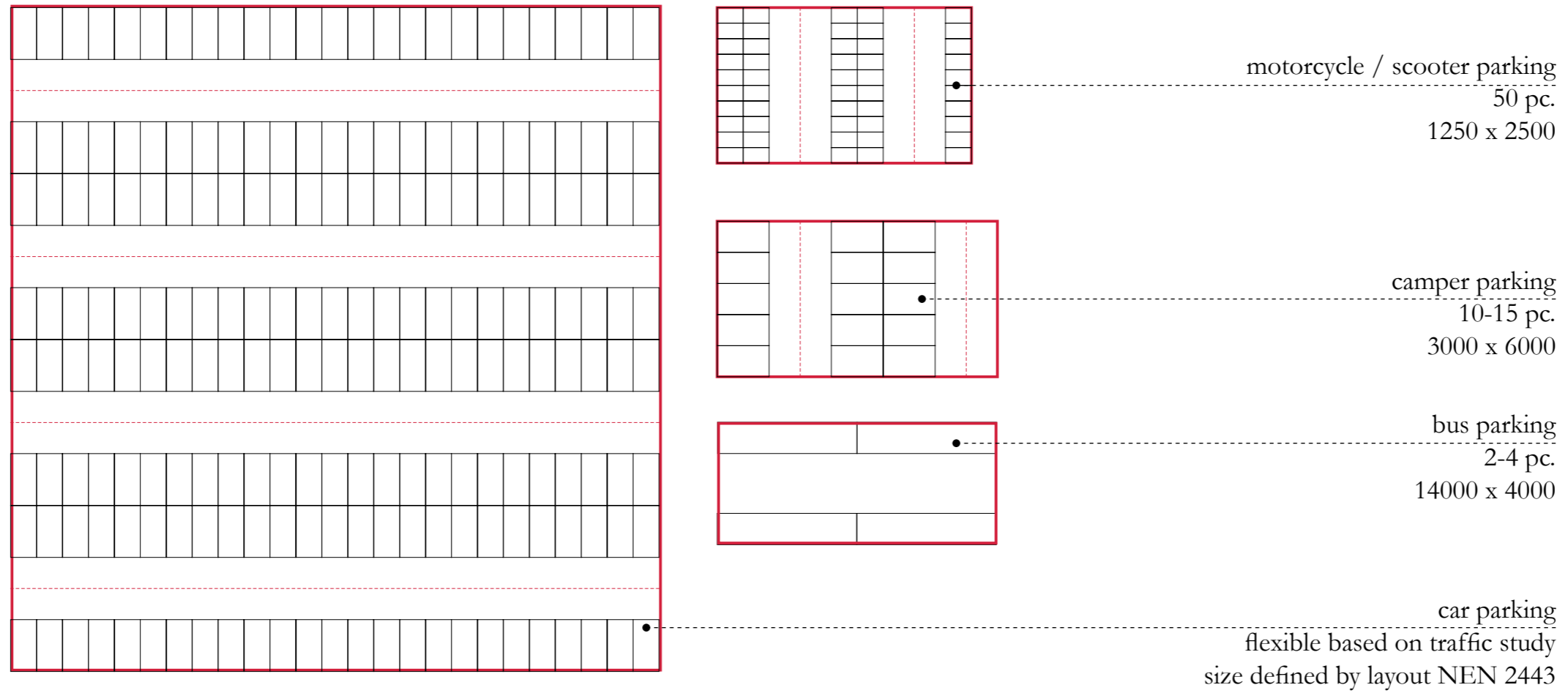
0 20 40 100
meter



OVERFLOW PARKING - CURRENT SITUATION



OVERFLOW PARKING - PROGRAMME



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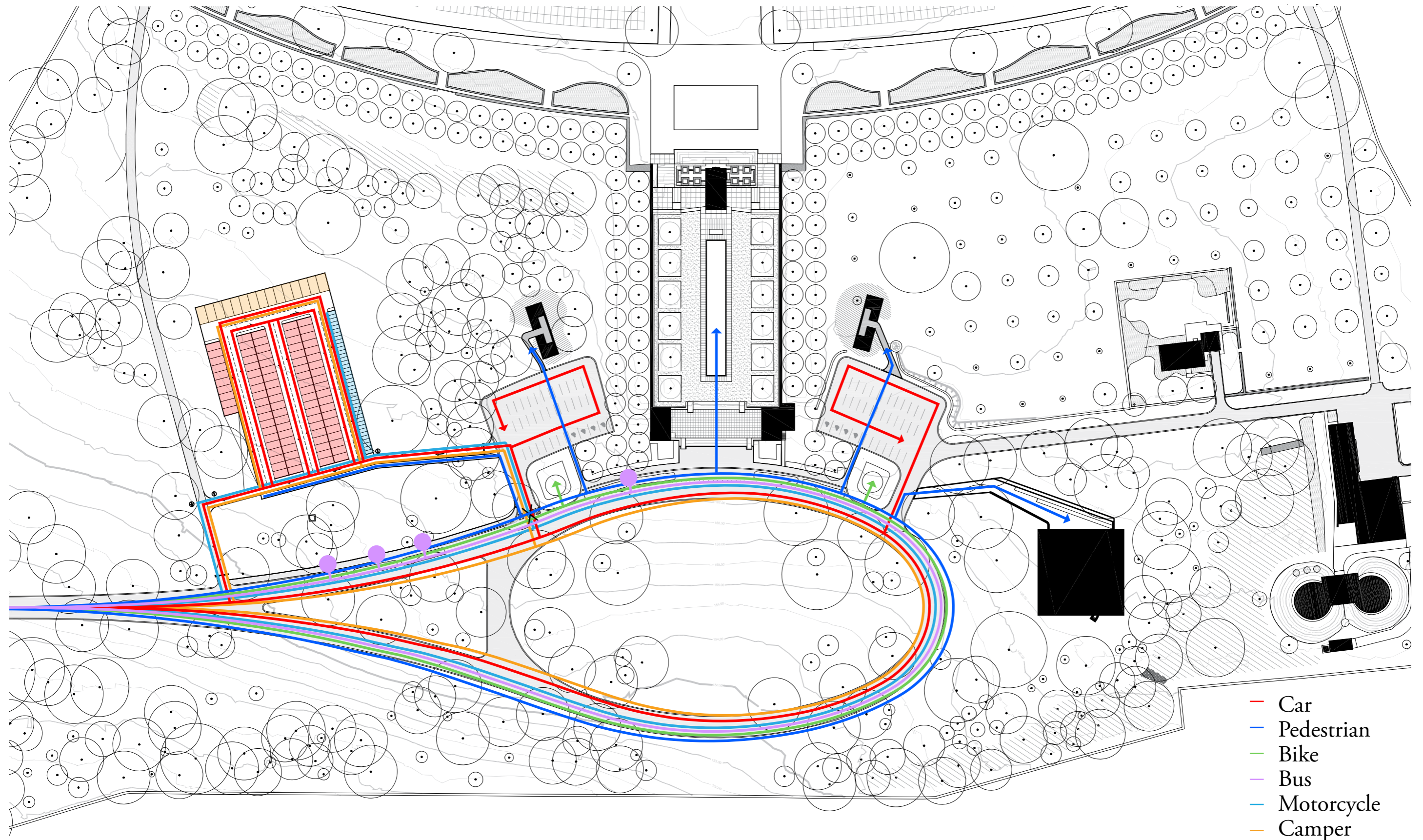
CONCEPT DESIGN

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OVERFLOW PARKING - CONCEPT DESIGN



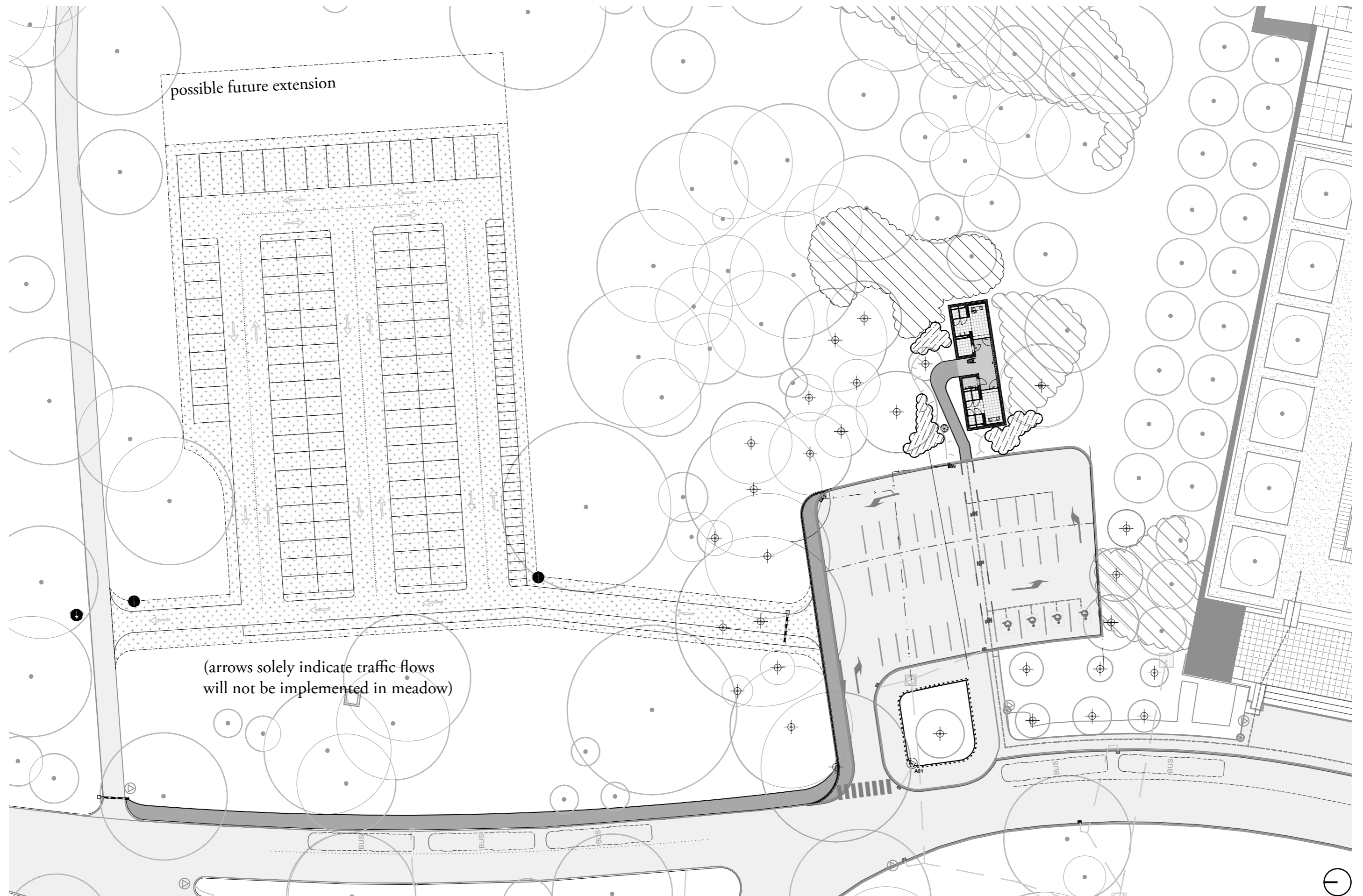
OVERFLOW PARKING - CONCEPT DESIGN - FLOWS



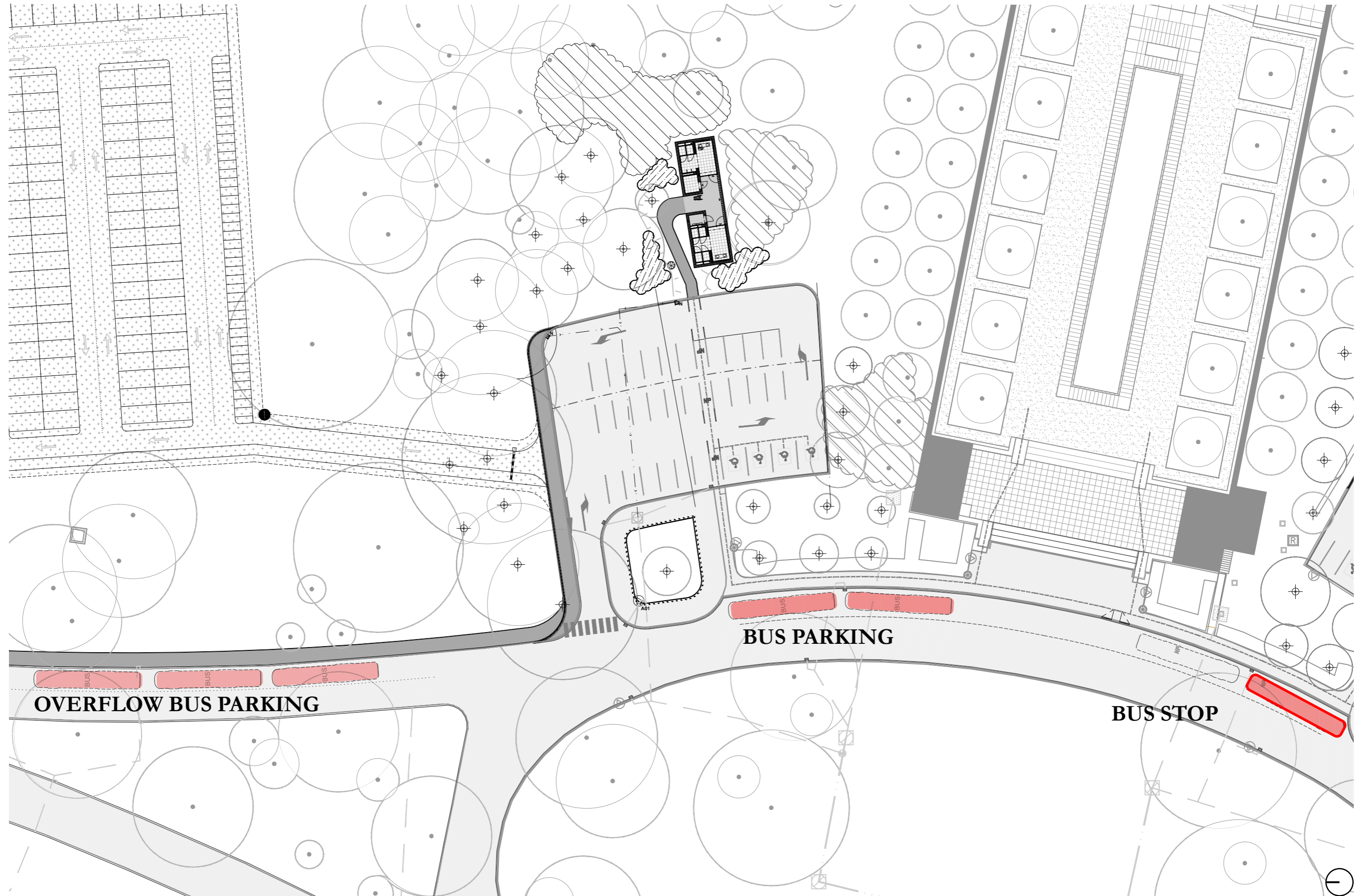
- Car
- Pedestrian
- Bike
- Bus
- Motorcycle
- Camper



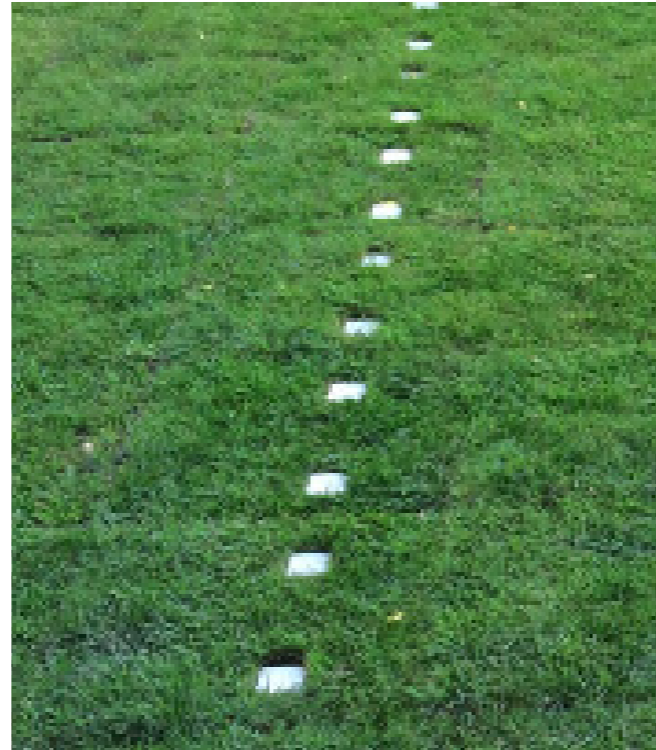
OVERFLOW PARKING - CONCEPT DESIGN



OVERFLOW PARKING - BUS

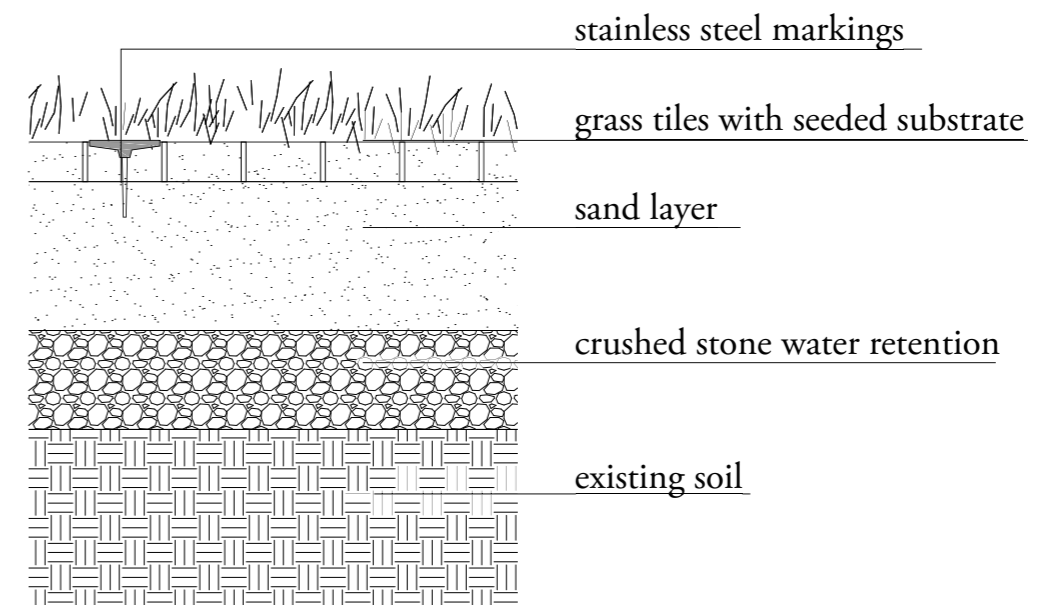


OVERFLOW PARKING - CONCEPT DESIGN - MATERIALIALIZATION



The site will be formalized with a reinforced grass surface suitable for vehicular movements without impacting the permanent appearance of the meadow. Parking spaces and driveways can be demarcated using stainless steel insets for grass tiles, which can be removed during low season.

Sample package buildup



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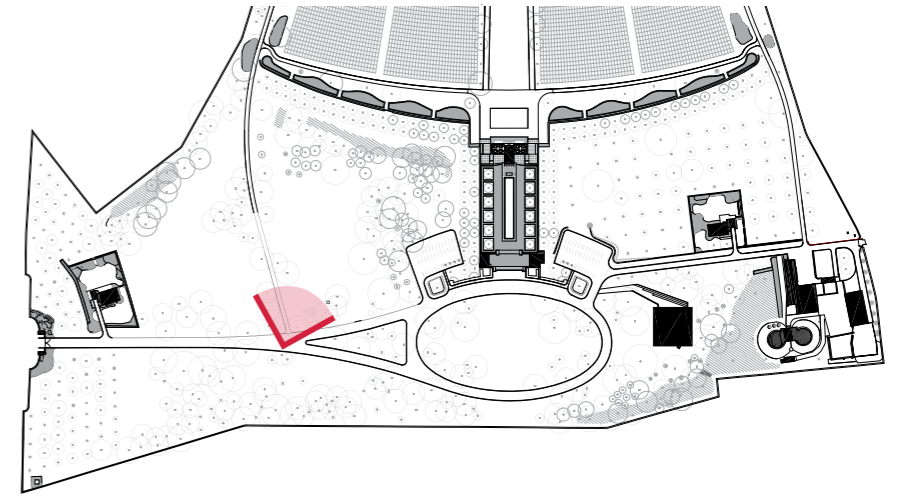
RESTROOM FACILITIES

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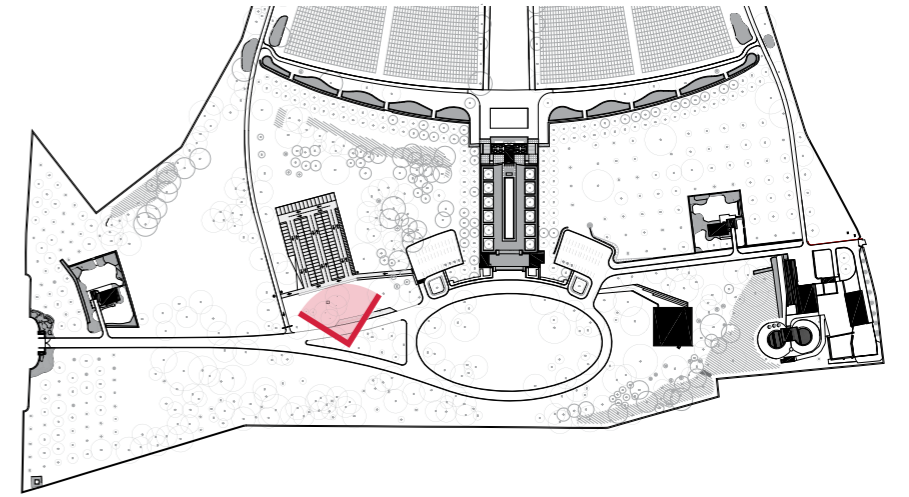
CONCEPT DESIGN

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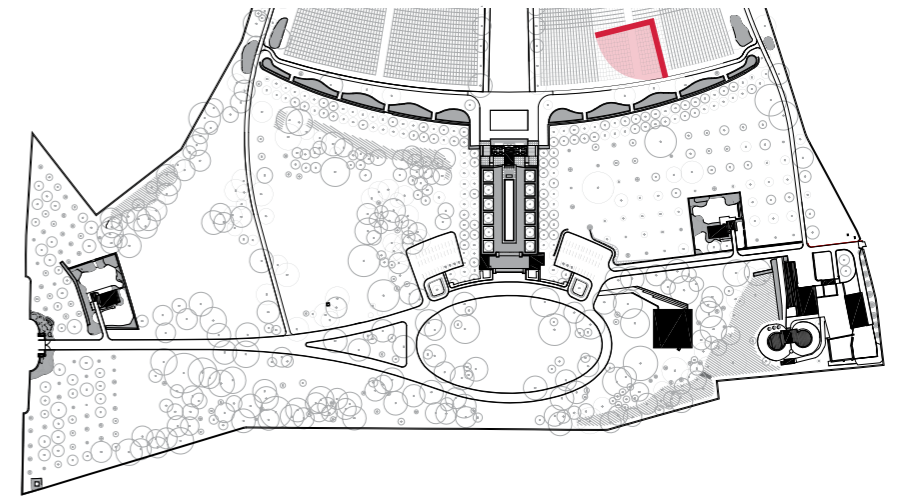
IMPACT - VISITOR EXPERIENCES - ARRIVAL



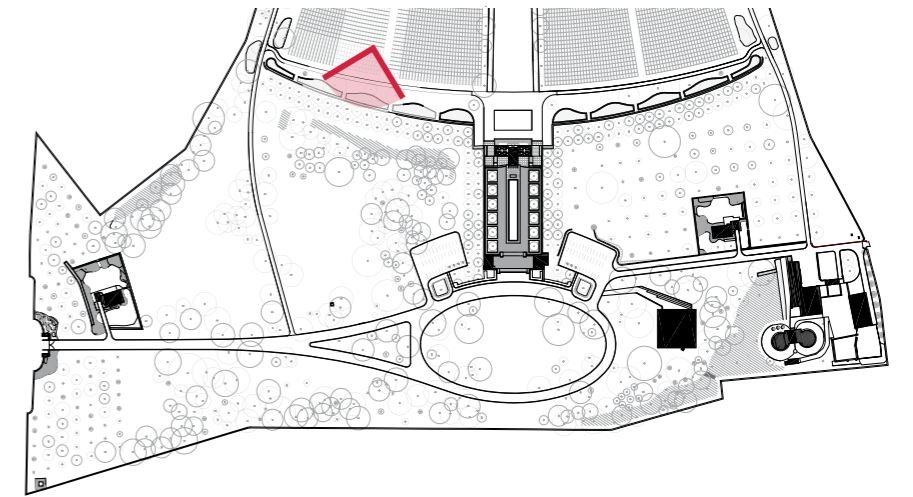
IMPACT - VISITOR EXPERIENCES - ARRIVAL



IMPACT - VISITOR EXPERIENCES - MONUMENT



IMPACT - VISITOR EXPERIENCES - MONUMENT



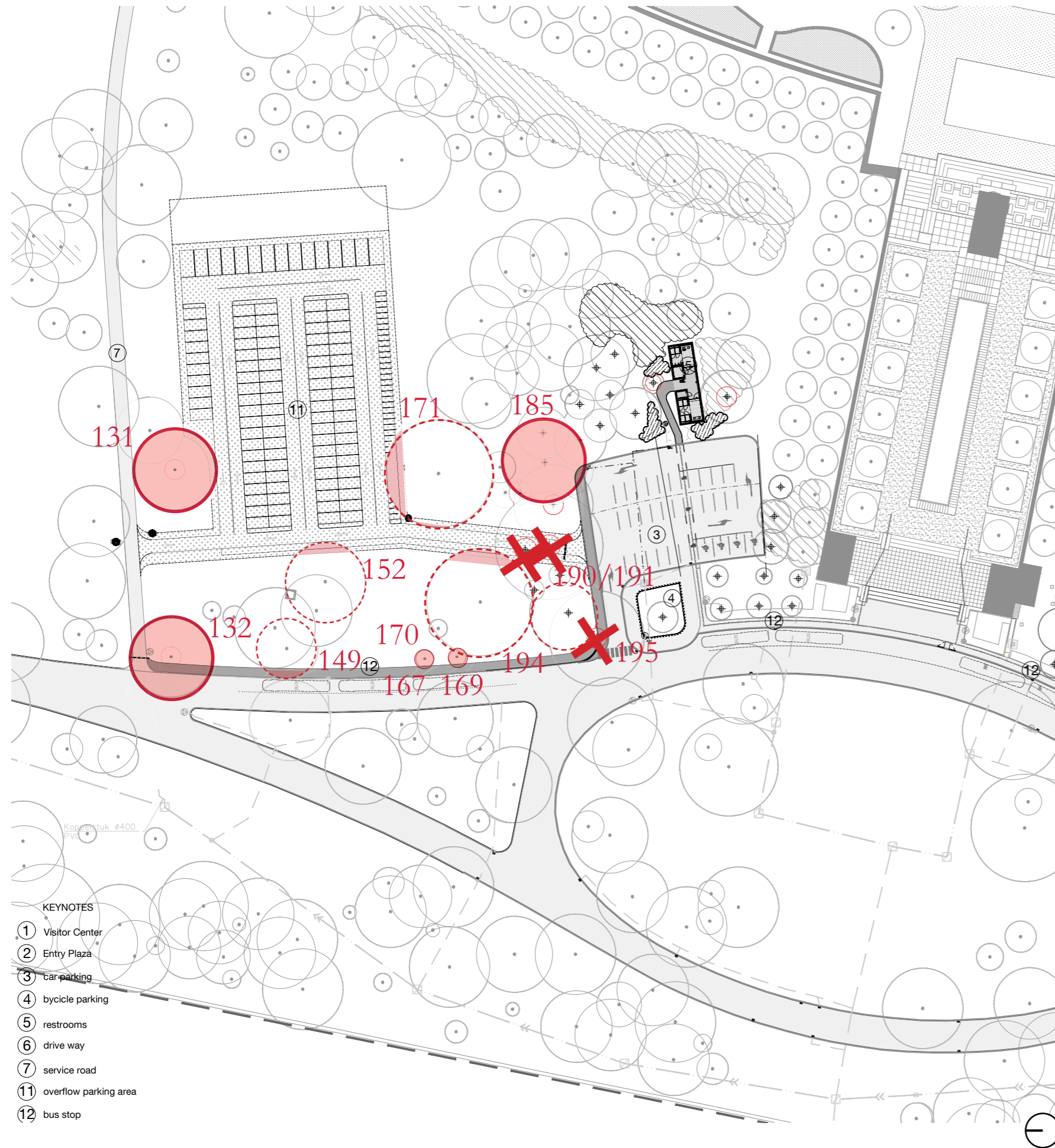
Summer



Winter



IMPACT VEGETATION



Cutting of trees ✗

Nr.	Species	Size crown (M)	Height (M)	Cause
190	Quercus rubra	18	17	Entrance overflow parking
191	Fraxinus excelsior	4	8	Entrance overflow parking
195	Quercus robur	16	20	Extension of parking lot

Possible impact in critical root zones ●

Nr.	Species	Size crown (M)	Height (M)	Cause
131	Quercus cerris	18	20	Overflow parking
132	Quercus robur	18	20	Extension of sidewalk
185	Acer campestre	14	17	Extension of parking lot

Possible impact in crown ●

Nr.	Species	Size crown (M)	Height (M)	Cause
149	Quercus cerris	14	18	Extension of sidewalk
152	Quercus robur	18	18	Overflow parking
170	Quercus rubra	24	20	Entrance overflow parking
171	Quercus coccinea	24	20	Overflow parking
194	Quercus coccinea	16	17	Extension of parking lot

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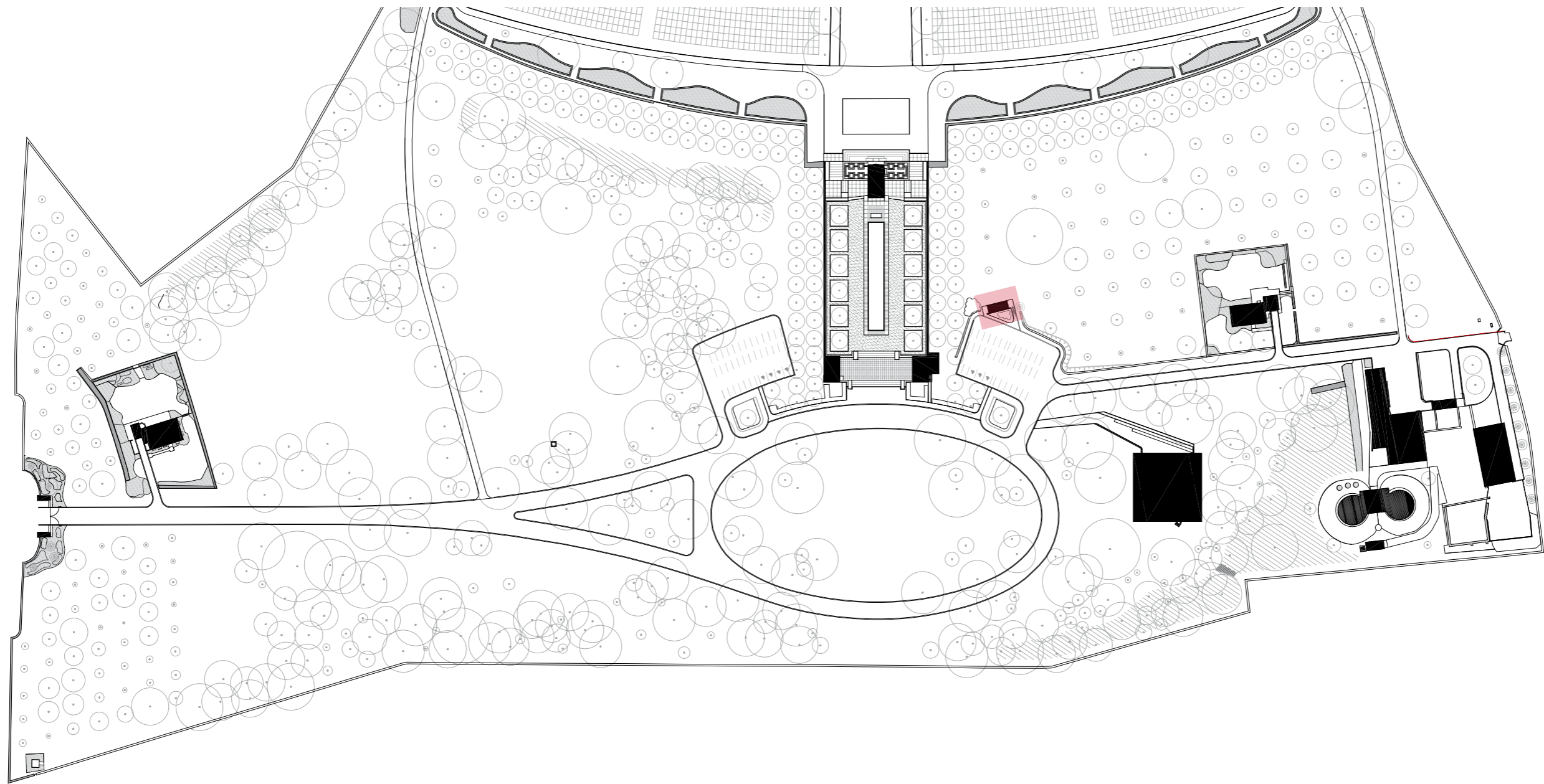
RESTROOM FACILITIES

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RESTROOM FACILITY - CURRENT SITUATION

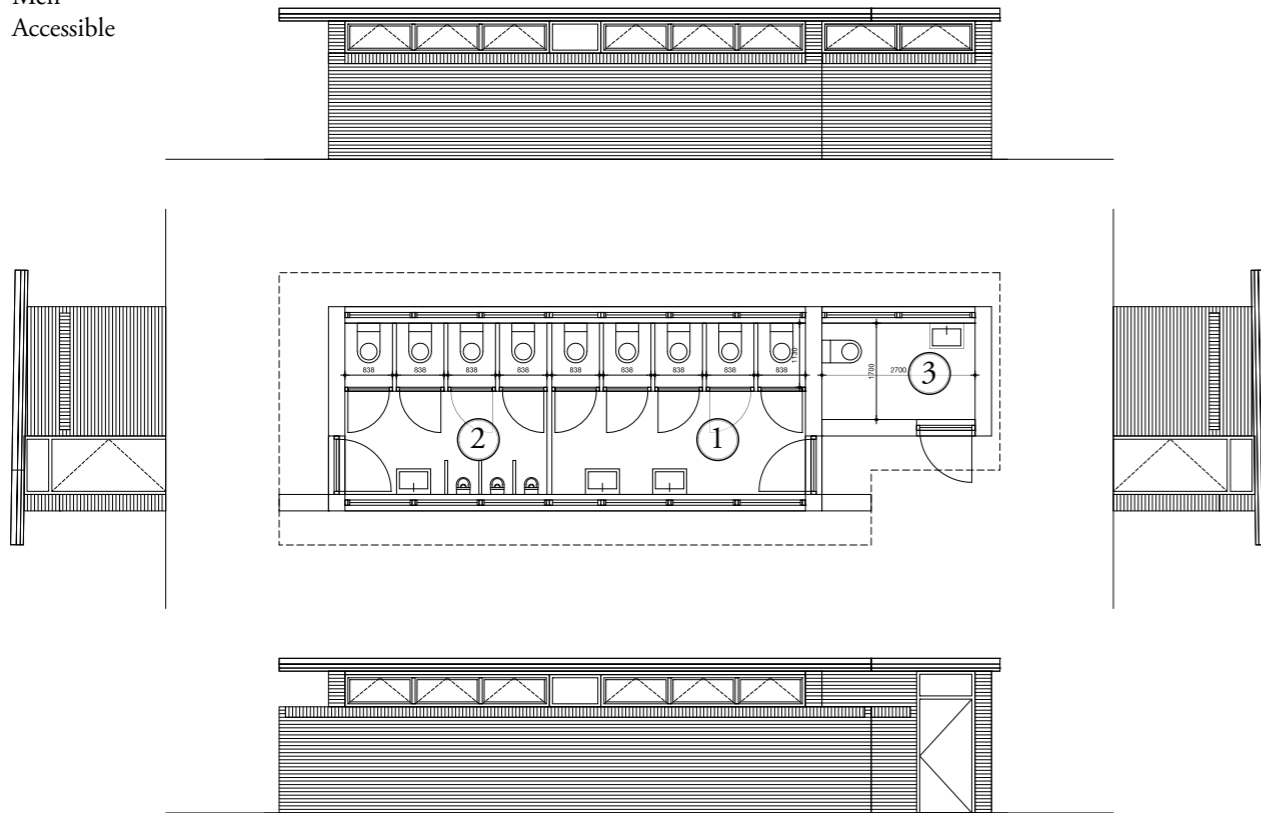


RESTROOM FACILITY - CURRENT SITUATION

Existing Restroom Facility

Before the construction of the Monument was finished, the first additions to the original design were made. Added to the original layout of the cemetery was a sanitary building designed by Architectenbureau A.J.N. Boosten. Located close to the south side of Court of Honor, next to the apple orchard, the toilet building hides itself behind shrubs and hedges. The materialisation of the brick façades contrast from the other monumental architectural features, which are primarily clad in English Portland stone.

- 1. Women
- 2. Men
- 3. Accessible



⊙
Plan and facade existing restroom, not to scale



Restroom facility in 2022

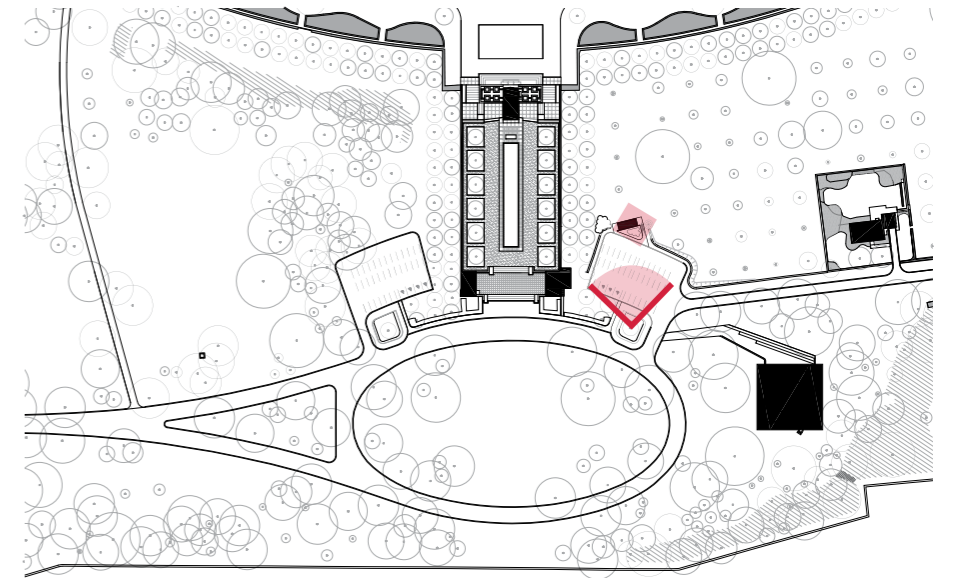


Restroom facility in 2019

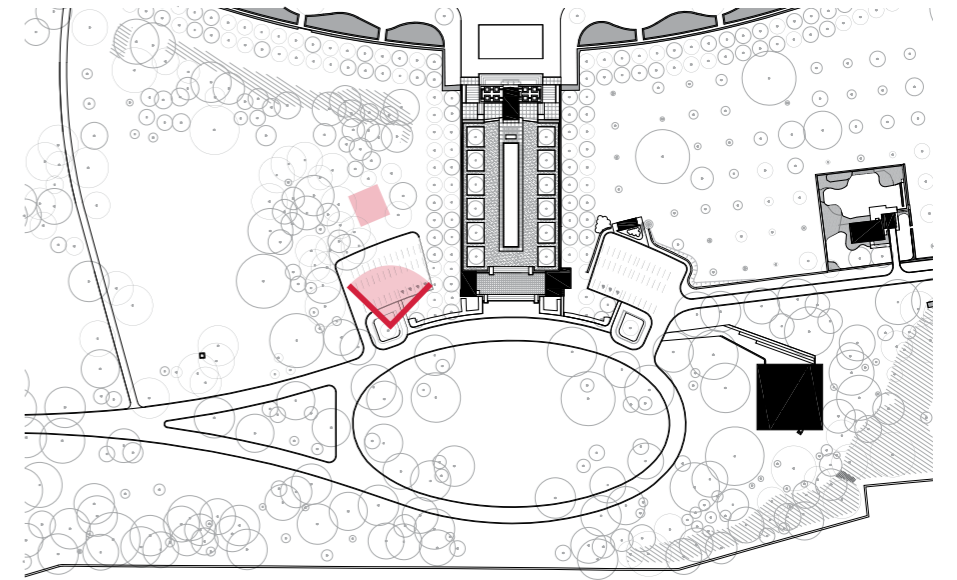
RESTROOM FACILITY - CURRENT SITUATION - PLOTS



RESTROOM FACILITY - CURRENT SITUATION - SOUTH PLOT

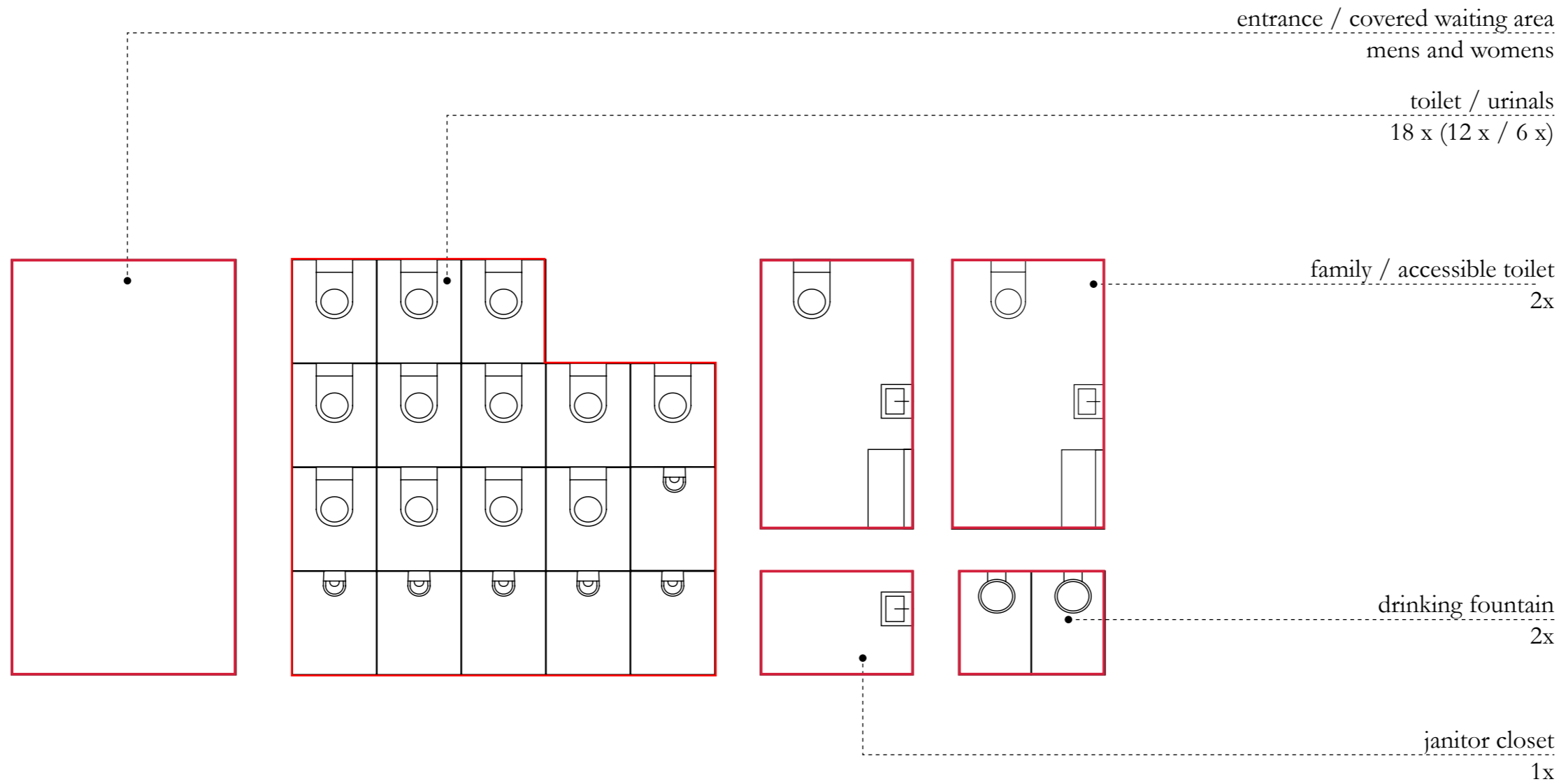


RESTROOM FACILITY - CURRENT SITUATION - NORTH PLOT



RESTROOM FACILITY - CURRENT SITUATION - PROGRAM

Develop the architectural and site/utility program for the restroom facility to achieve an increased fixture count of approximately 50%. The program shall be developed that is a replacement of the existing structure and for a new facility adjacent to the north parking lot.



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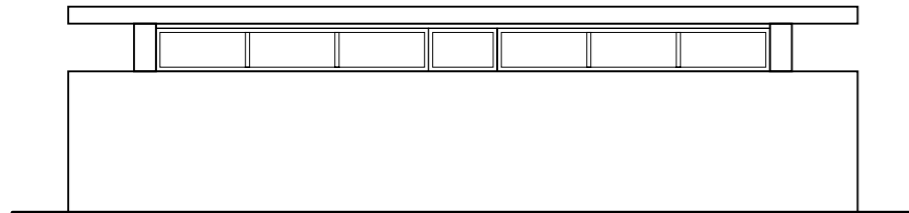
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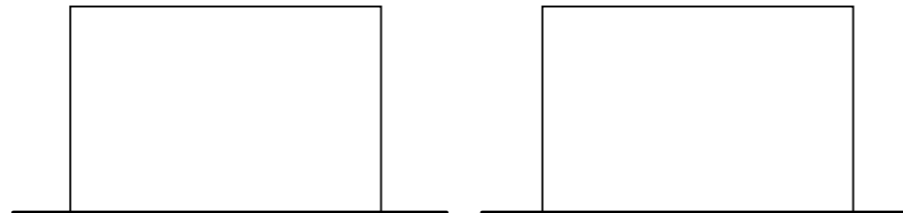
RESTROOM FACILITIES - CONCEPT DESIGN

1 Renovation



expansion and renovation existing building

2 Split



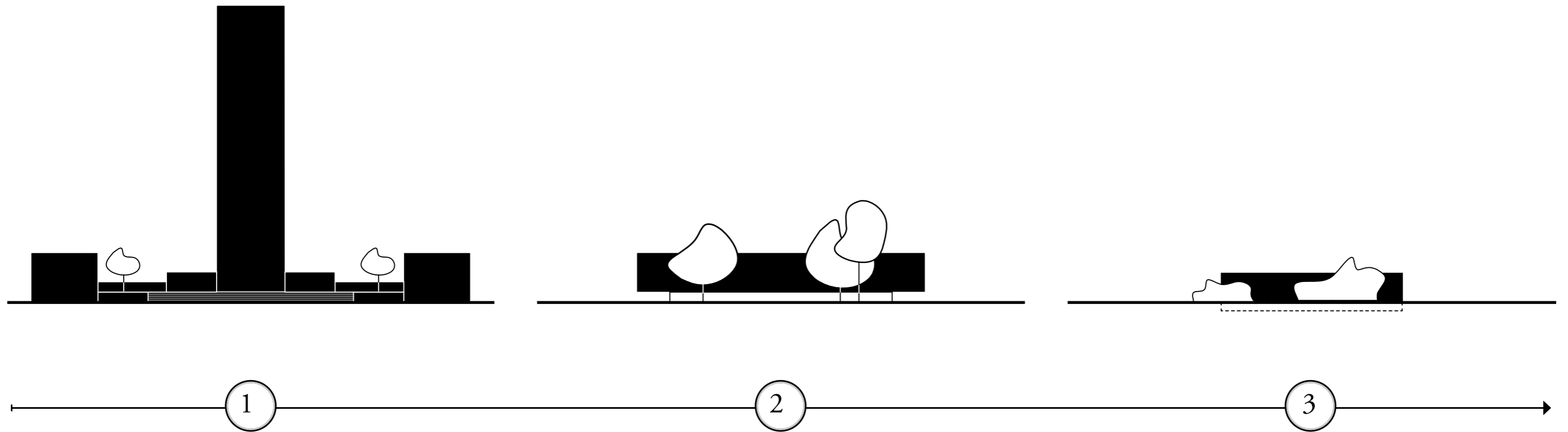
newbuild on north and south parking

3 Compact



newbuild on south parking

RESTROOM FACILITIES - CONCEPT DESIGN - HIERARCHY IN LANDSCAPE



MAIN ACTIVITY

- defining symmetrical axis
- landscape framing volume
 - cinematic viewsheds

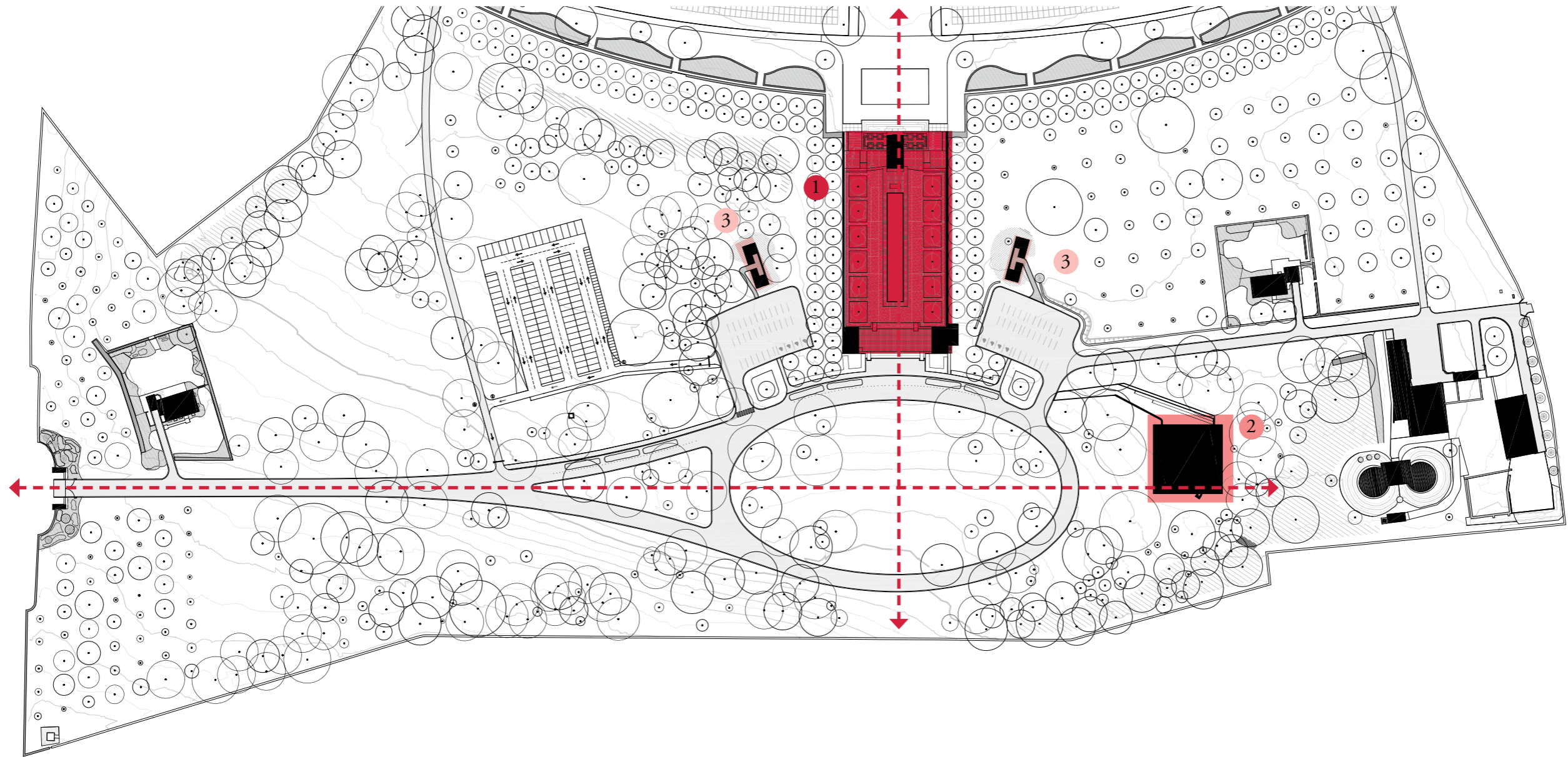
SUPPORT ACTIVITY

- placed on symmetrical axis
- landscape screens volume
 - views towards site

ACCESSORY BUILDING

- not part of symmetrical axis
- landscape obscures volume
 - view towards sky

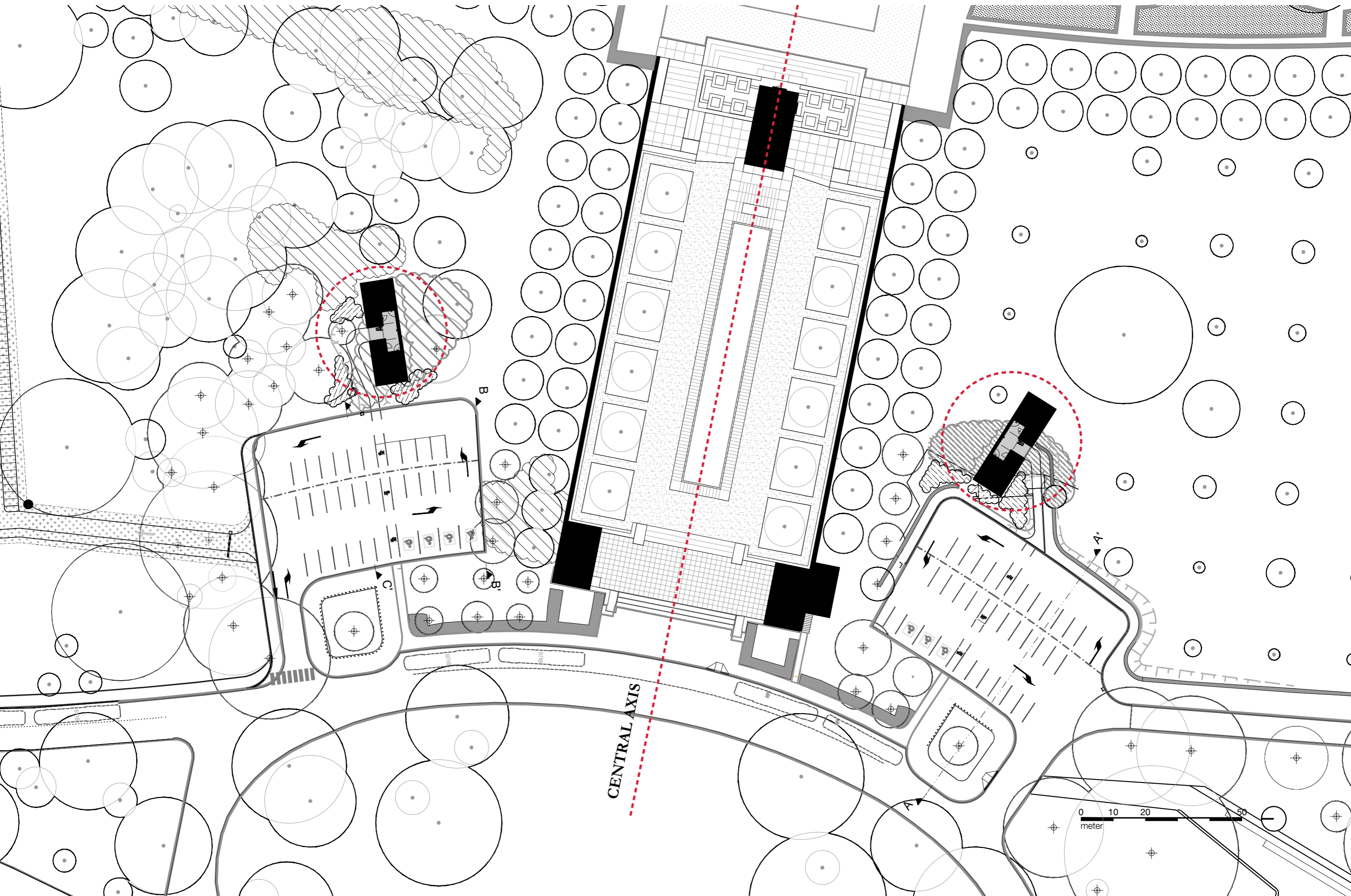
RESTROOM FACILITIES - CONCEPT DESIGN - HIERARCHY IN LANDSCAPE



0 20 40 100
meter



RESTROOM FACILITIES - CONCEPT DESIGN - HIERARCHY IN LANDSCAPE



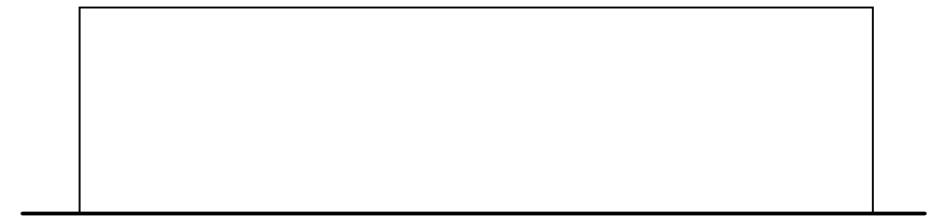
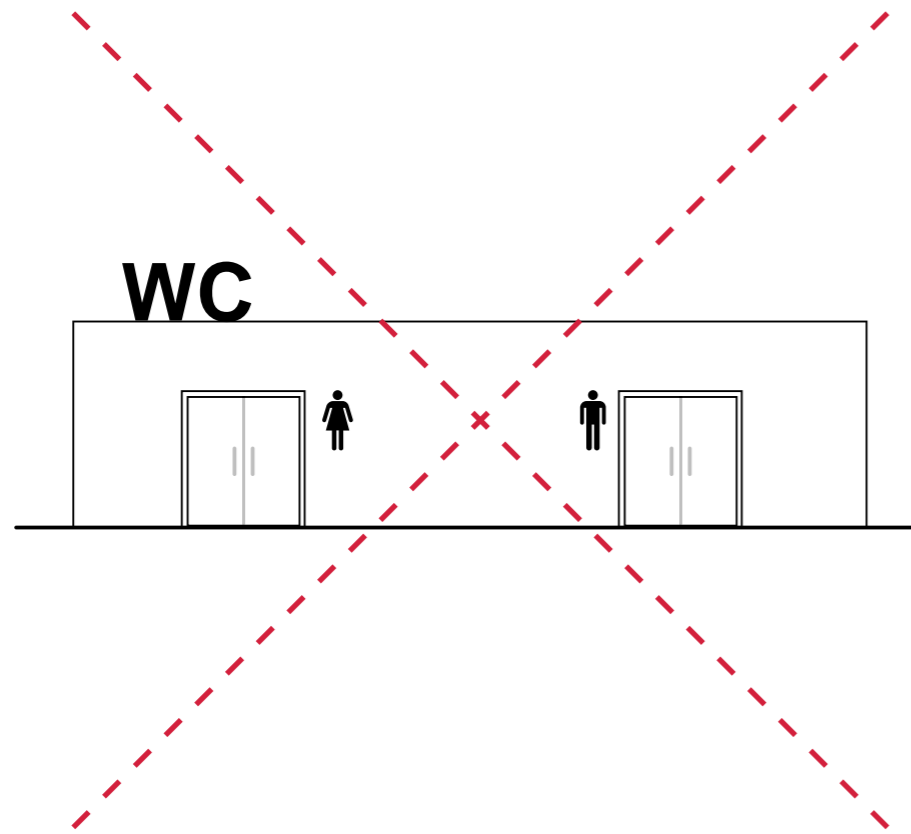
RESTROOM FACILITIES - CONCEPT DESIGN - DESIGN PRINCIPLE

General Aesthetics of Design and Programming

The architecture of the restroom facility shall be as **quiet as possible**, expressing neither bravado, nor aggressive forms and materials - It must be understood that the restroom is an **accessory building** within a completed work of civic art. The presence of the restroom must be designed to **blend as a background** intrusion.

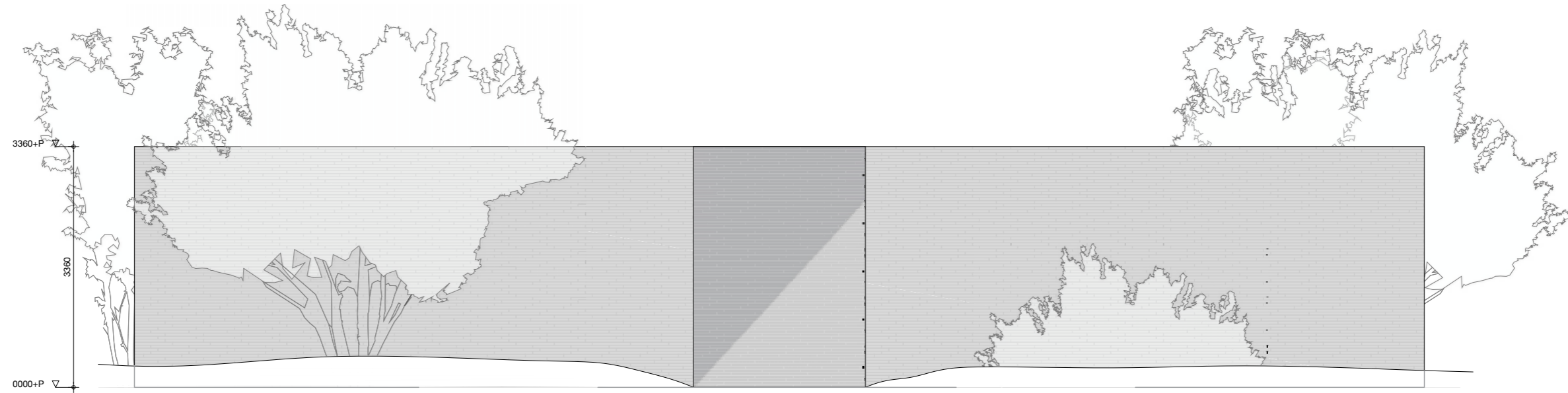
In some instances, the original materials, forms and massing may provide the design vocabulary with which the restroom must evolve and be **visually compatible**. In other situations, the restroom is best designed to **not mimic the existing architecture** of the cemetery, allowing the original to have eminence.

RESTROOM FACILITIES - CONCEPT DESIGN - DESIGN PRINCIPLE



Accessory building that does not call attention to itself through explicit display of function.

RESTROOM FACILITIES - CONCEPT DESIGN - EMBEDDING

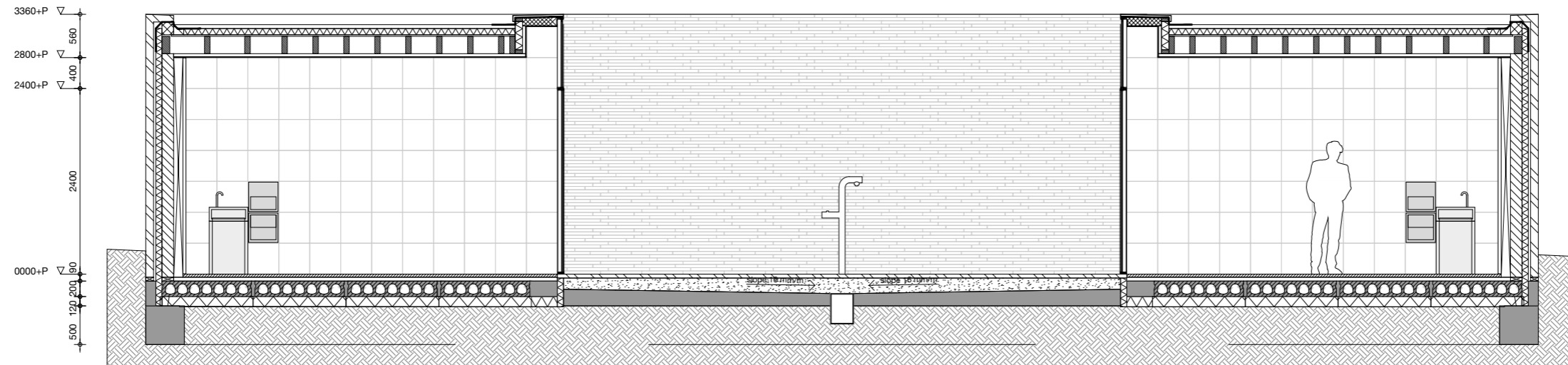


Building volume embeds into sloping landscape

RESTROOM FACILITIES - CONCEPT DESIGN - EMBEDDING



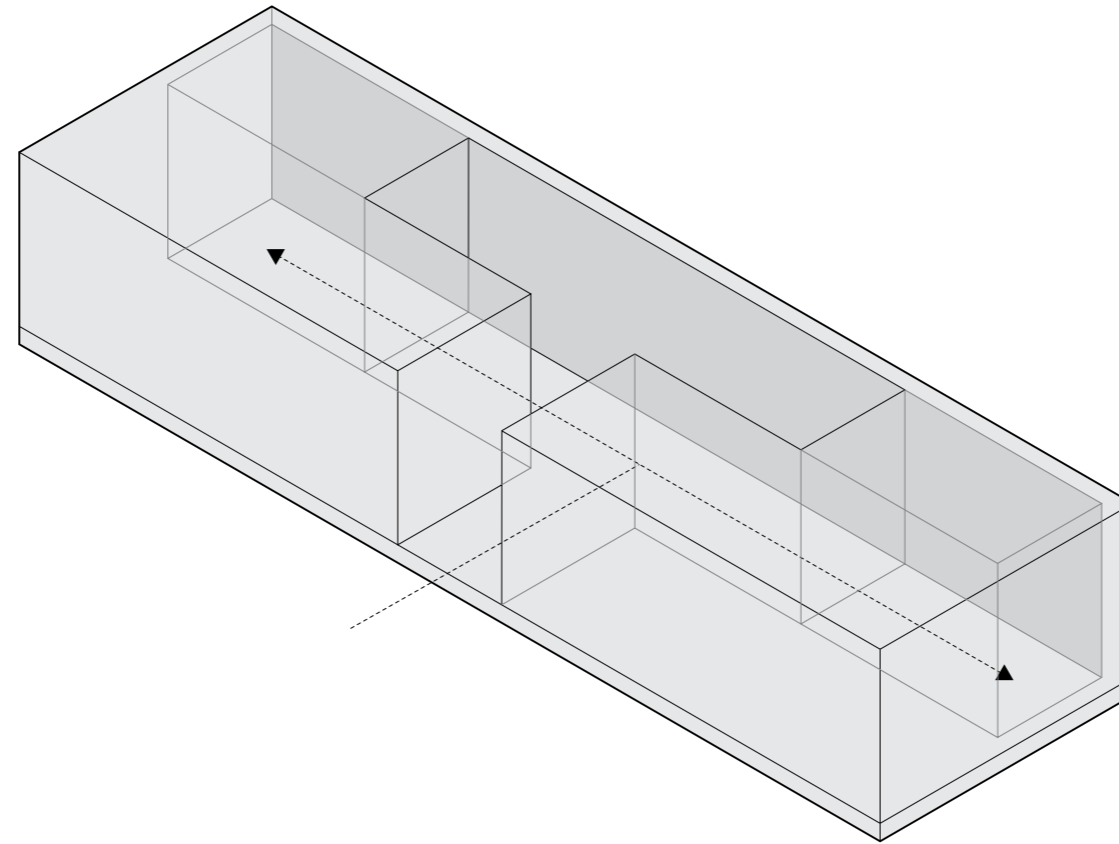
RESTROOM FACILITIES - CONCEPT DESIGN - SECTION



RESTROOM FACILITIES - CONCEPT DESIGN - SECTION



RESTROOM FACILITIES - CONCEPT DESIGN - MATERIAL CONCEPT



The interior as a continuation of the exterior.



walls + floor exterior:

Brick - Petersen K54
random bond, joints grouted fully
flush with bricks



glazing and mirrors

glazing with dark bronze
coating



**glazing profiles, doors,
handles, faucets, dispensers,
trash bins, etc:**

accessory elements all in uniform
stainless steel



walls + floor interior:

natural stone tiles, in a color
matching selected brick,
400x400mm tiles



washbasin

solid object of natural stone as
tiling

RESTROOM FACILITIES - CONCEPT DESIGN - MATERIAL CONCEPT



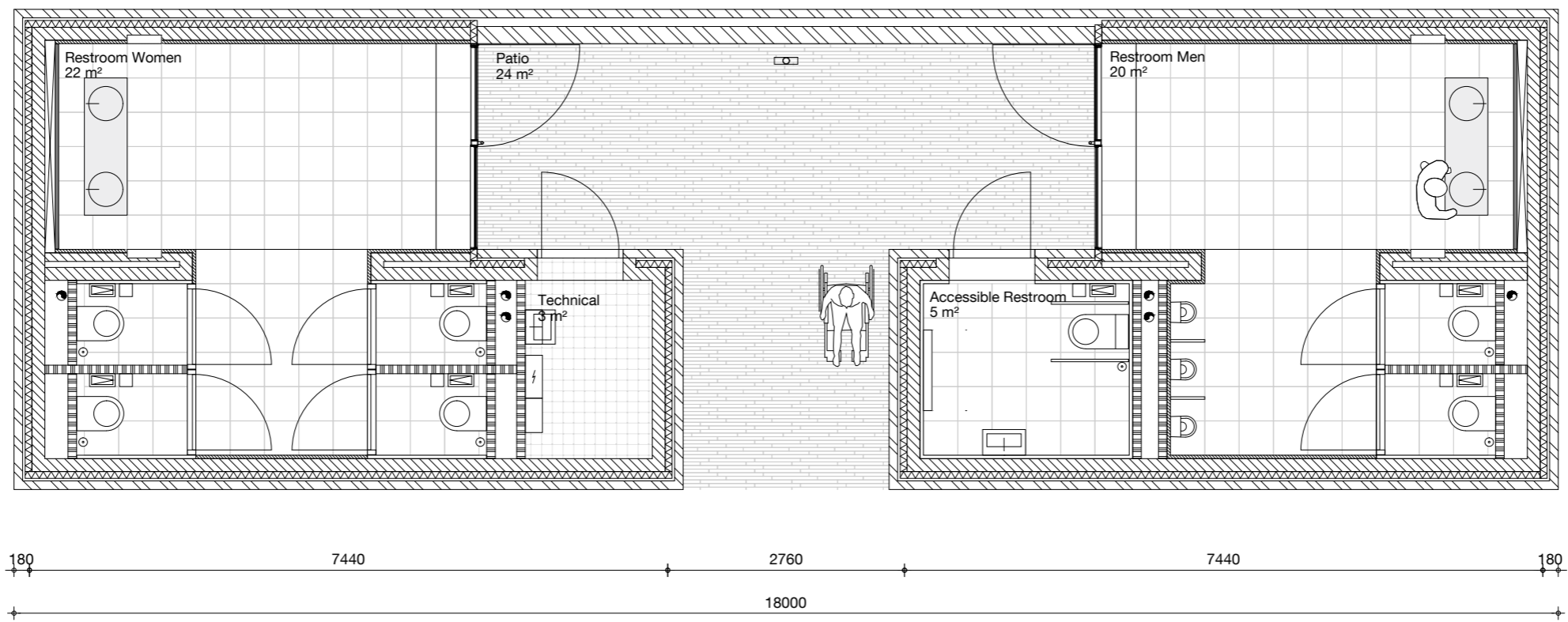
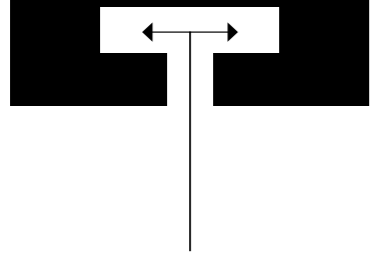
RESTROOM FACILITIES - CONCEPT DESIGN - MATERIAL CONCEPT



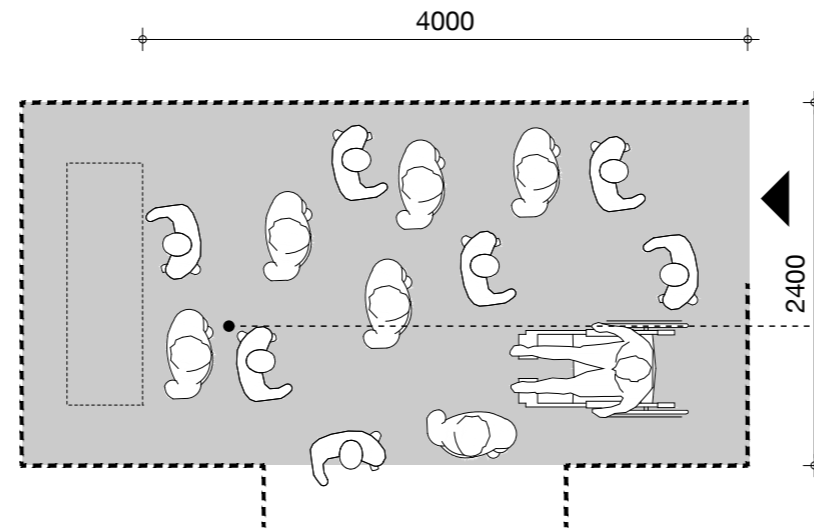
RESTROOM FACILITIES - CONCEPT DESIGN - MATERIAL CONCEPT



RESTROOM FACILITIES - CONCEPT DESIGN - PLAN



RESTROOM FACILITIES - CONCEPT DESIGN - CAPACITY



entrance / covered waiting space
 $4 \times 10\text{m}^2 = 40\text{m}^2$ total
full bus 56 persons = 1.4 p/m^2



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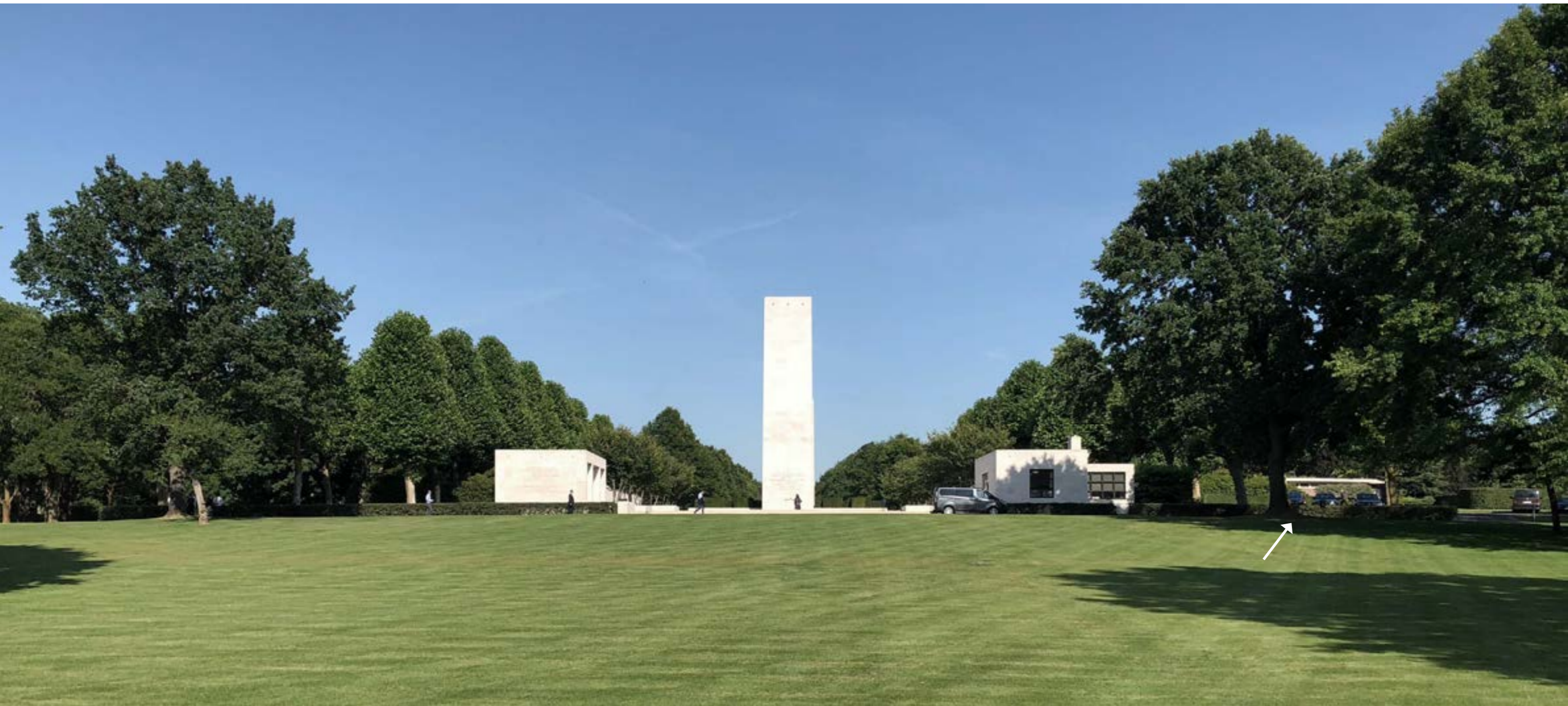
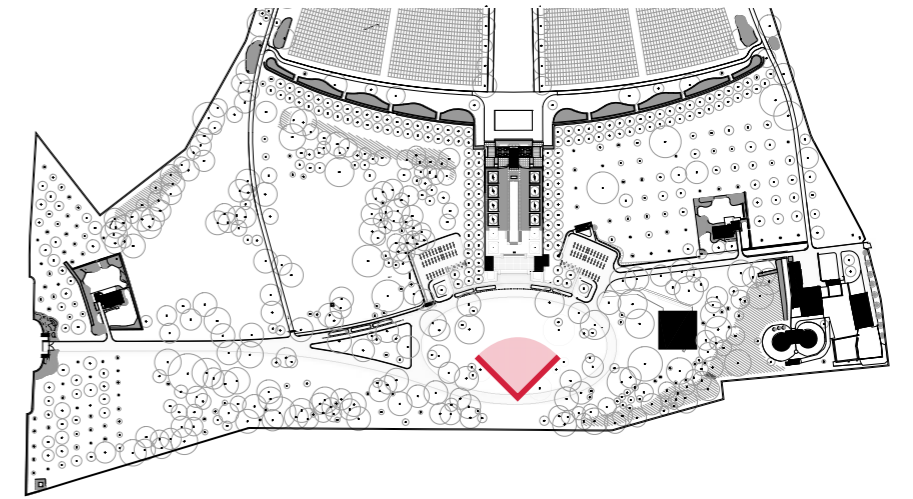
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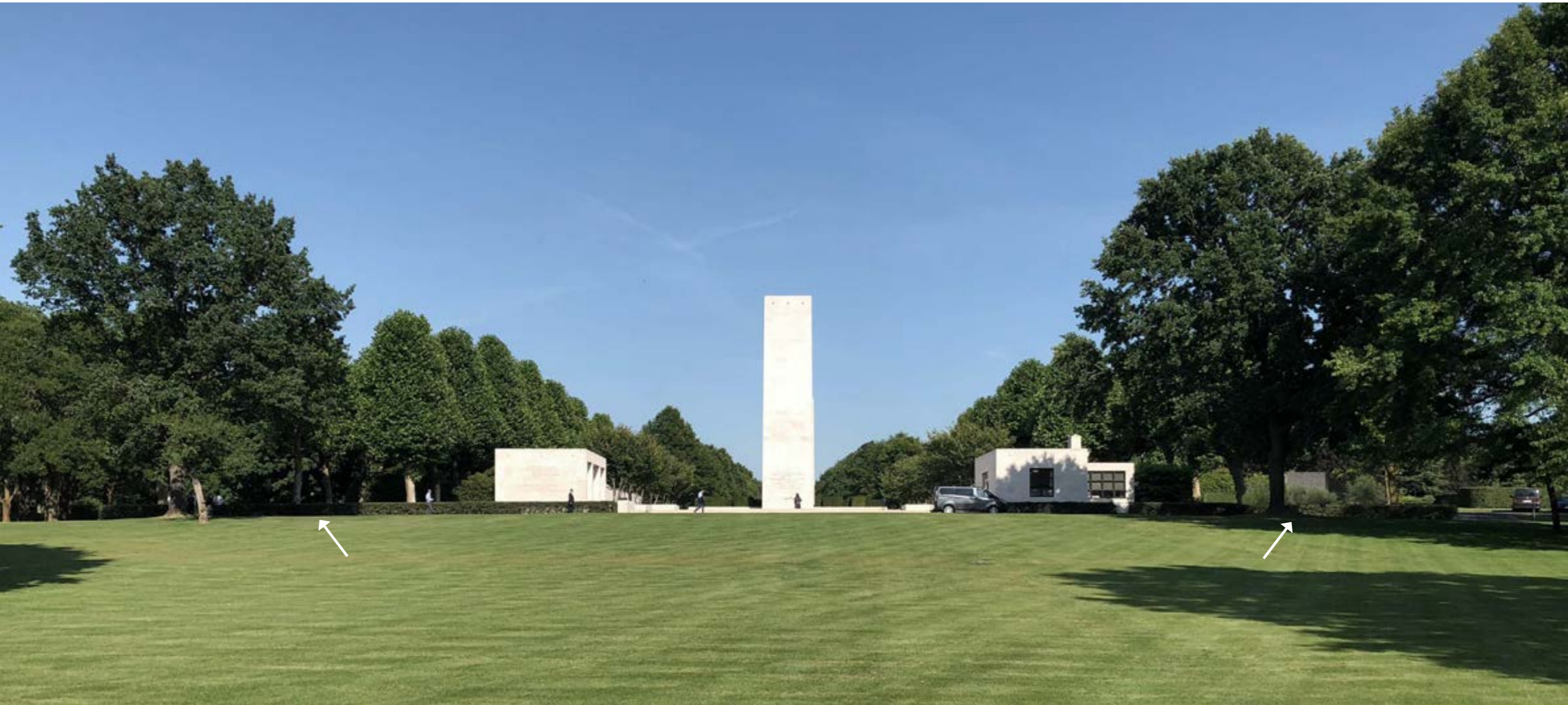
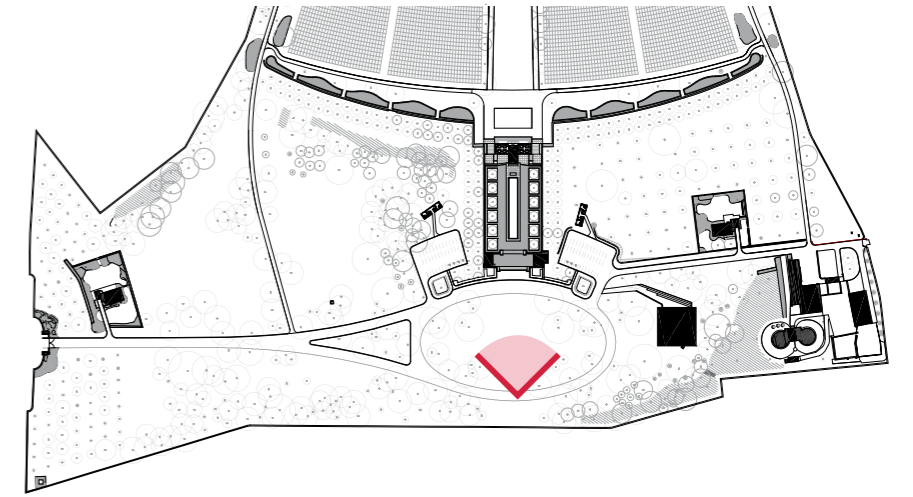
CONCEPT DESIGN

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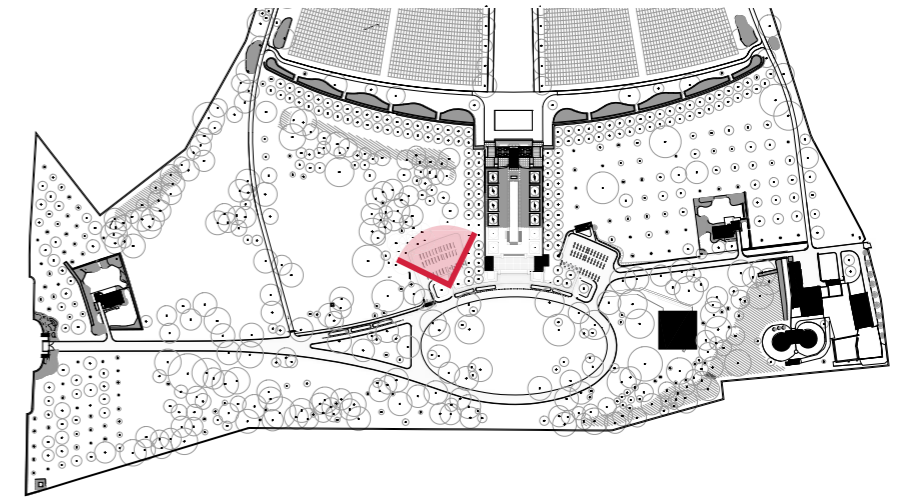
IMPACT - VISITOR EXPERIENCES - ARRIVAL



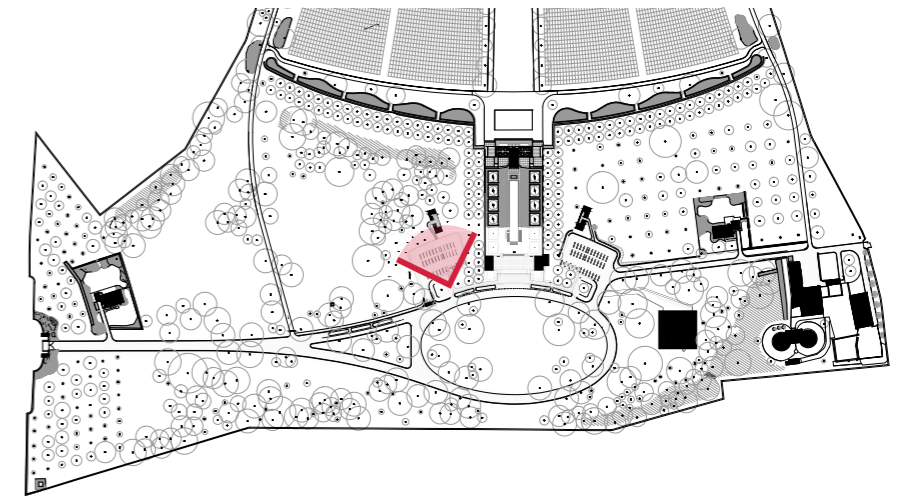
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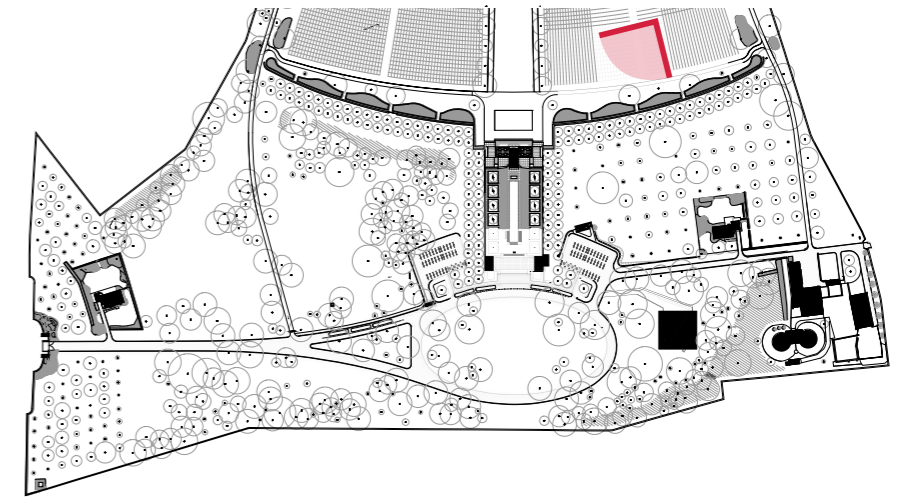
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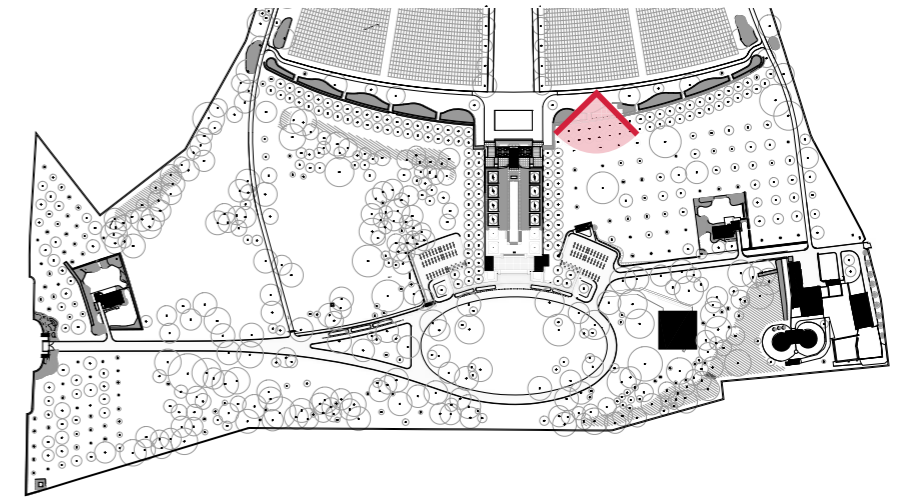
IMPACT - VISITOR EXPERIENCES - ARRIVAL



IMPACT - VISITOR EXPERIENCES - MONUMENT



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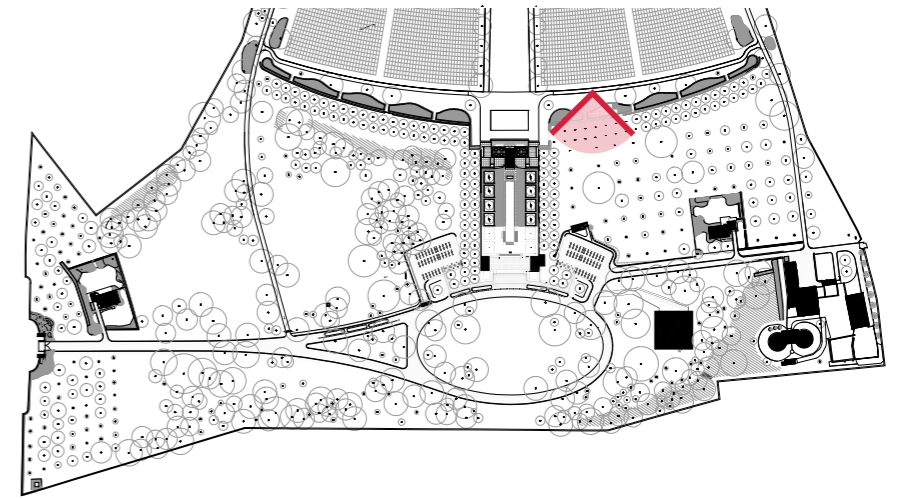
Summer



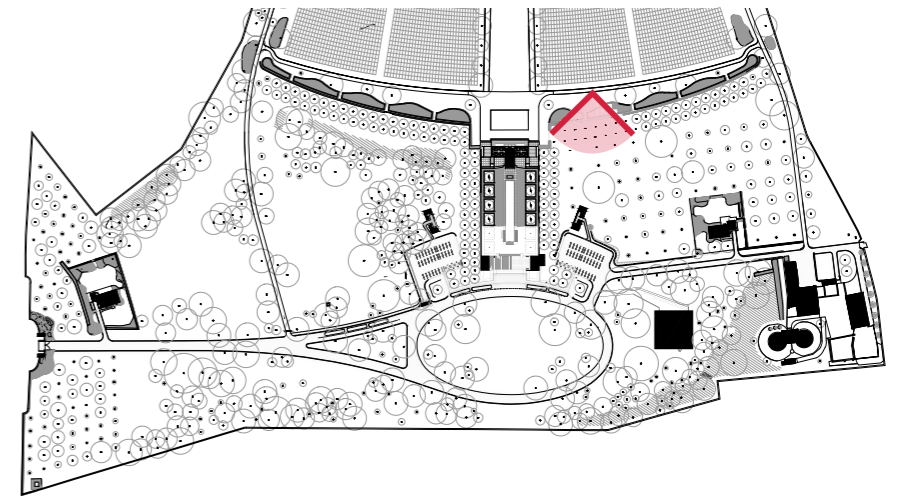
Winter



IMPACT - VISITOR EXPERIENCES - MONUMENT



IMPACT - VISITOR EXPERIENCES - MONUMENT







IMPACT VEGETATION



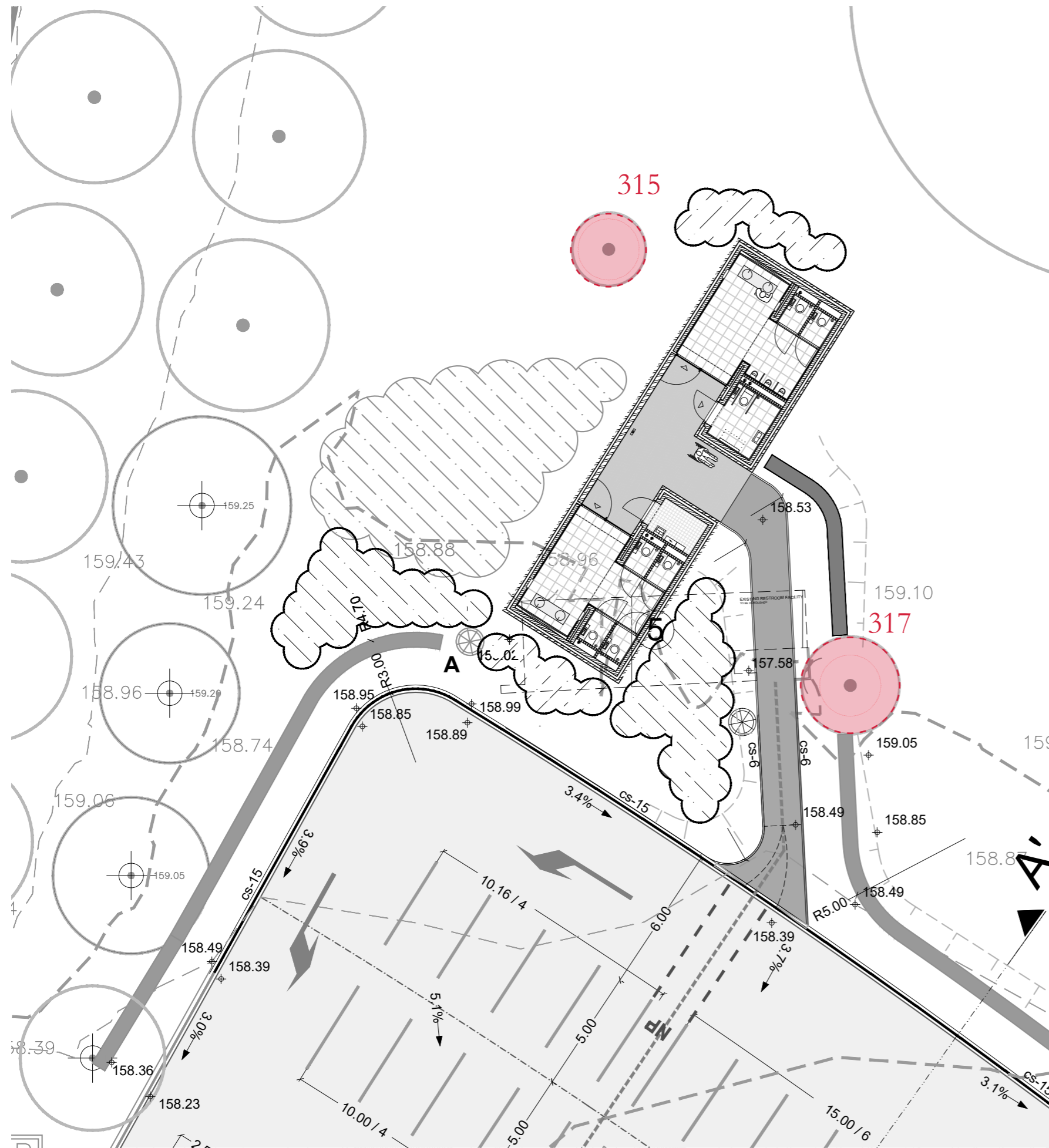
Nr.	Species	Crown (m)	Cause
227	Acer campestre	12	Restroom North



227

-  tree crown projections
-  cutting tree
-  critical root zone / potential damage
-  crown projection / potential damage

IMPACT VEGETATION



Nr.	Species	Crown (m)	Cause
315	Malus domestica	3,5	Restroom South
317	Pinus parviflora	7	Restroom South



315



317

- tree crown projections
- ✗ cutting tree
- critical root zone / potential damage
- crown projection / potential damage



THANK YOU

dGm^R

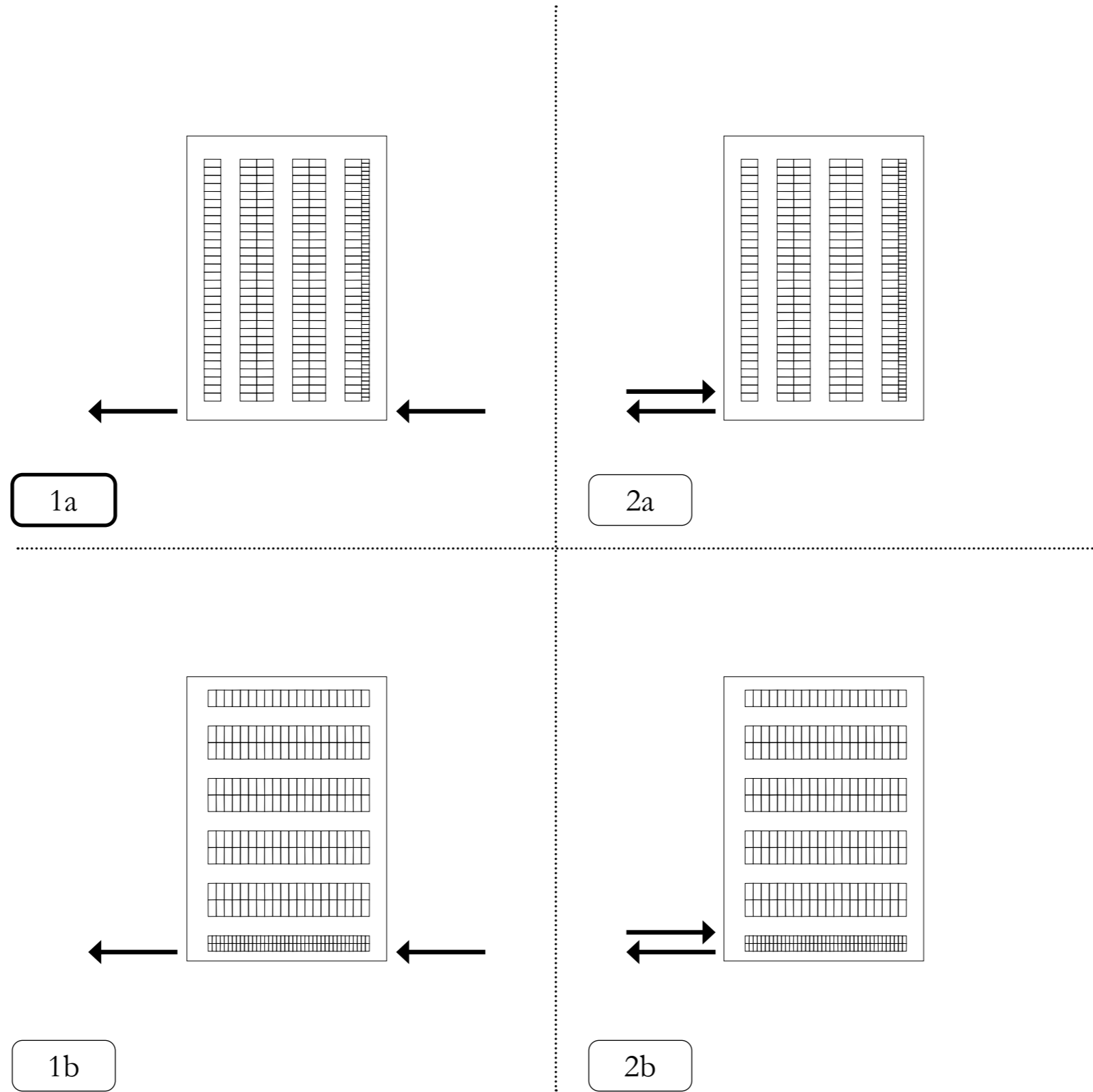
hp engineers

Pieters
BOUWTECHNIEK

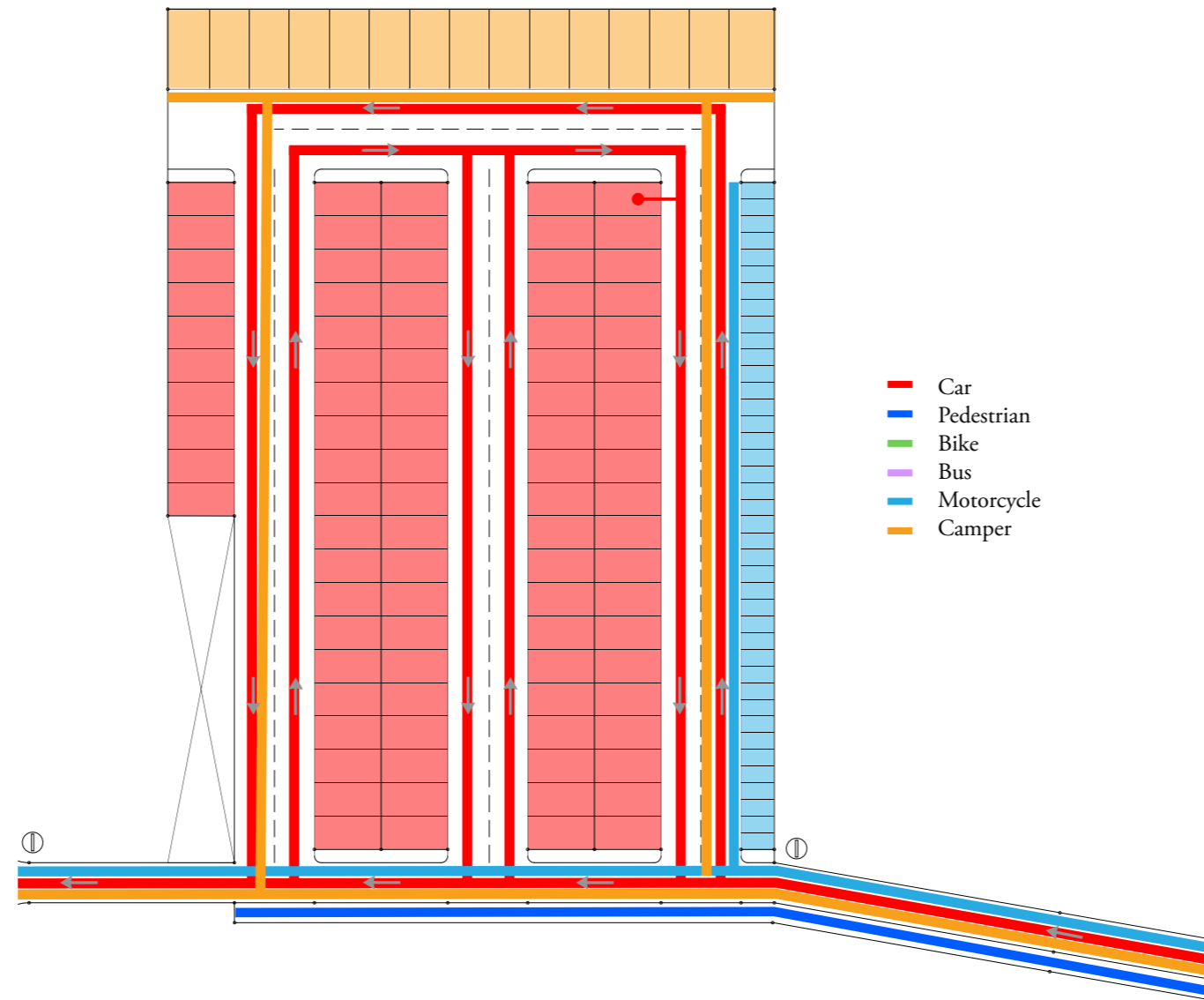
SmitsRinsma
Adviseurs groenvoorziening en terreininrichting

KAAN Architecten

OVERFLOW PARKING - PREFERRED ALTERNATIVE



OVERFLOW PARKING - FLOWS



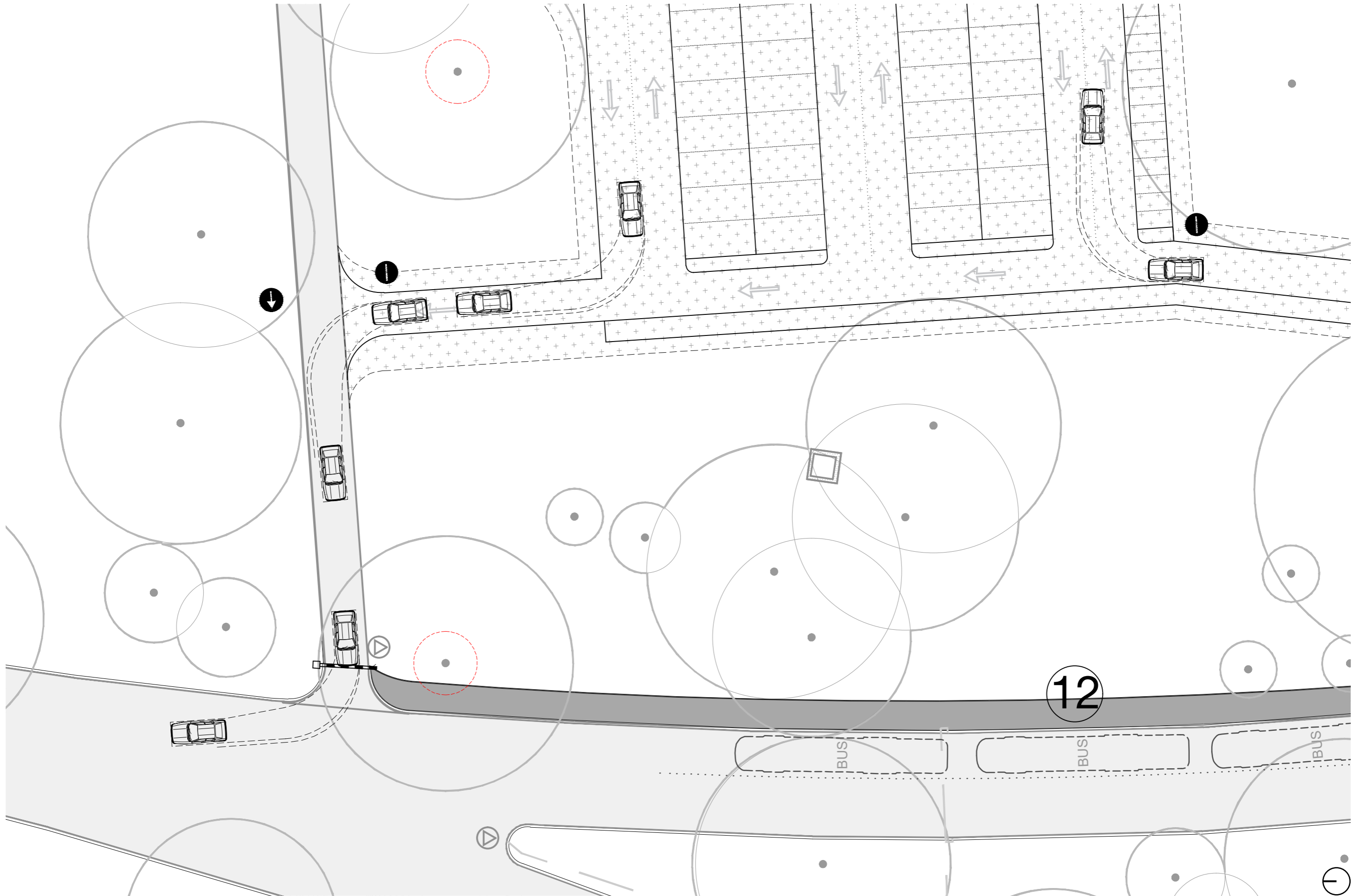
0 5 10 25
meter



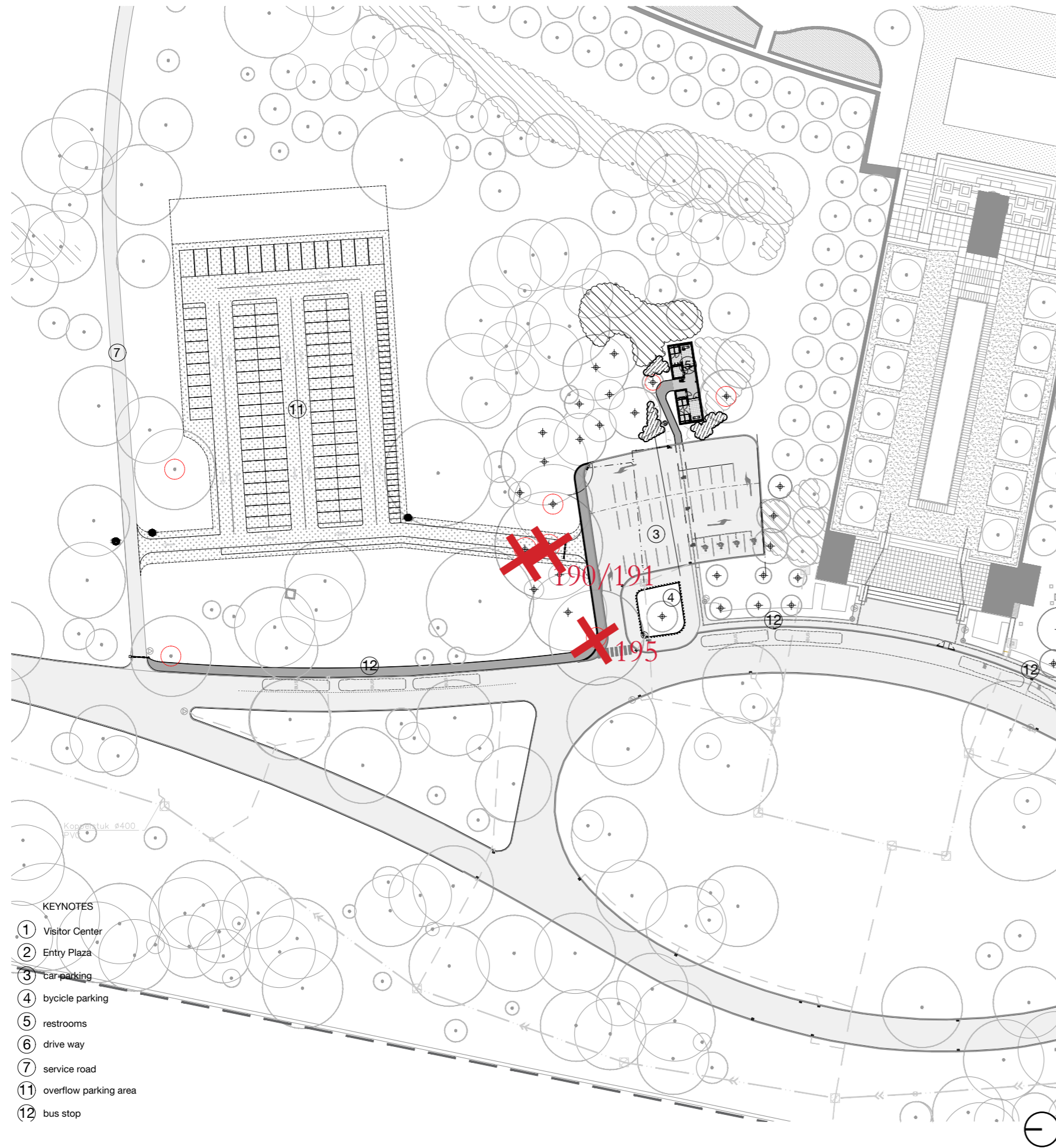
OVERFLOW PARKING - ENTRANCE



OVERFLOW PARKING - EXIT



OVERFLOW PARKING IMPACT VEGETATION



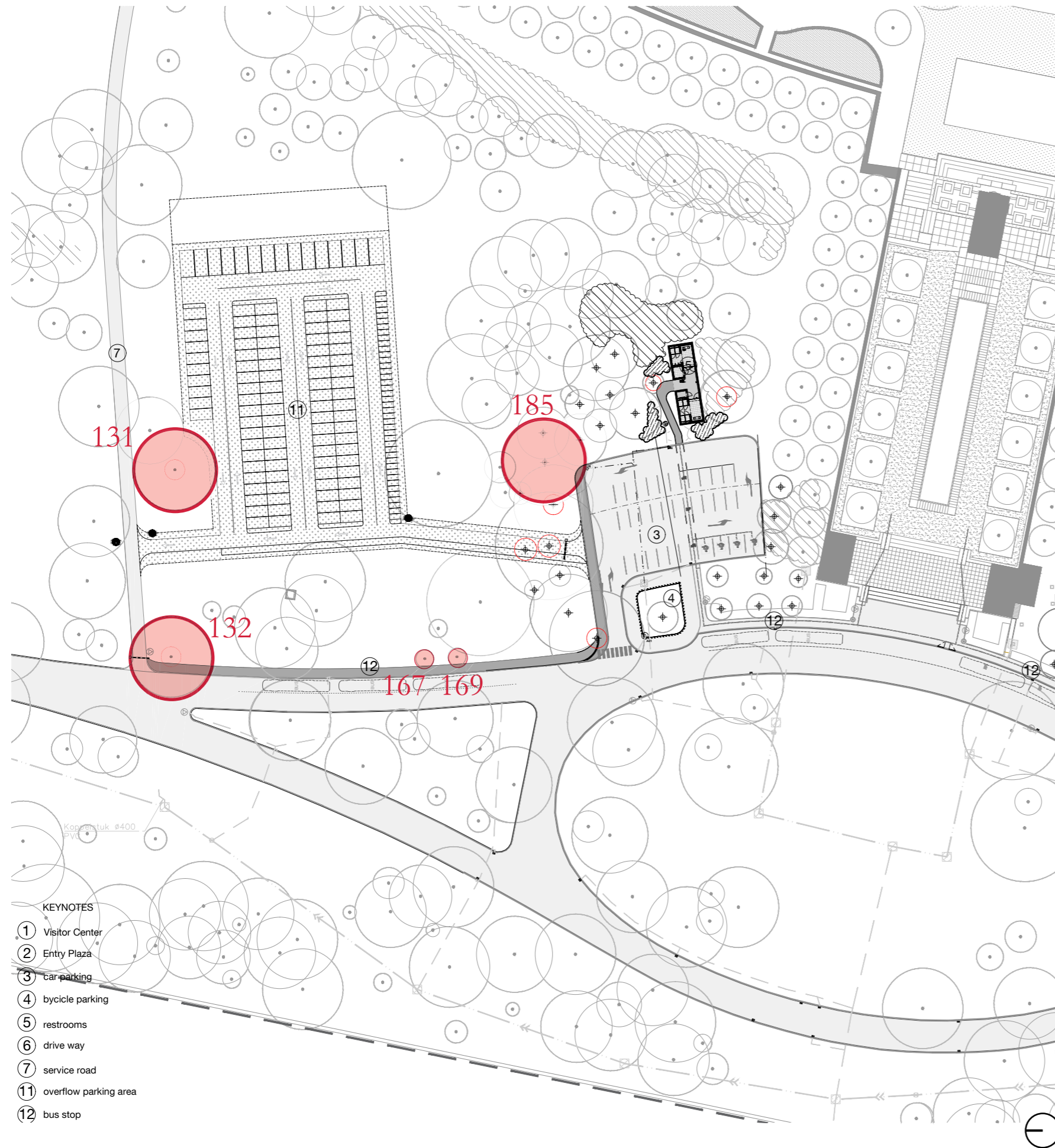
Cutting of trees ✗

Nr.	Species	Size crown (M)	Height (M)	Cause
190	Quercus rubra	18	17	Entrance overflow parking
191	Fraxinus excelsior	4	8	Entrance overflow parking
195	Quercus robur	16	20	Extension of parking lot

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OVERFLOW PARKING IMPACT VEGETATION



Possible impact in critical root zones

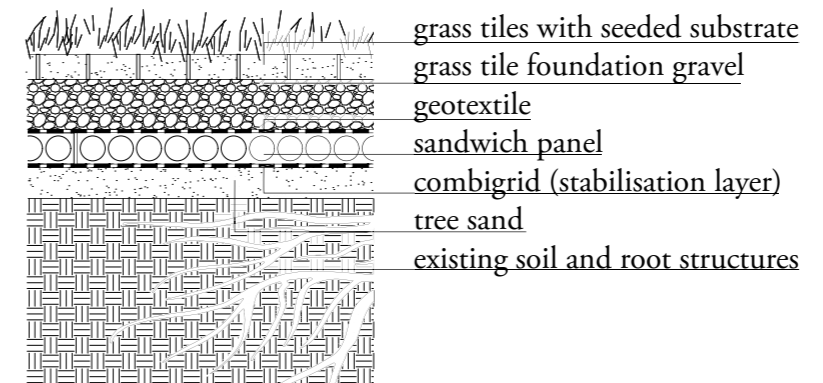
Nr.	Species	Size crown (M)	Height (M)	Cause
131	Quercus cerris	18	20	Overflow parking
132	Quercus robur	18	20	Extension of sidewalk
185	Acer campestre	14	17	Extension of parking lot

Protection of critical root zones

Around the borders of the overflow parking, care must be taken to protect the root systems of adjacent trees from potential damage. One system that can be applied to prevent damage to trees due to compacting of soil and pressure on roots is a sandwich panel construction in a package as described below, to distribute the loads caused by parked and moving vehicles. This ensures that root structures are protected, while guaranteeing a sufficient aeration and permeability of the soil.

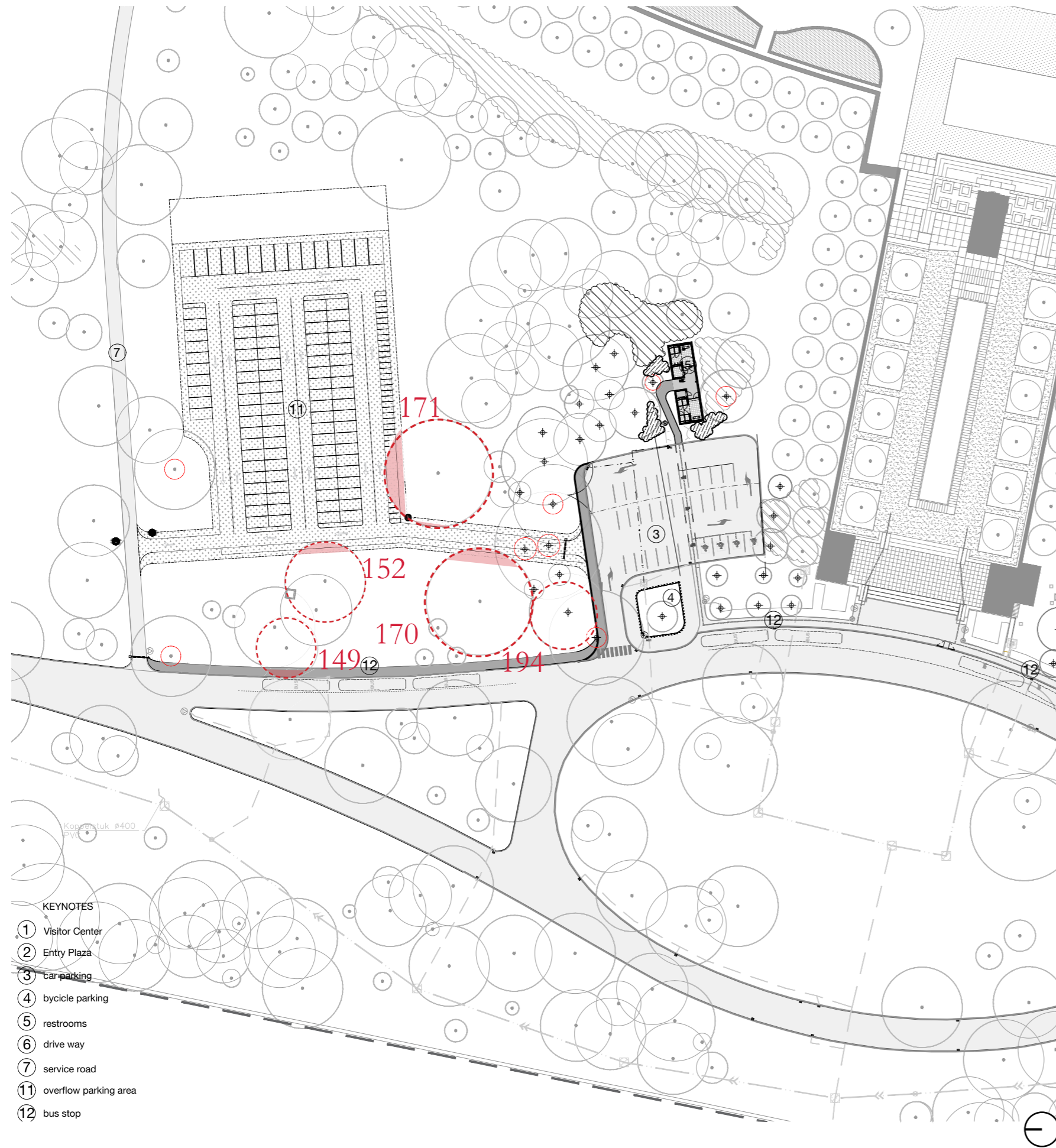
Sample package buildup - around critical root zones

layer thicknesses will follow from ground survey



- KEYNOTES
- ① Visitor Center
 - ② Entry Plaza
 - ③ car parking
 - ④ bicycle parking
 - ⑤ restrooms
 - ⑥ drive way
 - ⑦ service road
 - ⑪ overflow parking area
 - ⑫ bus stop

OVERFLOW PARKING IMPACT VEGETATION

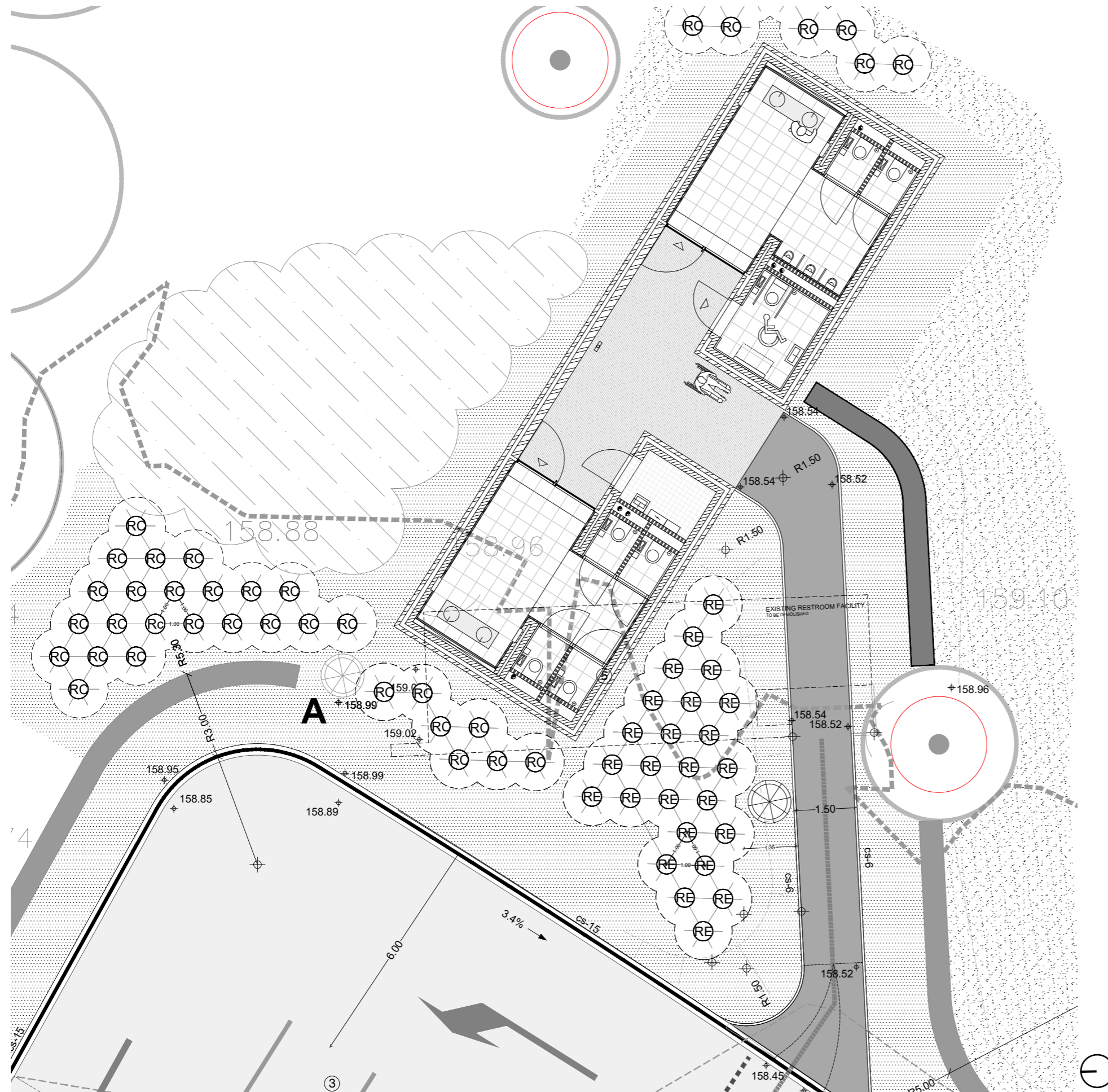


Possible impact in crown				
Nr.	Species	Size crown (M)	Height (M)	Cause
149	Quercus cerris	14	18	Extension of sidewalk
152	Quercus robur	18	18	Overflow parking
170	Quercus rubra	24	20	Entrance overflow parking
171	Quercus coccinea	24	20	Overflow parking
194	Quercus coccinea	16	17	Extension of parking lot

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RESTROOM FACILITIES - CONCEPT DESIGN - SOUTH RESTROOM



RESTROOM FACILITIES - CONCEPT DESIGN - NORTH RESTROOM

