

# Bolo para todos!

## PEACE BY PIECE



International Garden Festival  
Ponte de Lima | Jardim para a paz

Design Aspects and Construction Details  
1852317 | 2024WS  
University of Natural Resources and Life  
Sciences Vienna - BOKU

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Cecilie Rosa De Pauli

Supervisor: Roland Wück  
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## 01 INTRODUCTION + CONCEPT

- 01\_01 CONCEPT - IDEA
- 01\_02 PRESENTATION PLAN
- 01\_03 SECTION

## 02 CONSTRUCTION

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- 02\_03 SECTION

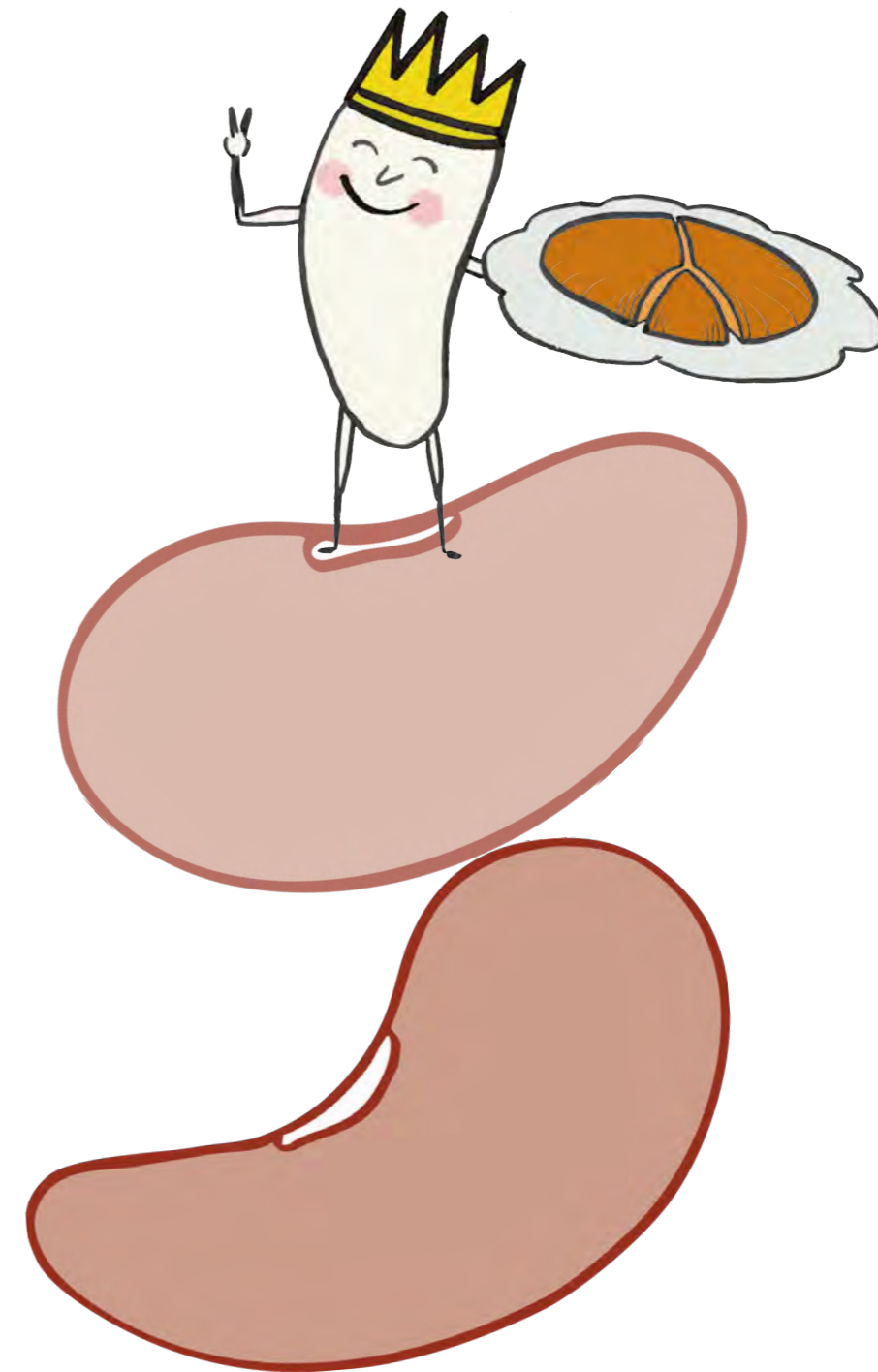
## 03 TECHNICAL DETAILS

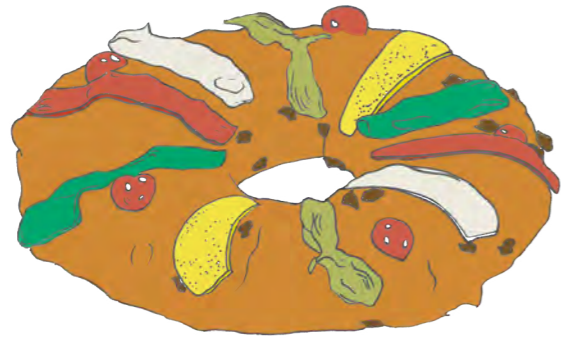
- 03\_01 CORTEN STEEL INLAYER
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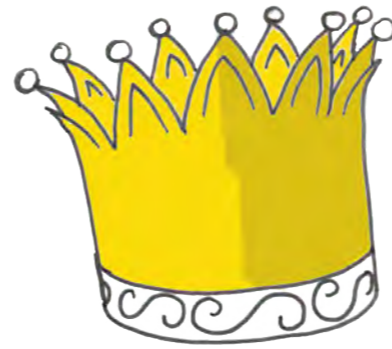
## 05 CALCULATION





We designed a special garden inspired by the 'Bolo-rei', a traditional Portuguese Christmas cake, which exists in many different varieties in many countries all over the world. It is a wonderful metaphor for the widespread and diverse picture of collective sharing. Many stories and customs surround this cake, one of them is to hide a bean inside the dough, the person who finds that bean gets a crown and has to bake the cake for the next year. So the winning person has to give something back to the community.

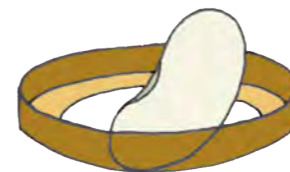
The cake is made of many different layers: the ones that are seen by us and also the ones that comes with our thinking and questioning: Who gets a piece? Who needs a piece? Who is baking the cake? Can everyone get a crown? And can you find the hidden bean?



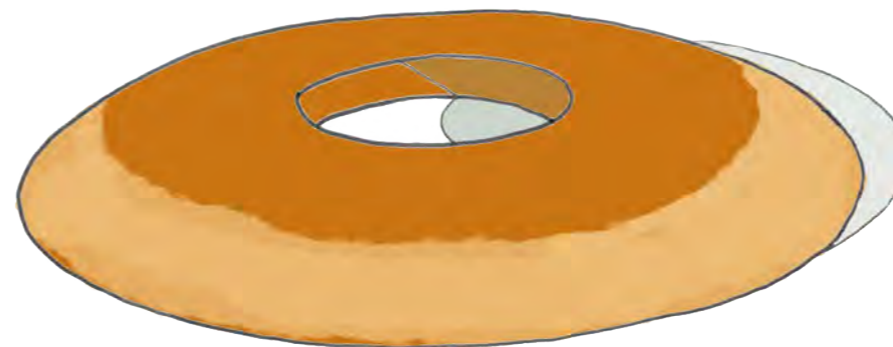
sharing



topping



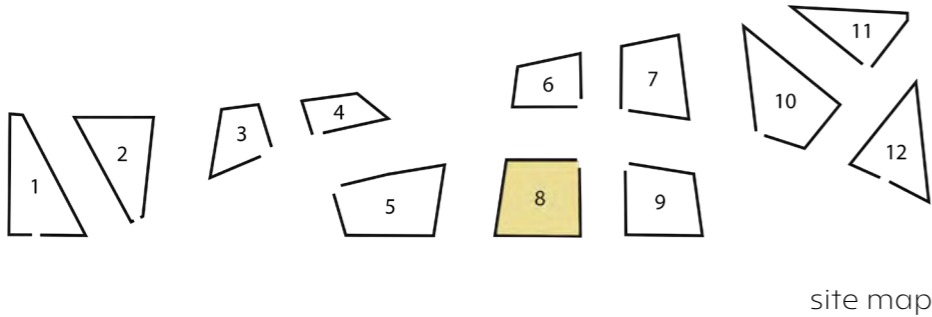
surprising



filling



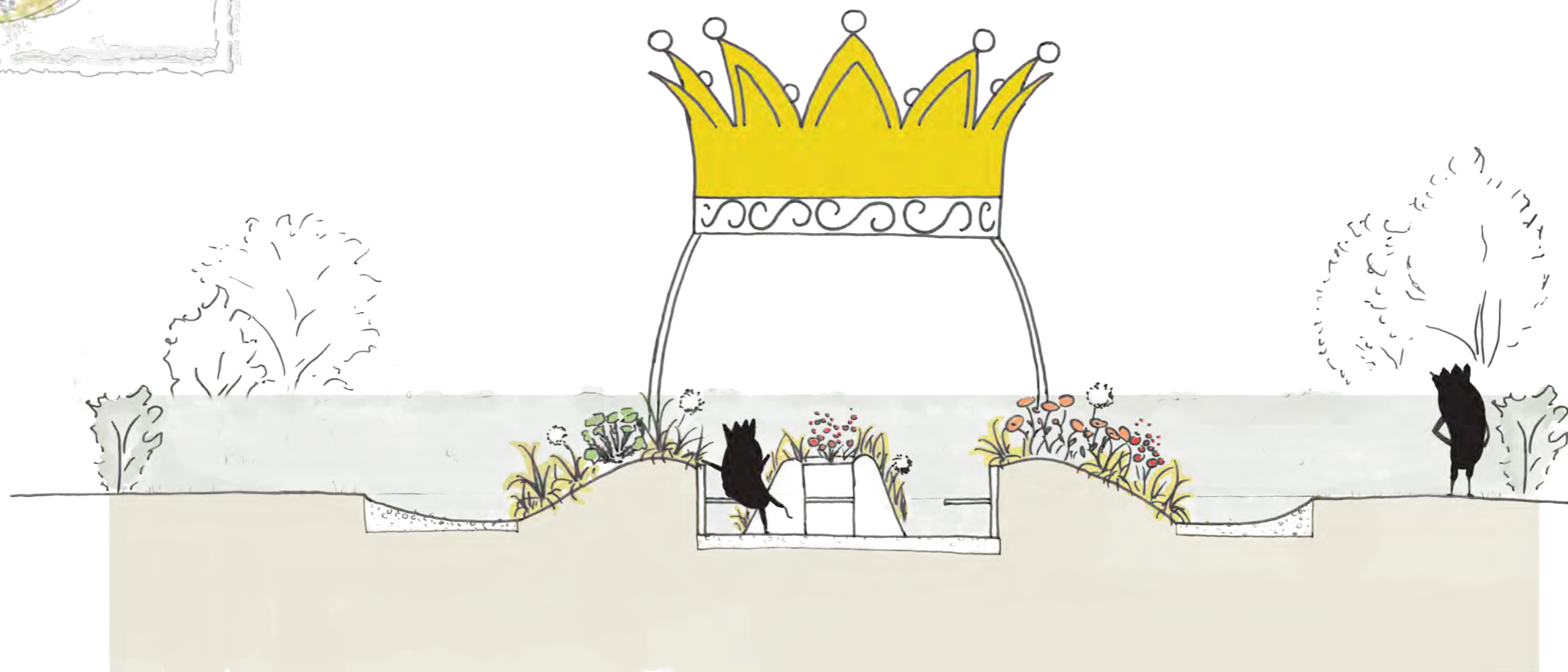
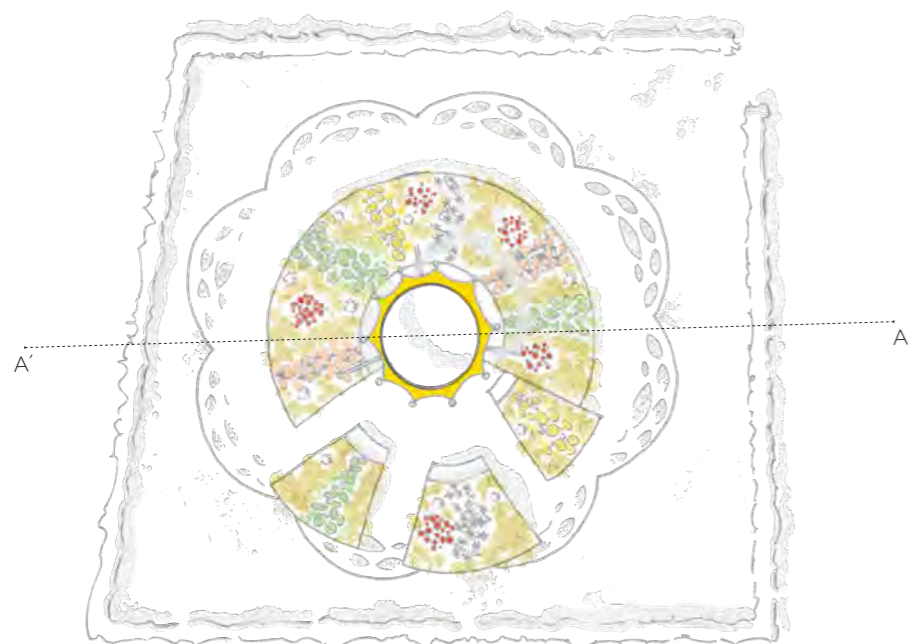
celebrating



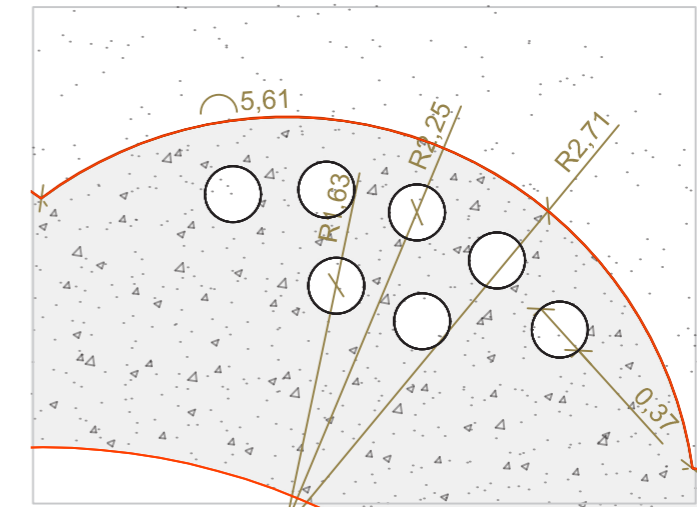
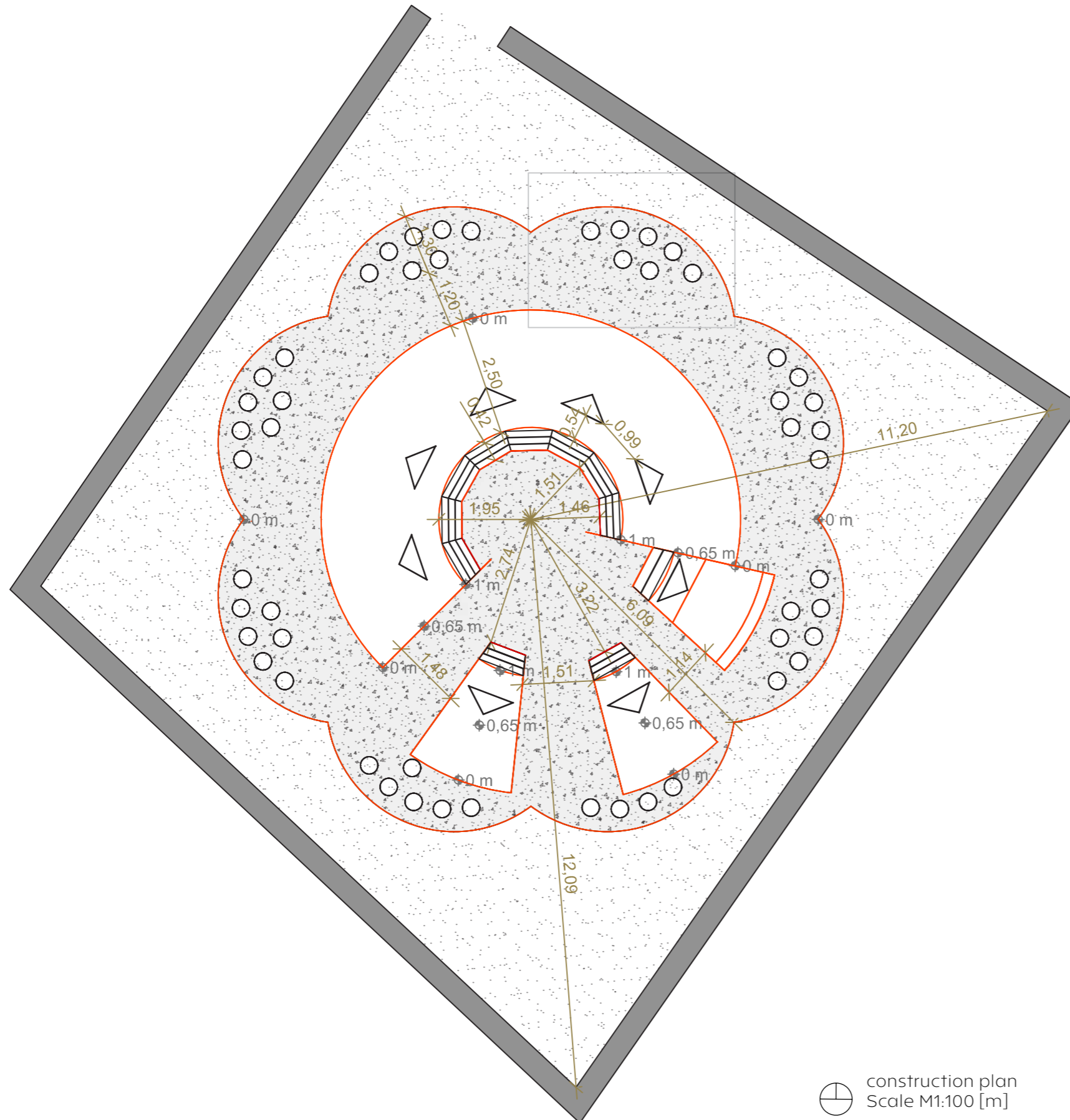
We have a vision of a very traditional cake as a sign for a peaceful humanity. This cake and its pieces combines two important ideas of peace: sharing a cake so everyone gets a piece of it and also representing a piece of bigger cake by contributing to our society as a very conscious part of it. By sharing the cake we are supposed to do both of it and therefore institutionalize our collective thinking of sharing and caring for each other.












⊗ ground plan | presentation plan  
Scale M1:100

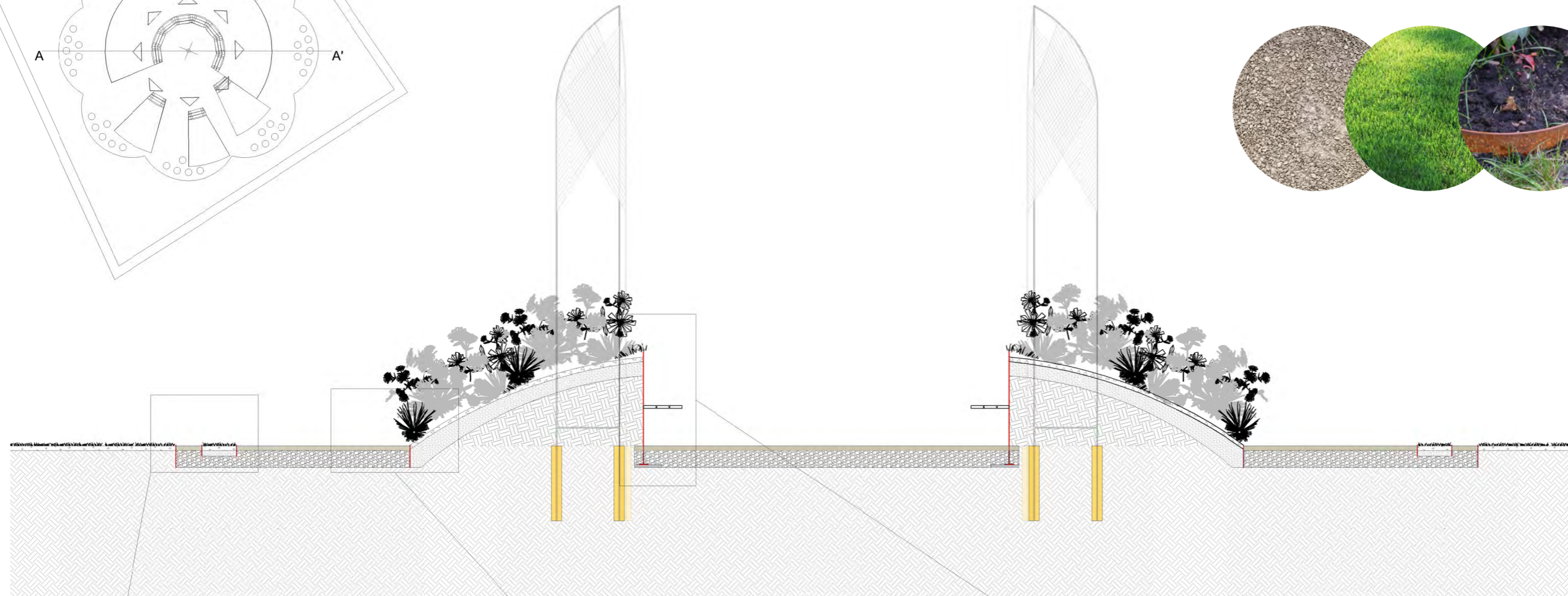
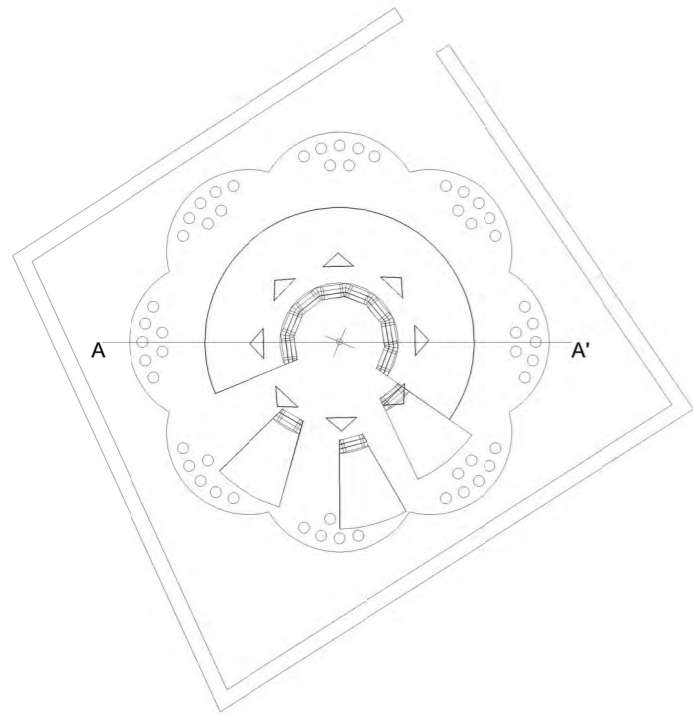


section AA'  
Scale M1:100



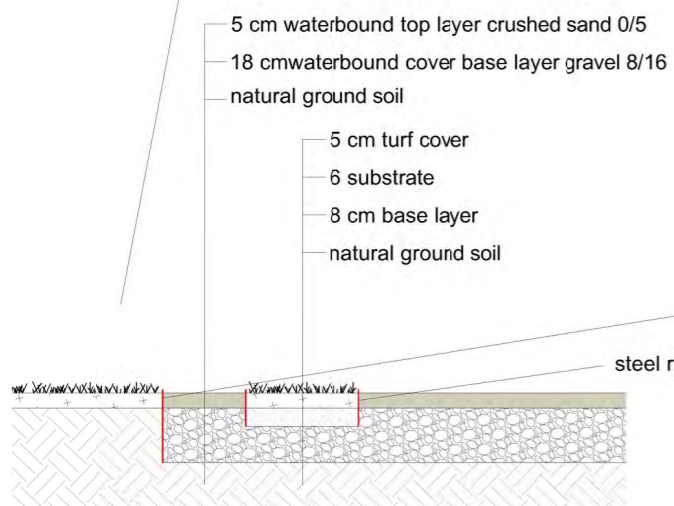
LEGEND

- |   |                          |   |                          |
|---|--------------------------|---|--------------------------|
|  | plant substrate          |  | cortensteel              |
|  | water-bound path surface |  | steel lawn edging circle |
|  | rolled turf              |  | sitting bench segment    |
|  | hedge                    |  | crown spike              |
|  | plant substrate          |   |                          |

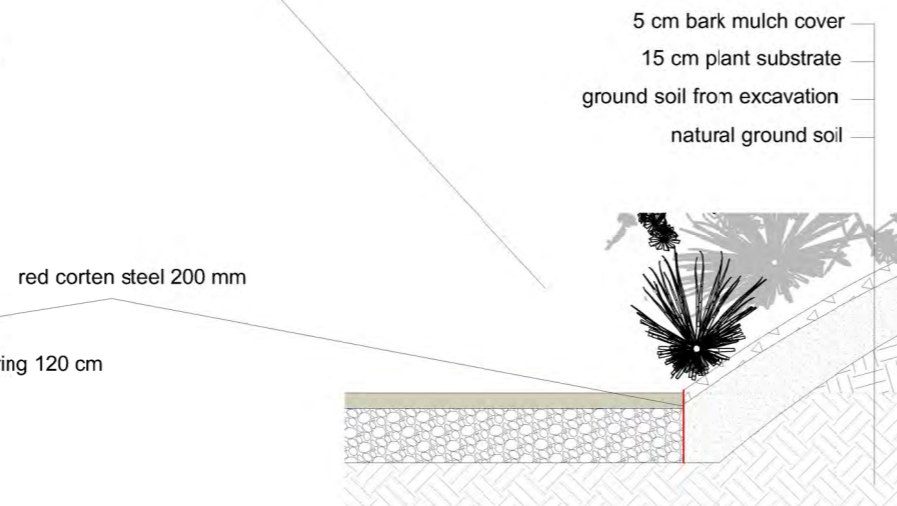


waterbound top layer  
lawn  
rust-coloured corten steel

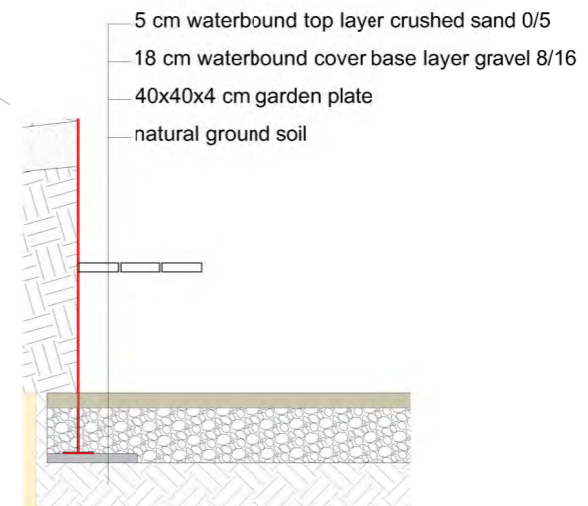
Cross section AA' M1:50



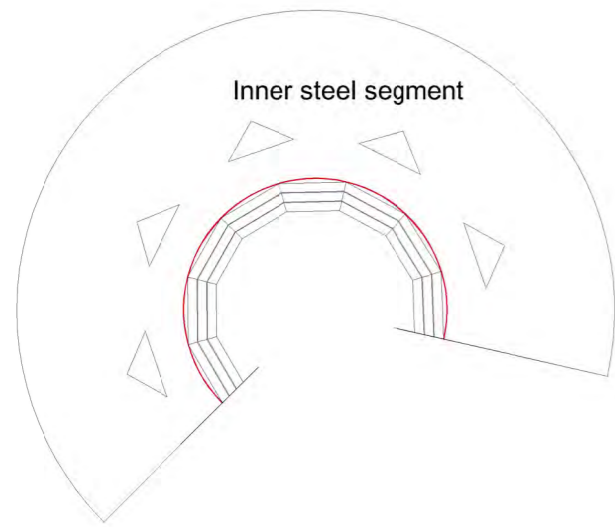
Detail waterbound cover M1:25 [cm]



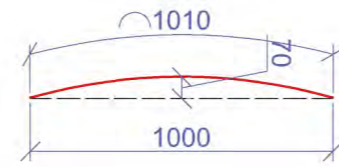
Detail raised planting beds M1:25 [cm]



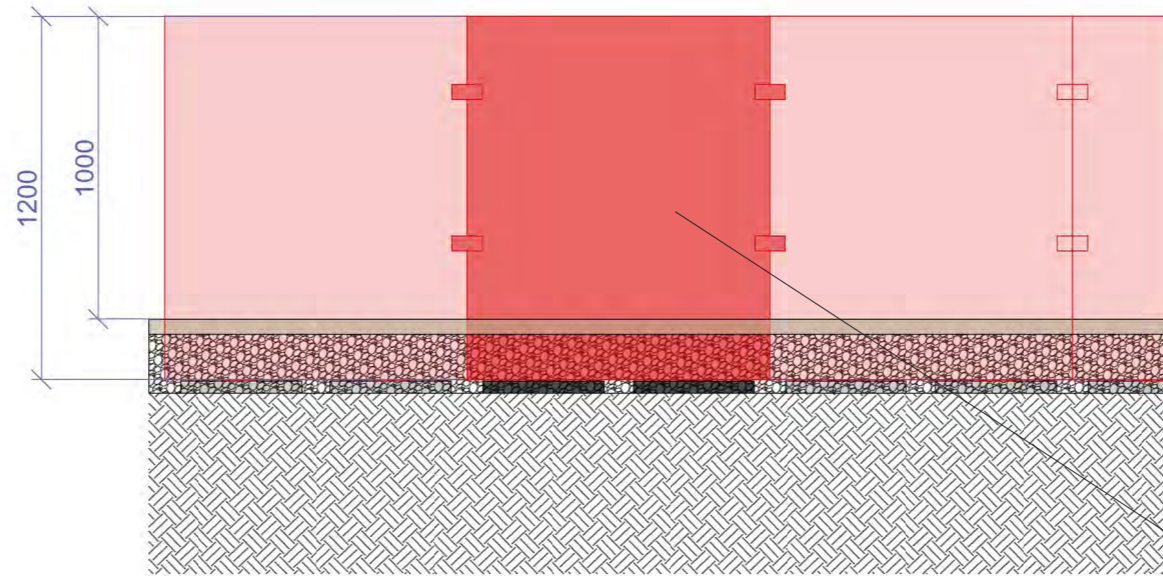
Detail waterbound cover inlay 1:25



Top View

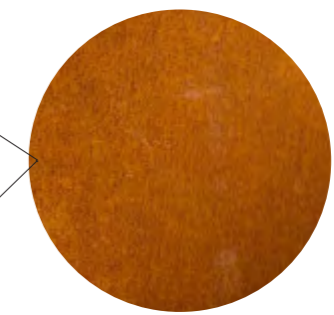


Side View

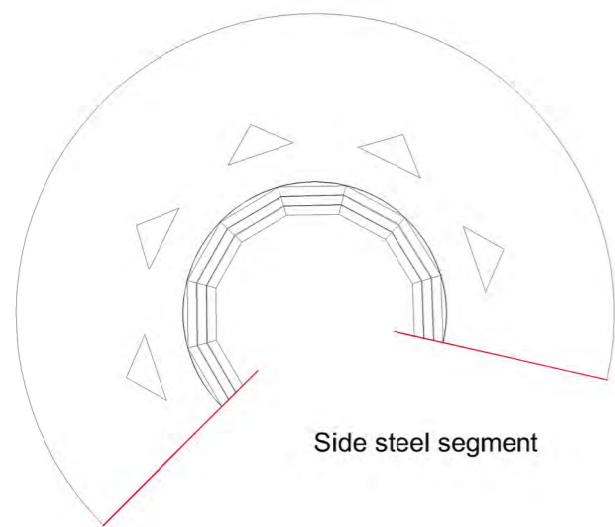


Inner steel segment M1:25 [mm]

8 pieces of rounded corten steel (5mm) are welded together to form the inner ring and support the flowerbed. The pieces are counter-sunk 20 cm into the ground and stabilized by garden plates



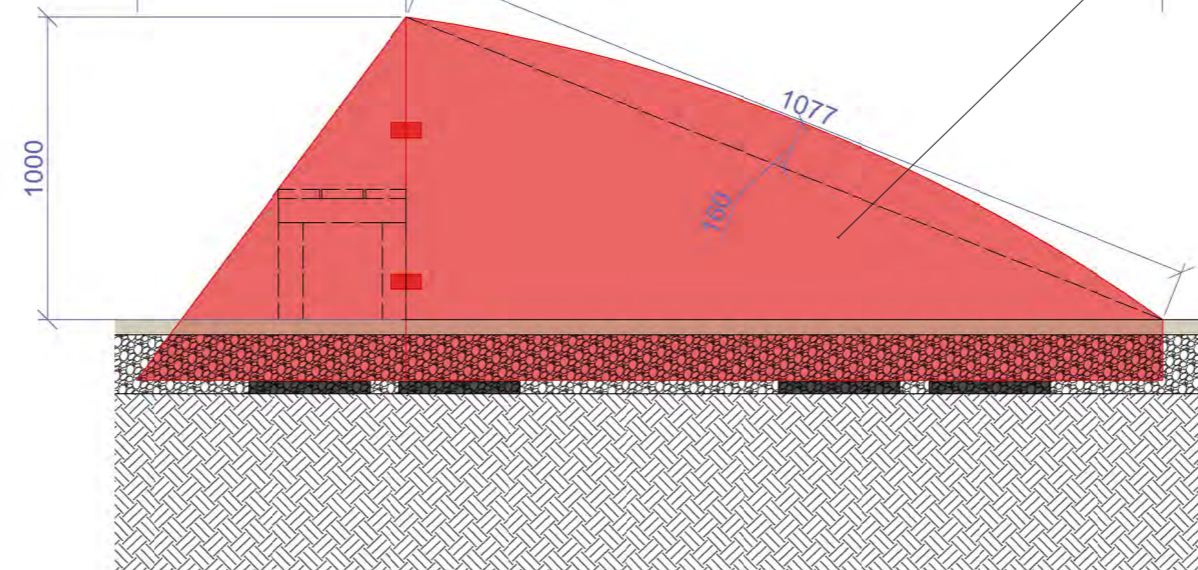
corten steel pattern



Top View



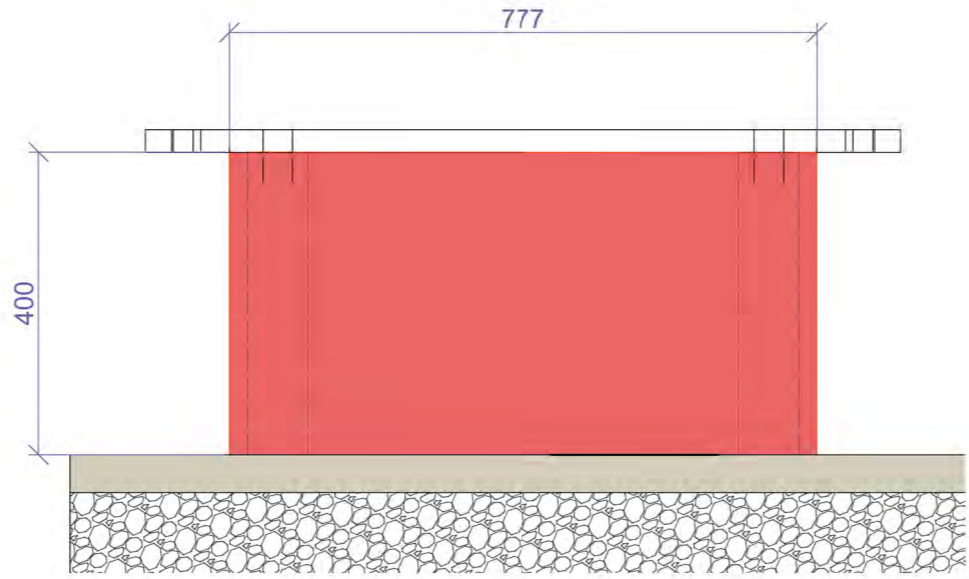
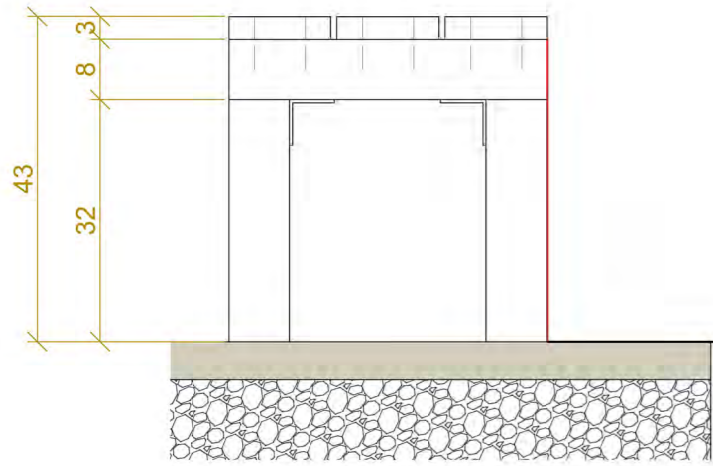
Side View



Side steel segment M1:25 [mm]

2 composed plates of 5mm corten steel form a side of the cake. The side pieces are welded together and also connected to the inner corten steel circle to improve stability. They are counter-sunk into the ground-

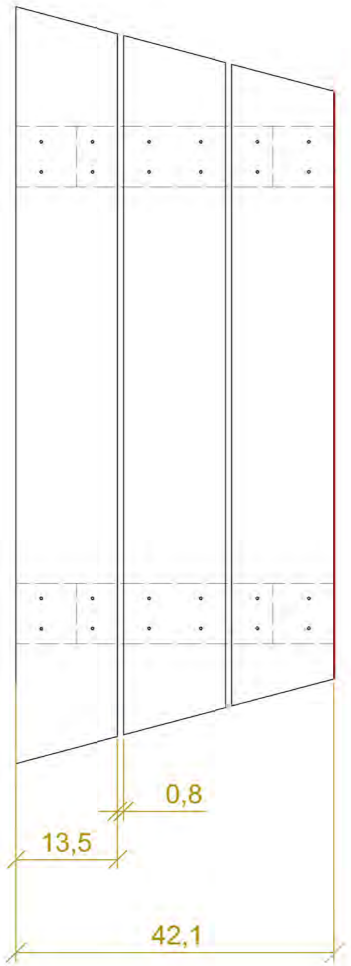




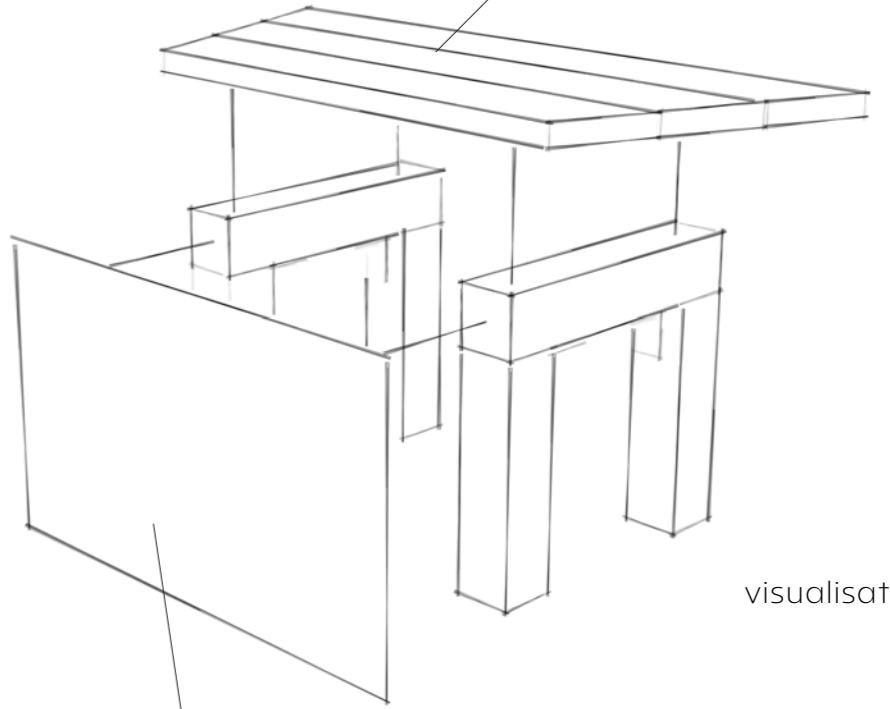
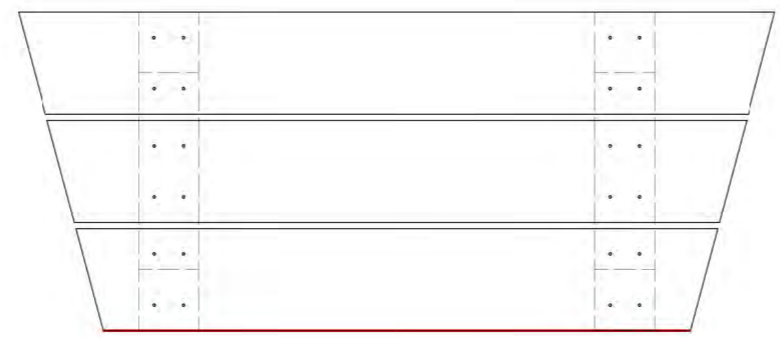
Bench Element Corten Steel Detail M1:10 [mm]



wooden laths



Bench Element Detail M1:10 [cm]

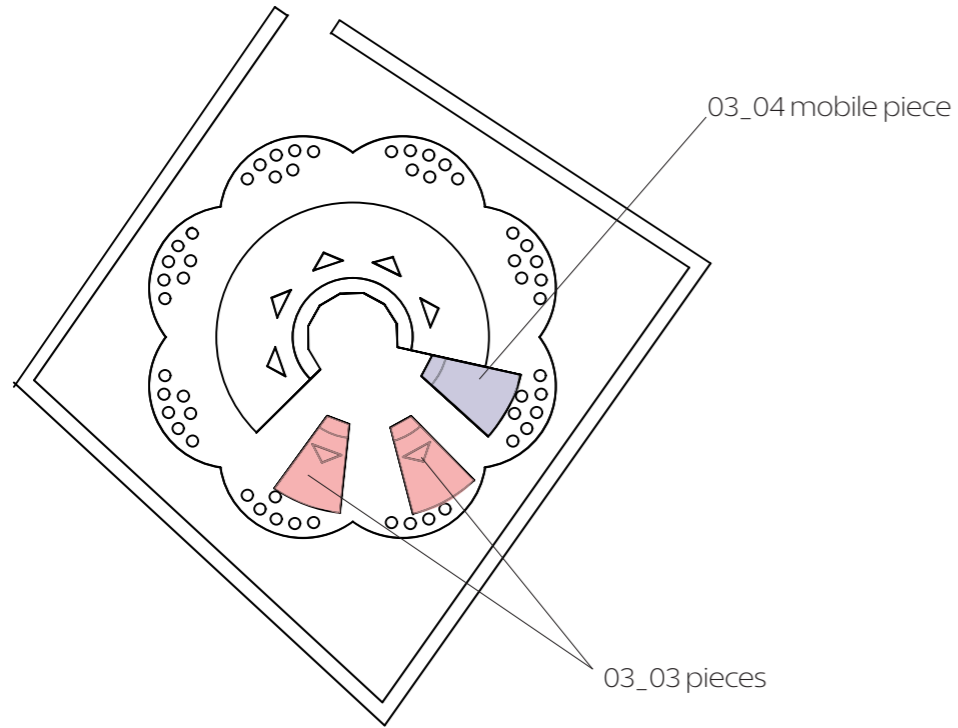


visualisation

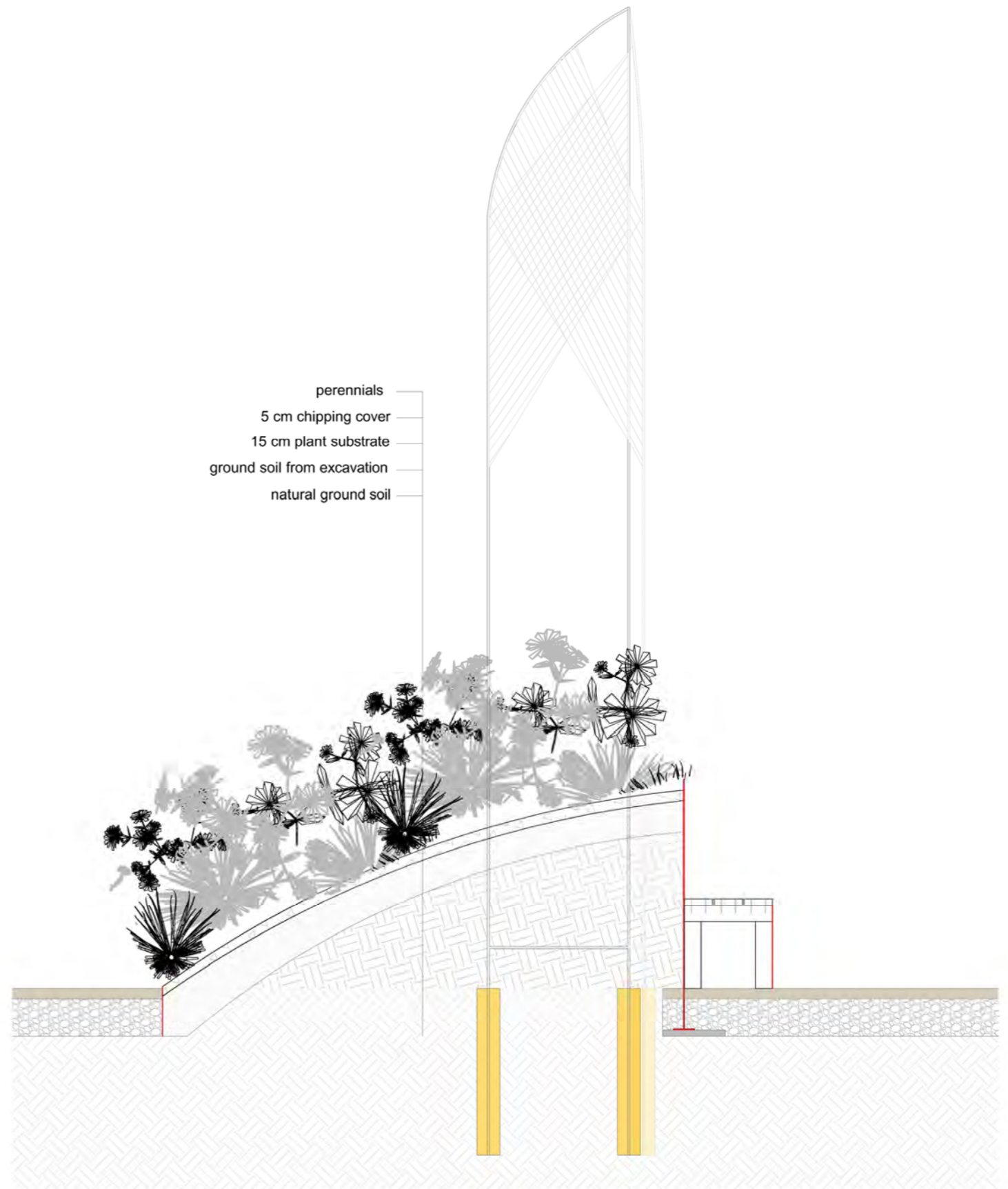
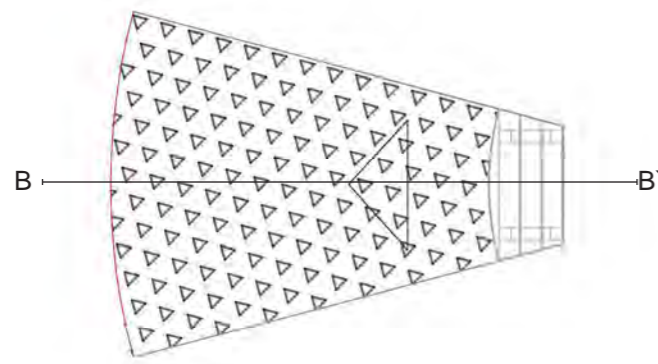


corten steel

03\_03 and 03\_04 localization

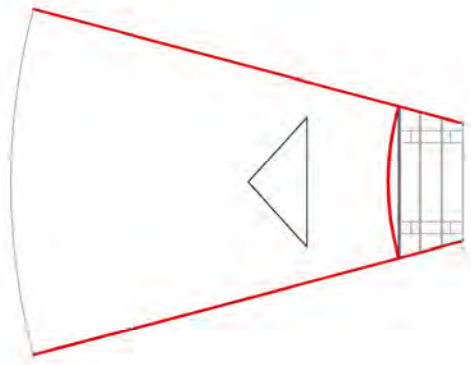


cross section BB'

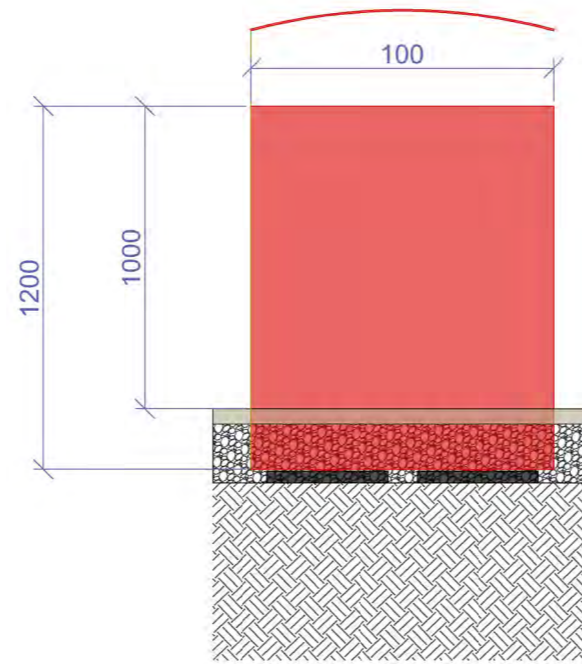


Cross section BB' Pieces M1:25 [cm]

corten steel segments

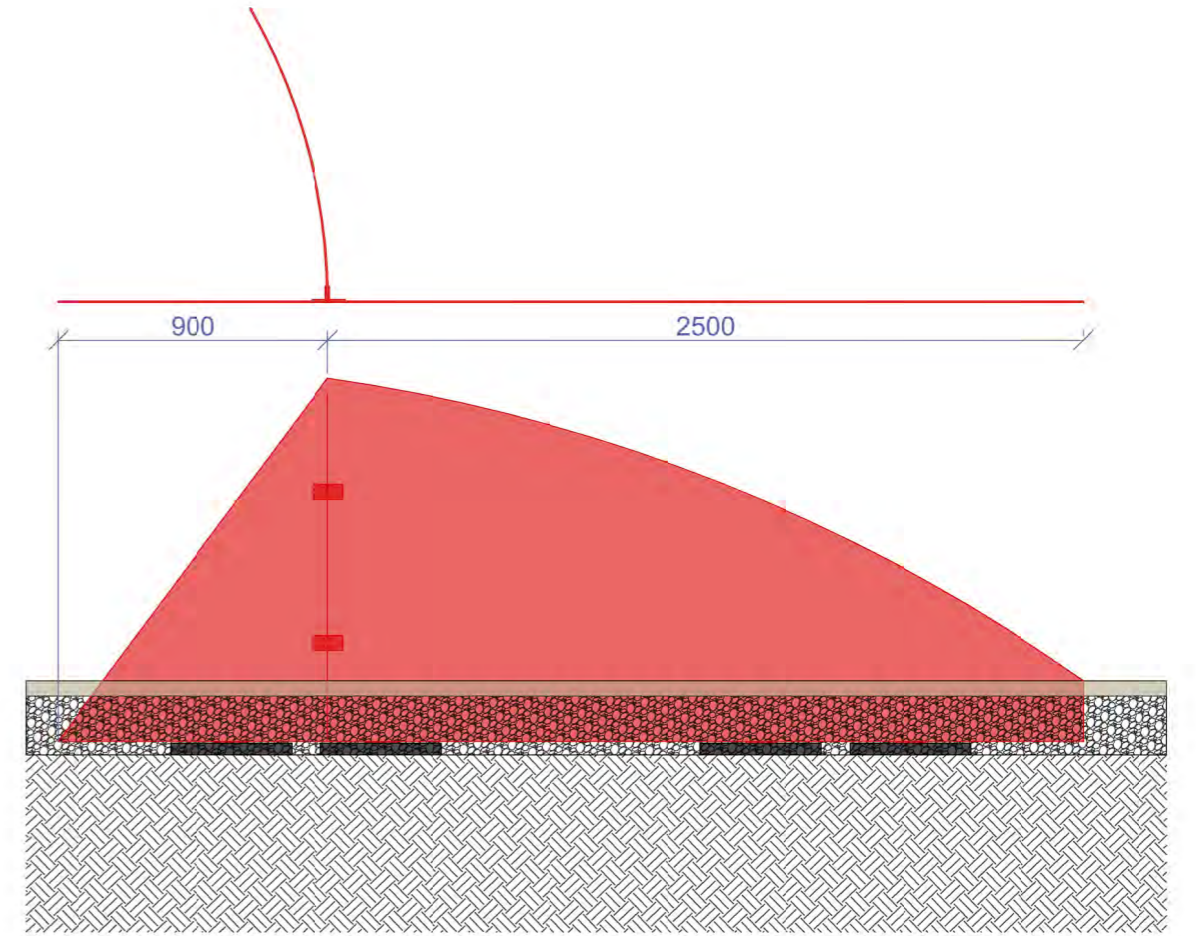


Top View



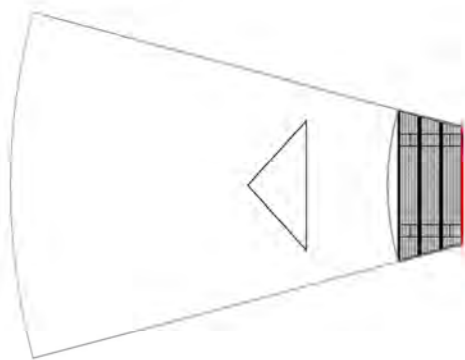
Inner steel segment M1:25 [mm]

Side View

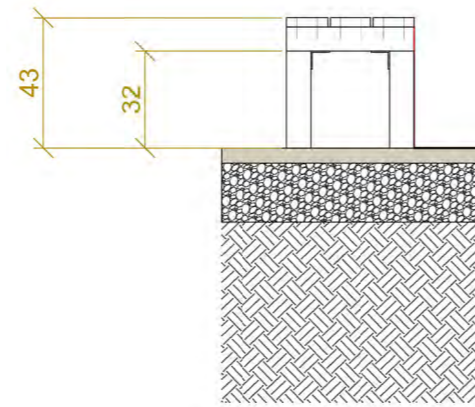


Side steel segment M1:25 [mm]

bench segment

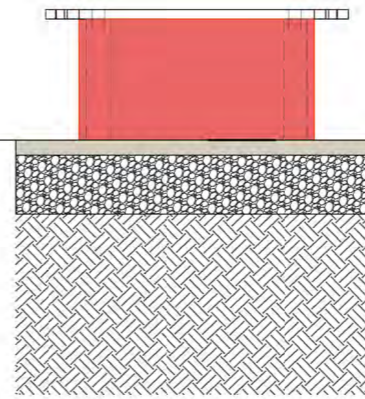


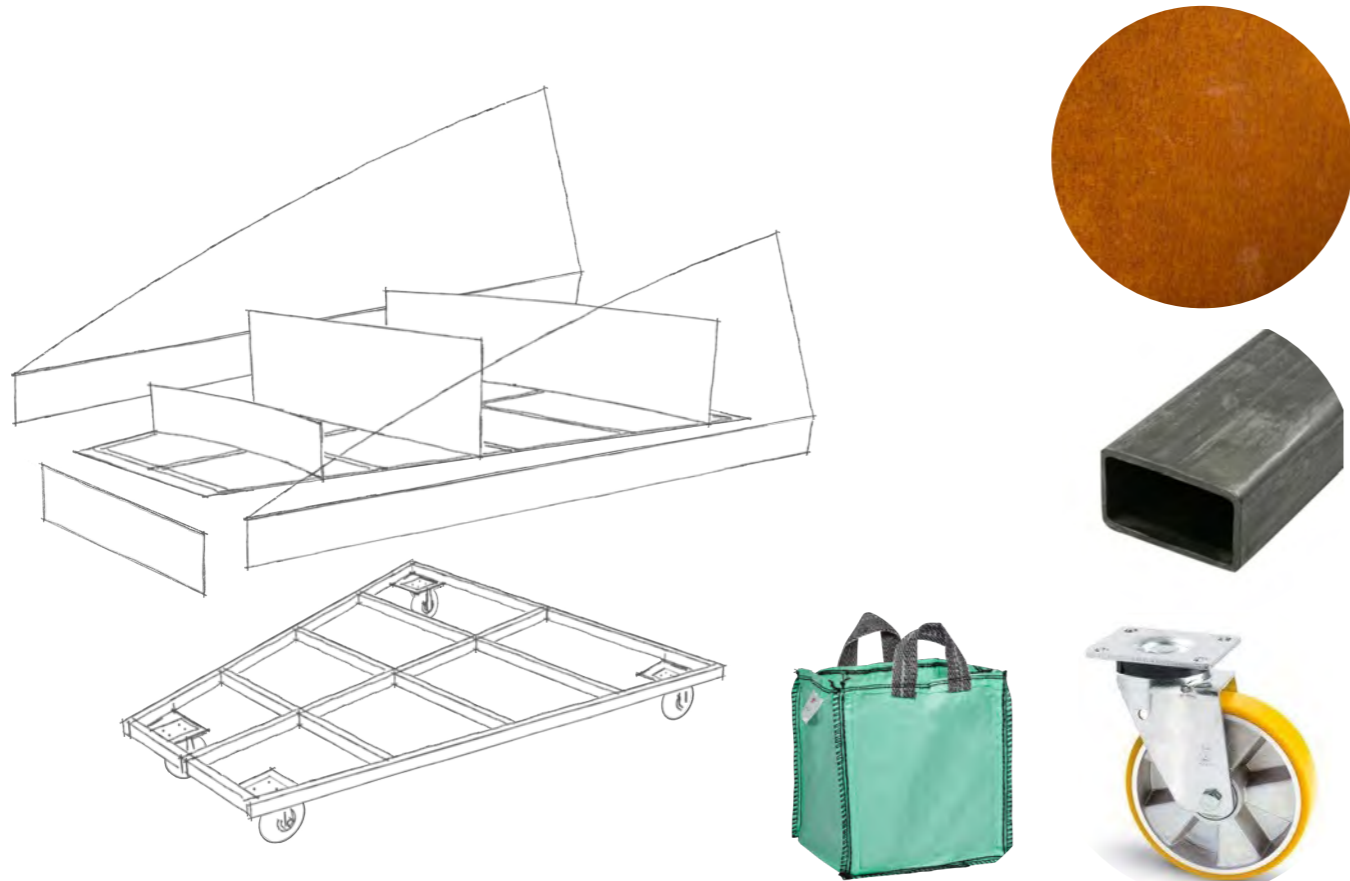
Side View



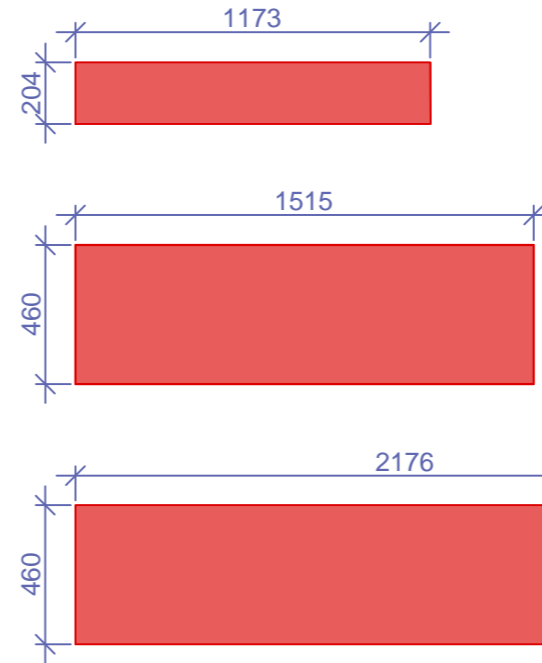
Bench Segment M1:25 [cm]

Front View

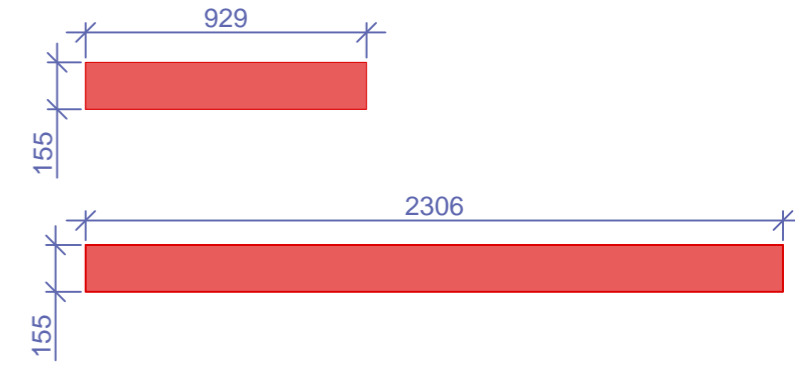




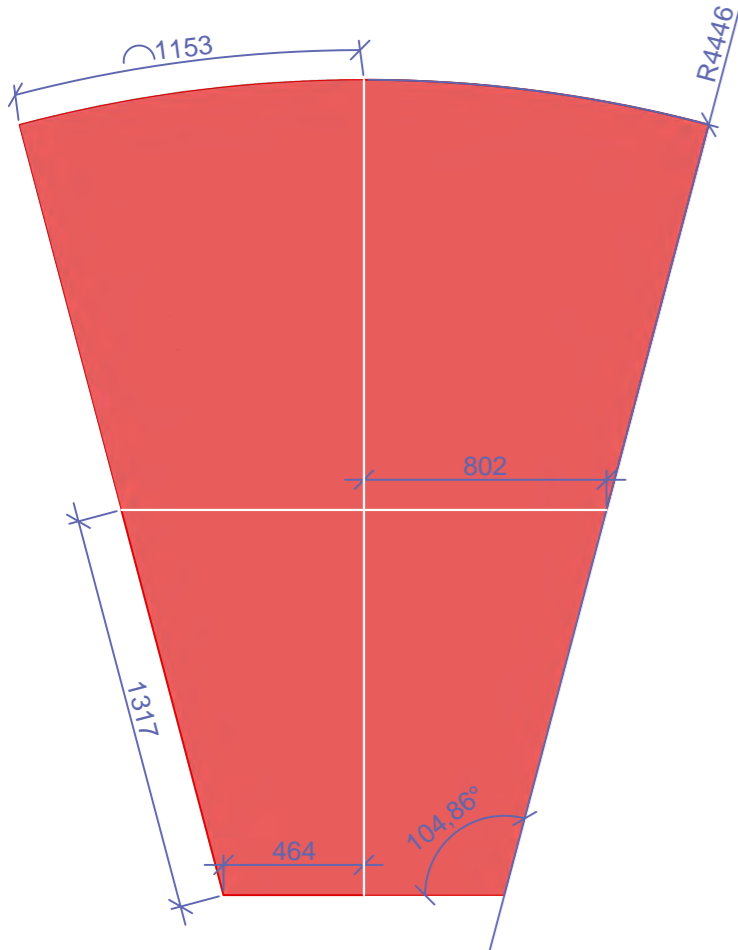
**compartments**  
corten steel | 3 mm



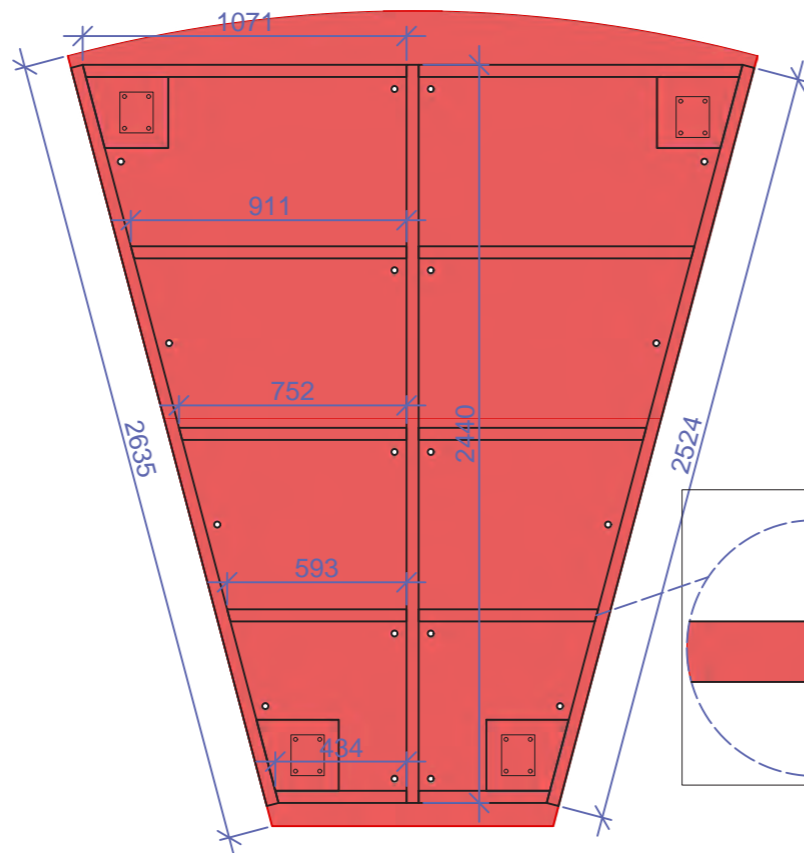
**front and back cover**  
corten steel | 3 mm



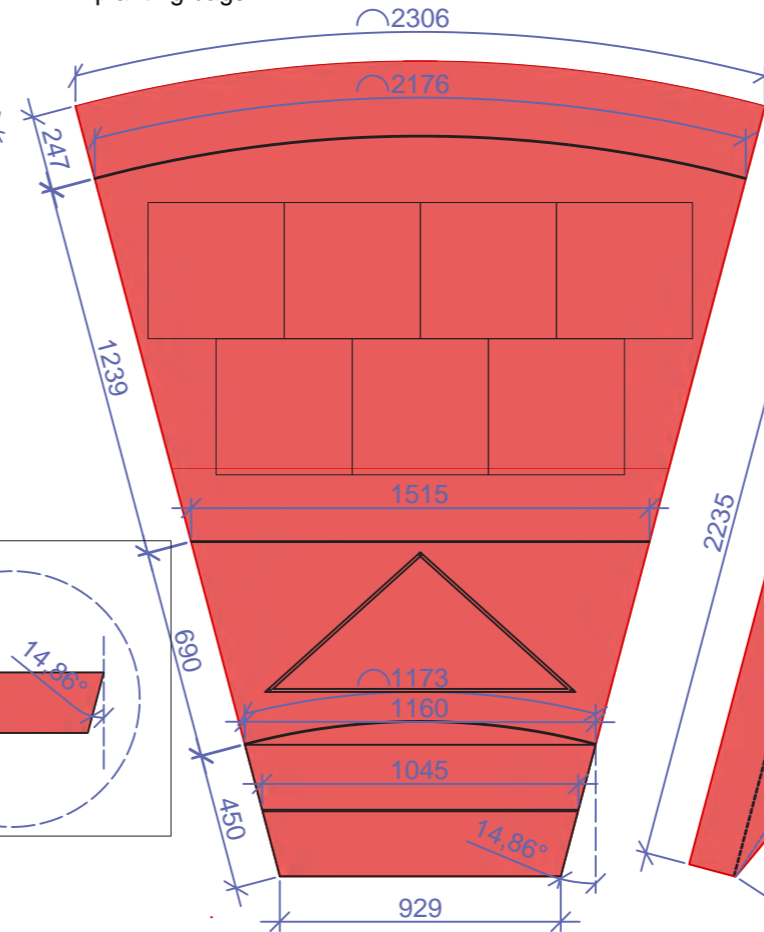
**ground plate dimensions**  
4 pieces of corten steel | 3 mm | welded



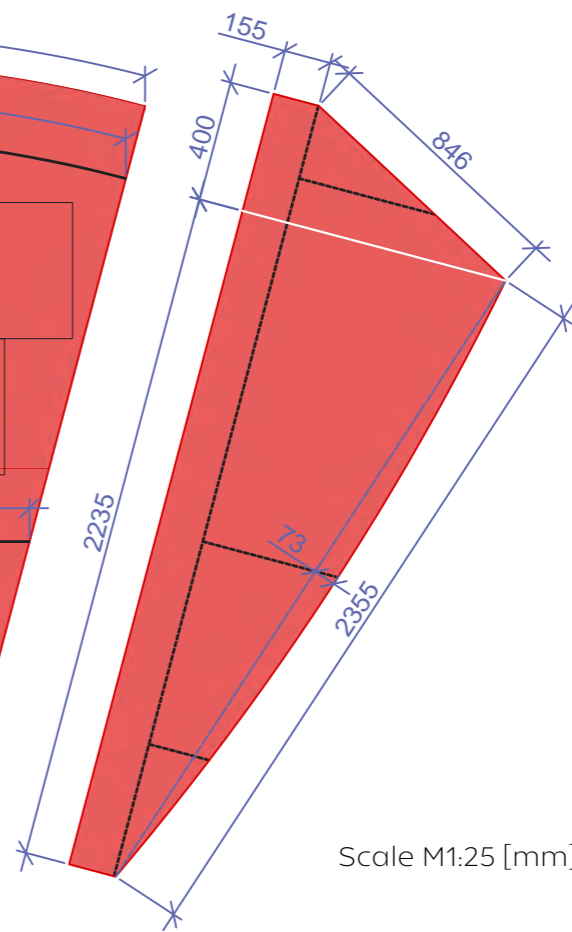
**ground plate - bottom view**  
supporting construction | rectangle corten steel tubes 40x60x3 mm  
holes for water drainage | Ø10 mm  
heavy duty caster wheel | position and supporting steel plate



**ground plate - top view**  
compartments and crown element | welded  
2 wooden slats for sitting  
7 planting bags



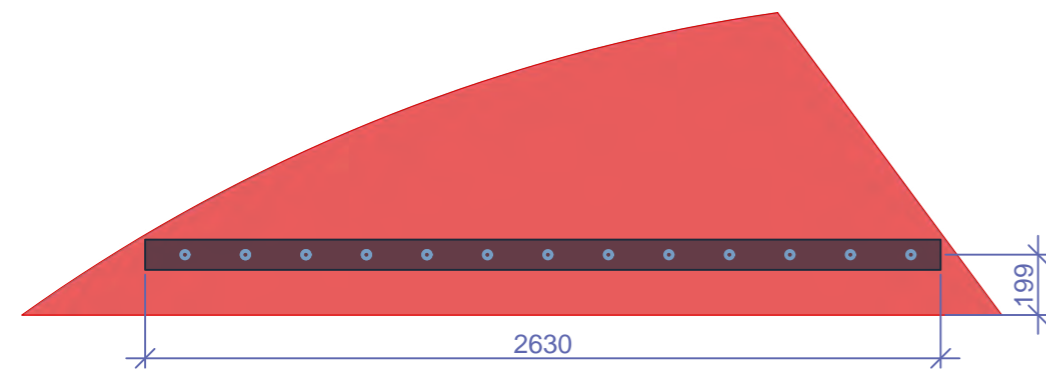
**side part x 2**  
2 pieces of corten steel | 3 mm | welded  
alignment markings for ground plate and compartments



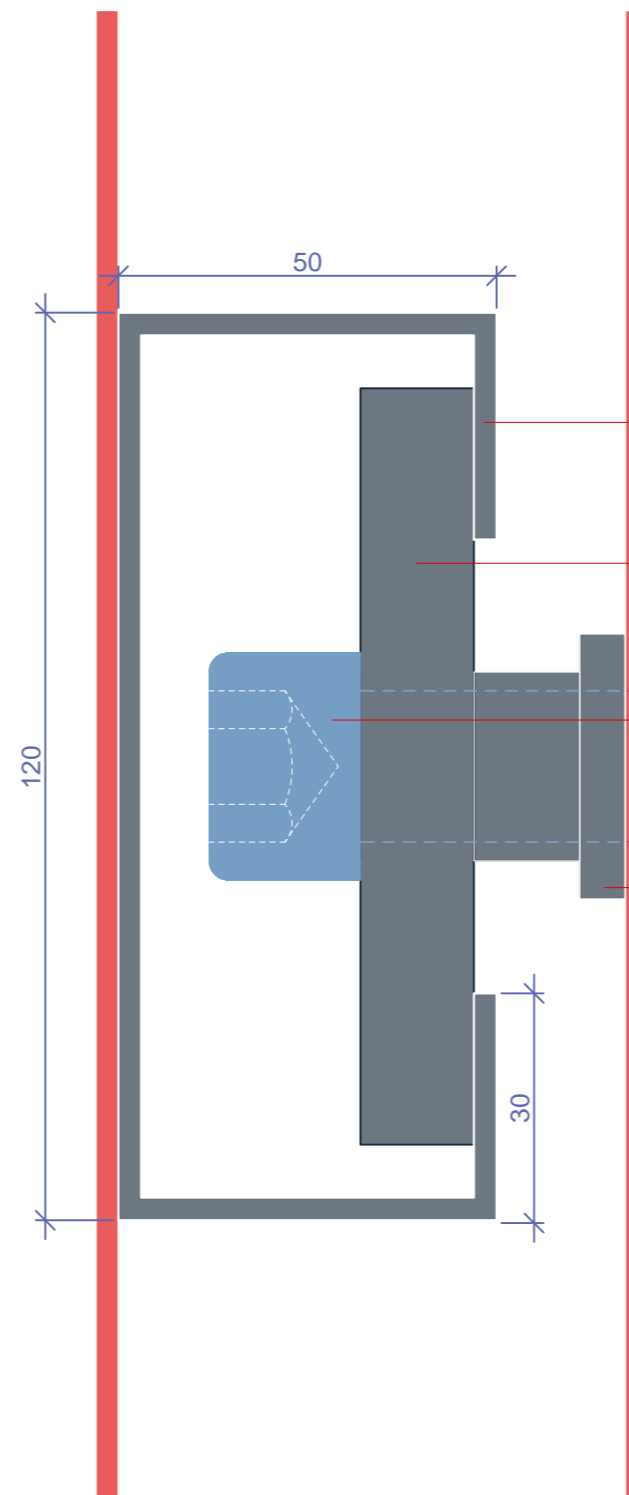
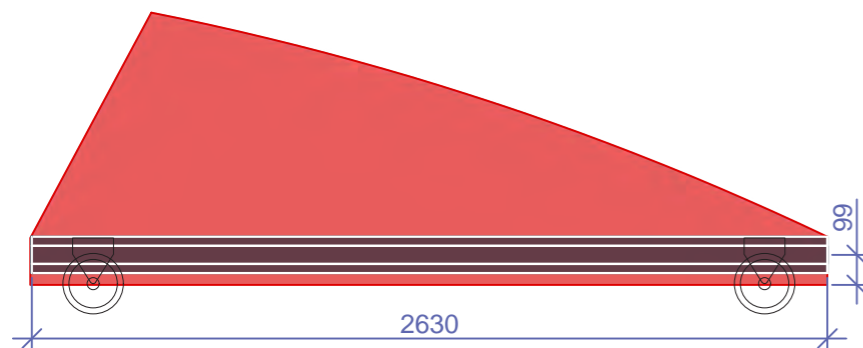
Scale M1:25 [mm]

**sliding mechanism - side view**  
M1:25 [mm]

fixed corten steel side element  
steel flat section | screwed



mobile piece  
steel c-profile | welded



**sliding mechanism - detail**  
M1:1 [mm]



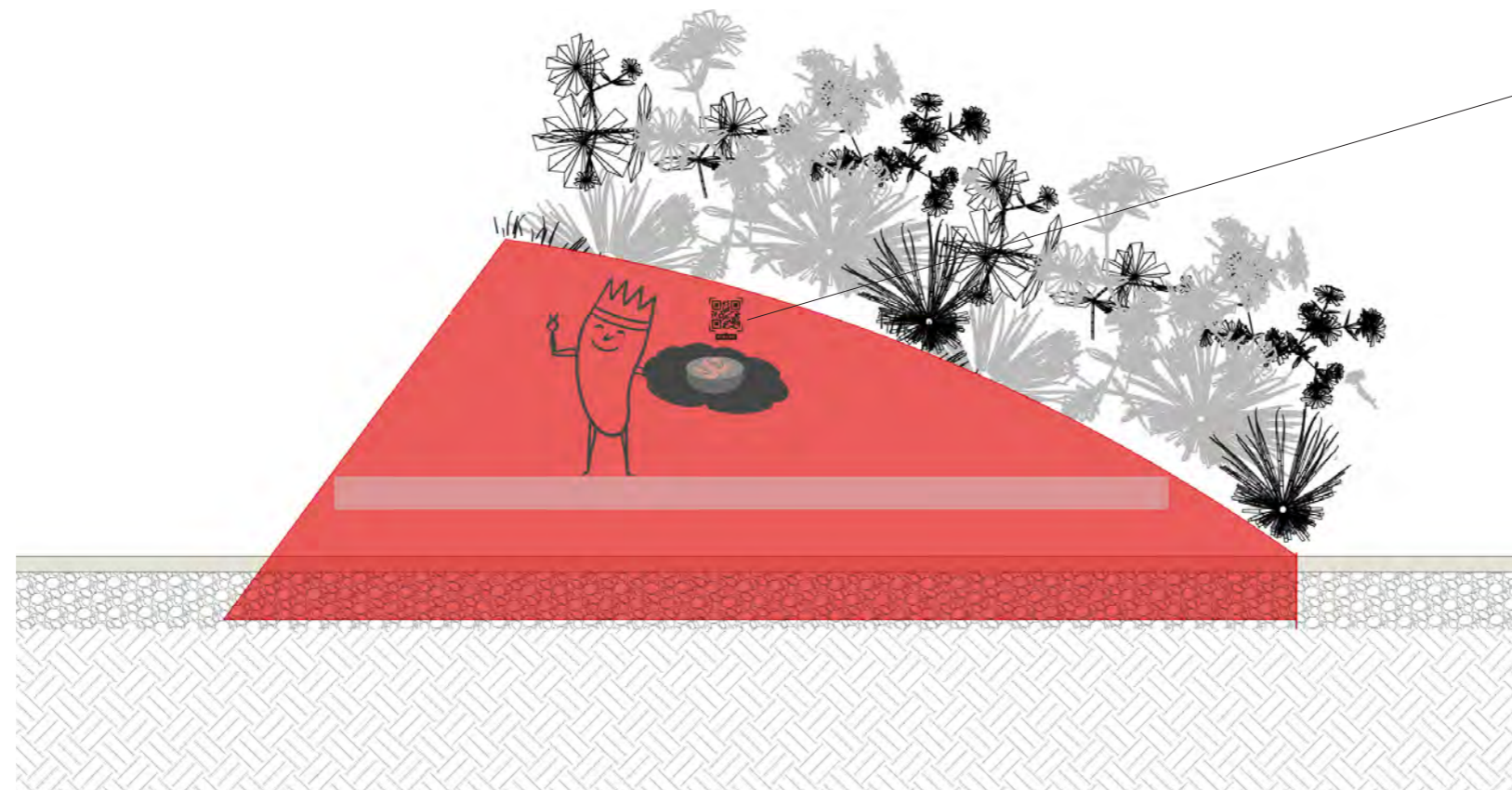
c-profile | 3 mm steel

steel flat section | 100 x 15 mm

13 cylinder screws | M20 x 60 mm

13 hexagon nuts | M20

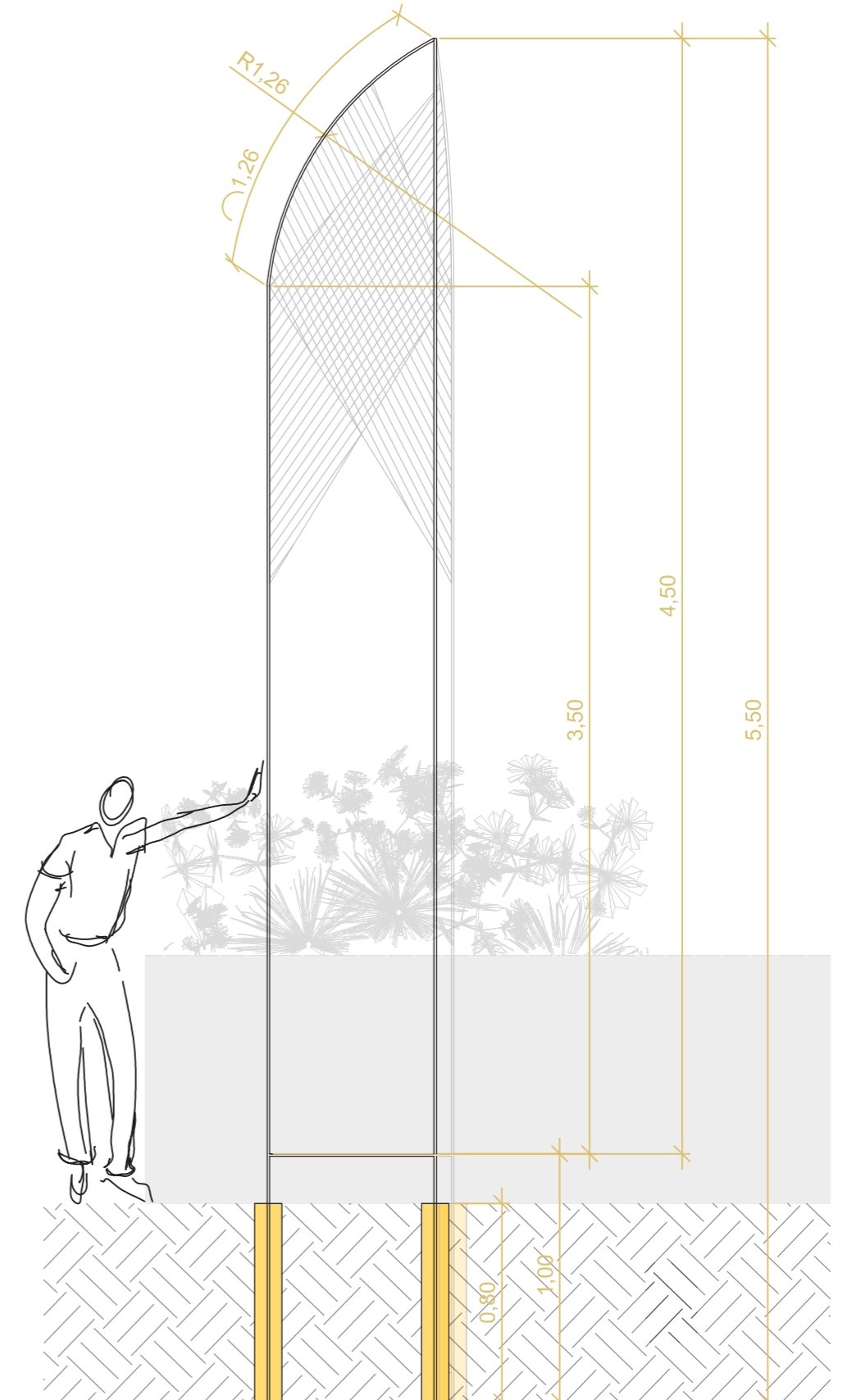
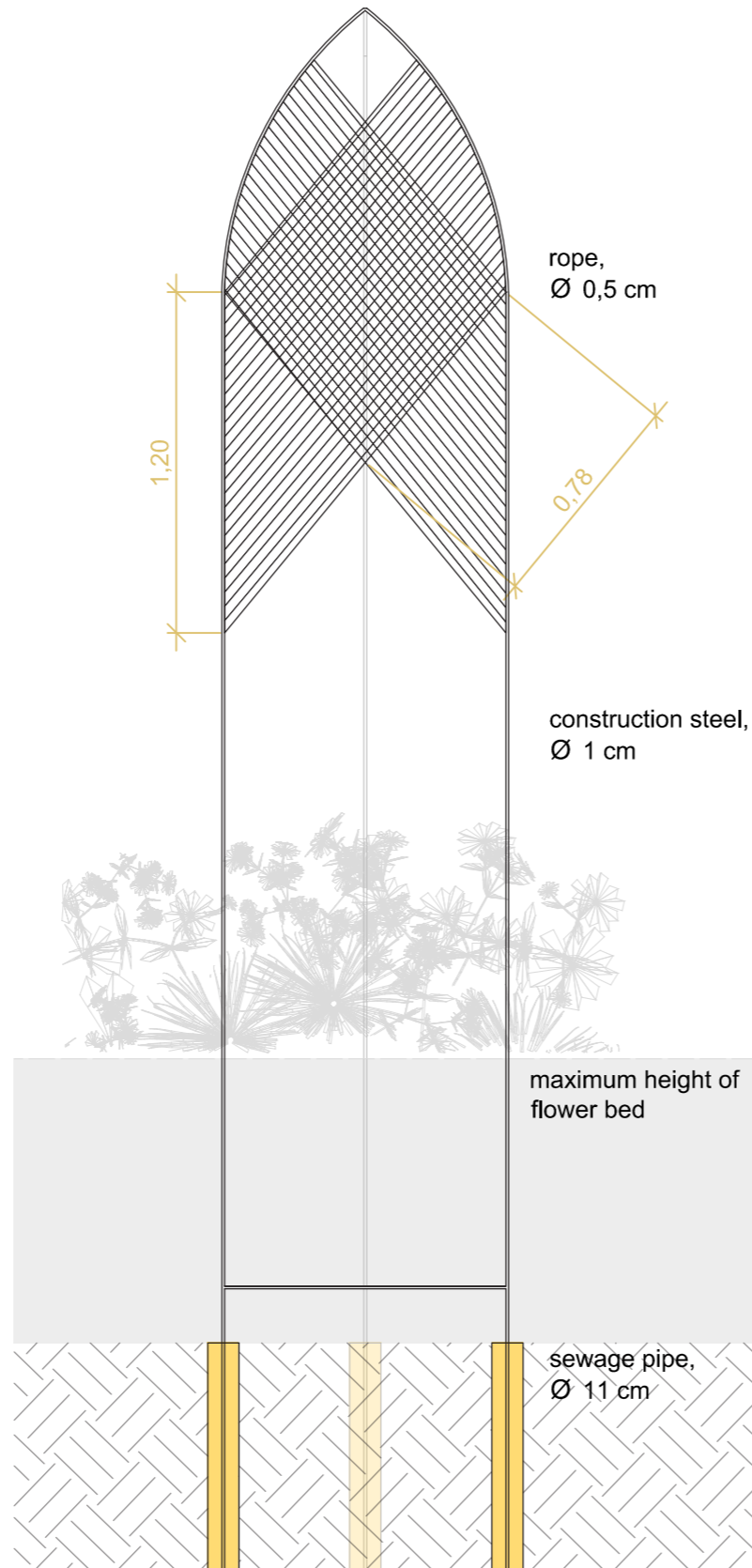
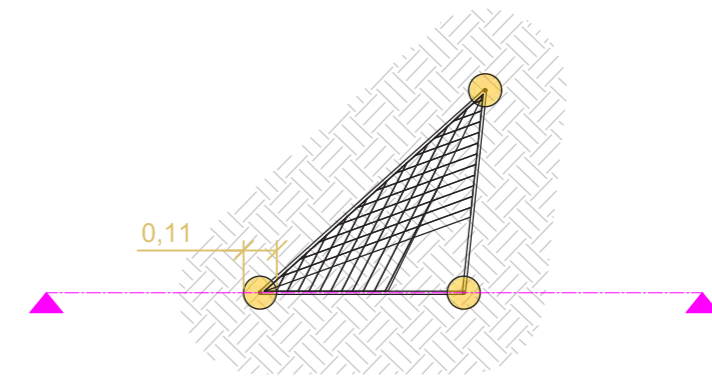
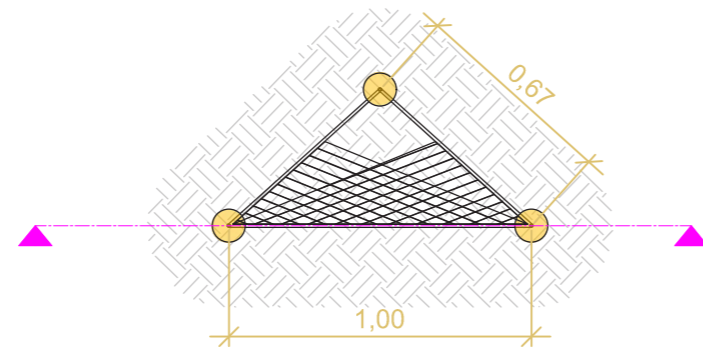
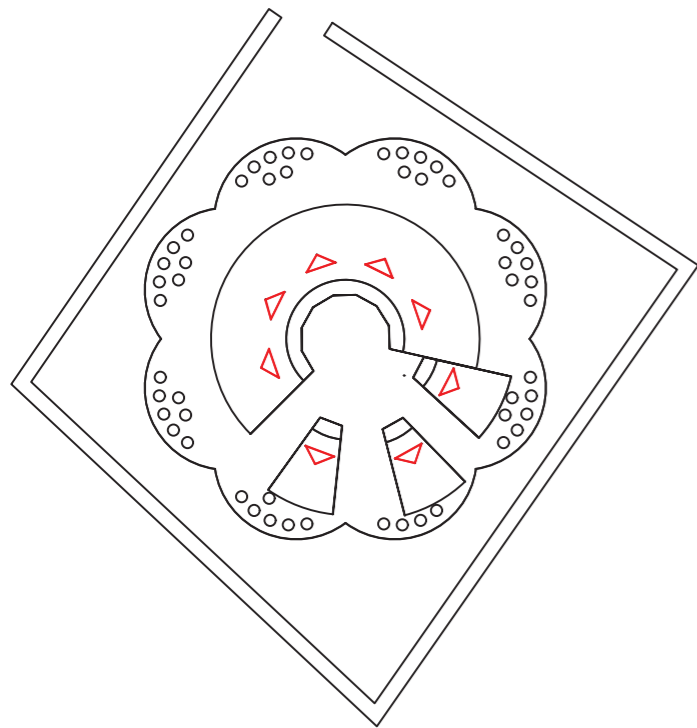
13 spacer sleeves | M20



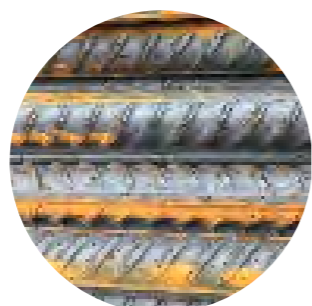
Also visitors are invited to become part of the virtual bolo rei community and share their recipes and pictures of the bolo rei cake by scanning the QR code.

With the cut area that becomes visible after moving the mobile piece, the king of beans appears. Its silhouette is cut into the corten steel plate, backfilled with a supporting metal plate so that the substrate is held together. In one hand the plate of the cake is presenting a 3D bowl stored in a hidden shelf inside the garden bed. The idea of the planners is to provide one bean per visitor of the garden festival.

Everyone gets a souvenir of the garden festival, can plant the bean and watch a plant grow out of it or hide it in a homemade 'Bolo rei'. Like this we want to give the visitors not only a piece of our giant cake but also motivate them to pass on their souvenir figuratively and literally. Stories about the visit, new fruits growing on a bean plant or a piece of cake shared with family and friends. This is what the garden is all about.



Scale M1:25 [m]



**Material needed  
crown spike**

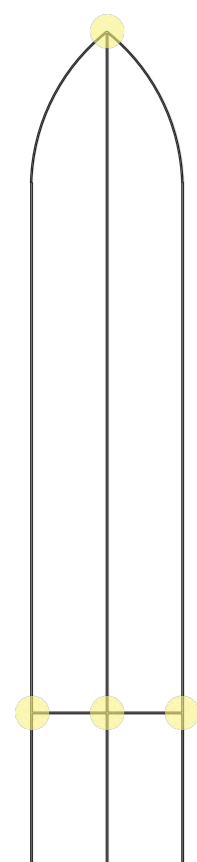
construction steel:  
2 pieces by 5,75 m  
1 piece by 5,5 m  
2 pieces by 0,67 m  
1 piece by 1 m

sewage pipes:  
3 pieces by 0,8 m

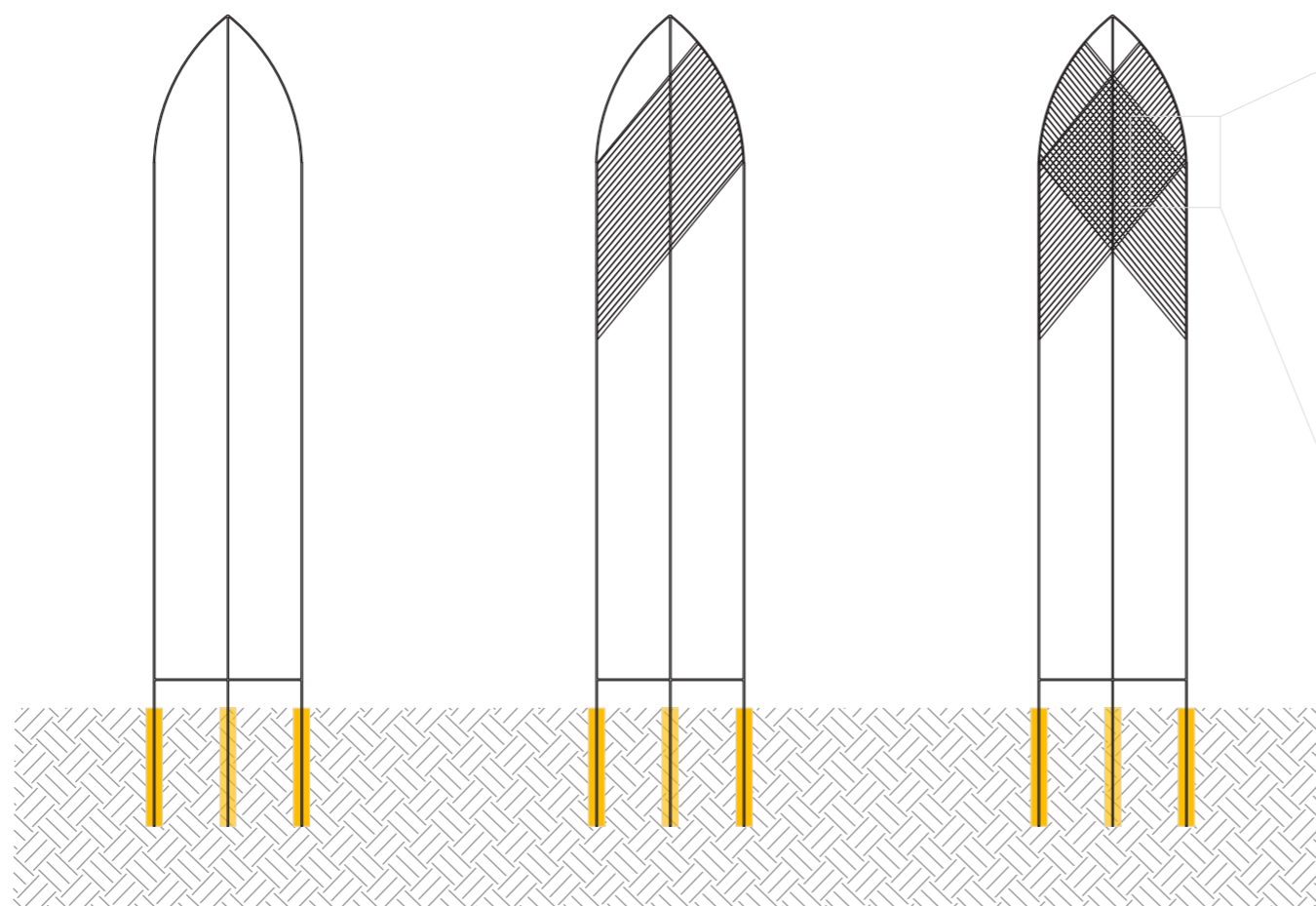
0,023 m<sup>3</sup> concrete

77 m rope

**Step-by-step construction  
crown spike**



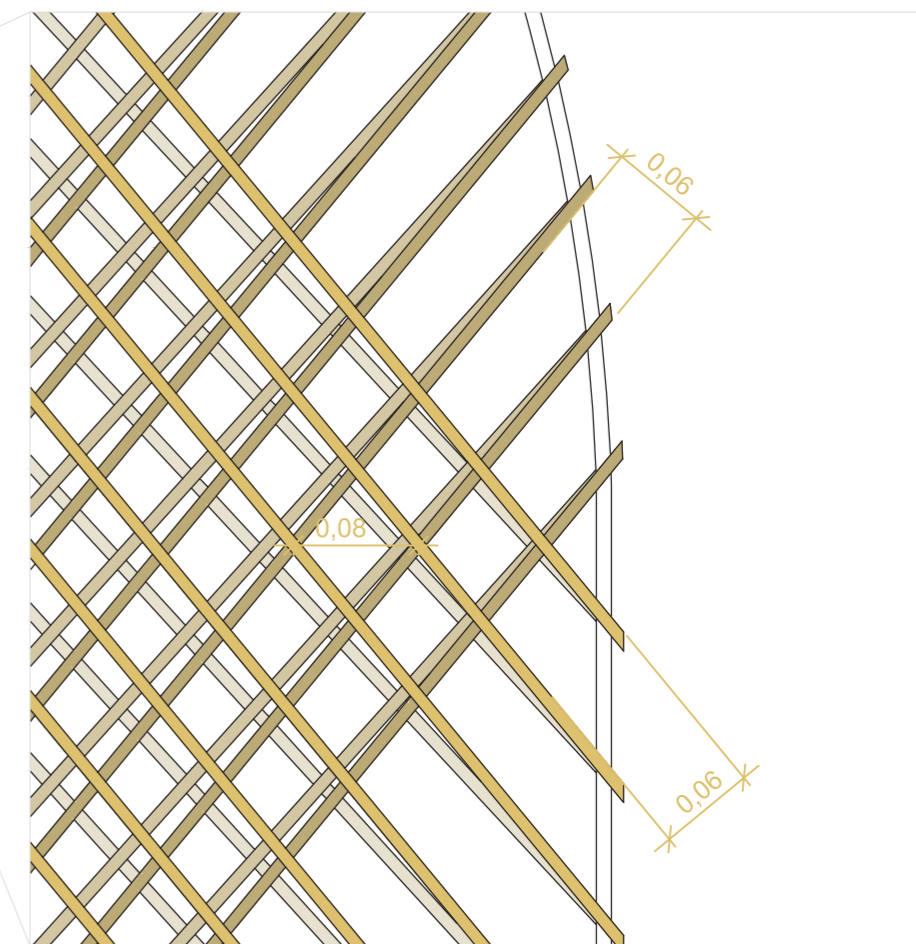
bend and weld steel



place steel in three pipes, fill up pipes with concrete

tie rope in first orientation

tie rope in second orientation

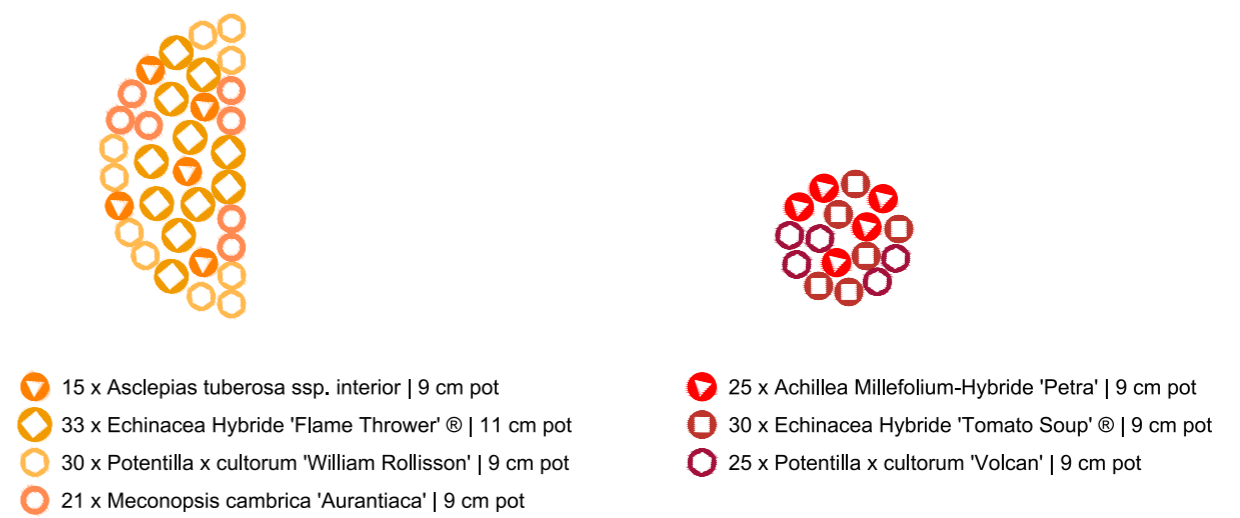
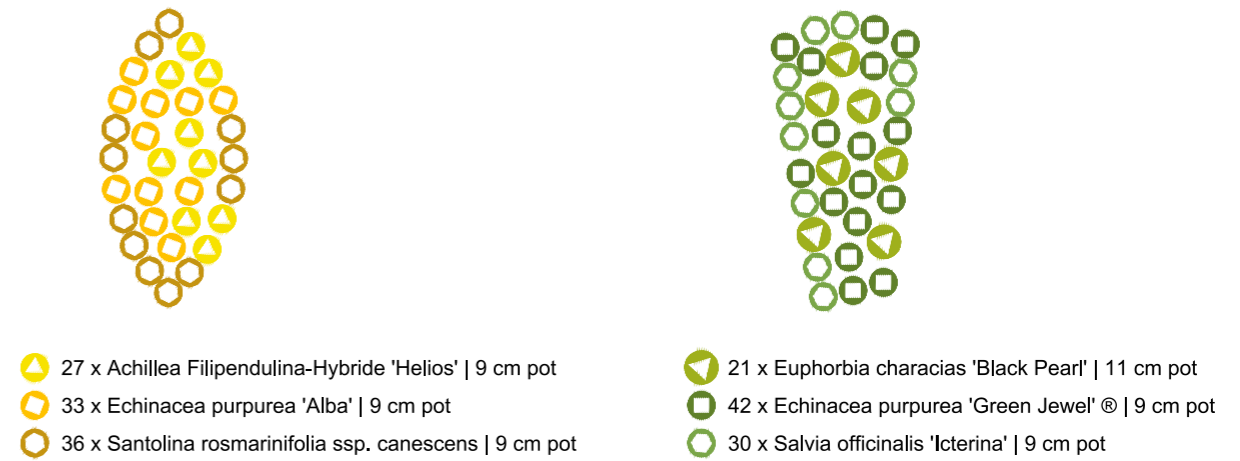
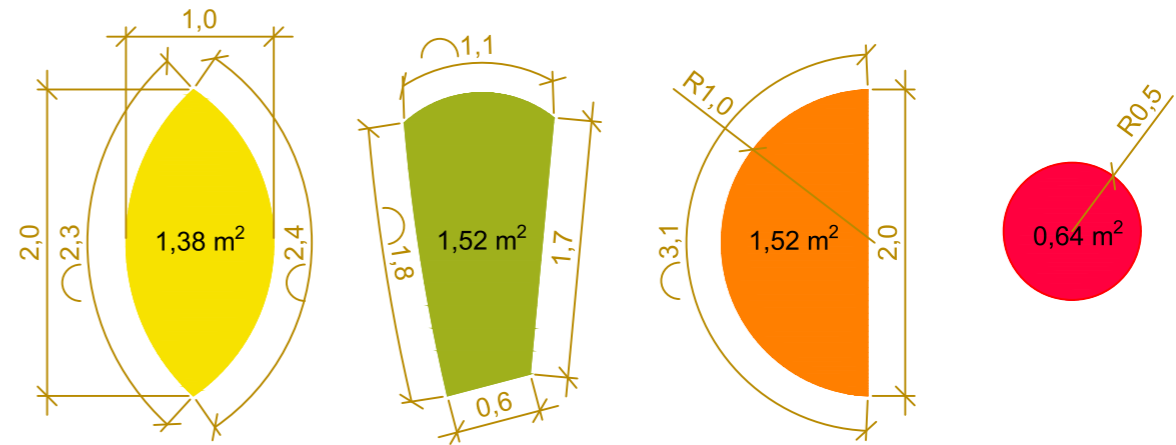


Scale M1:5 [m]

close-up of tying rope around steel

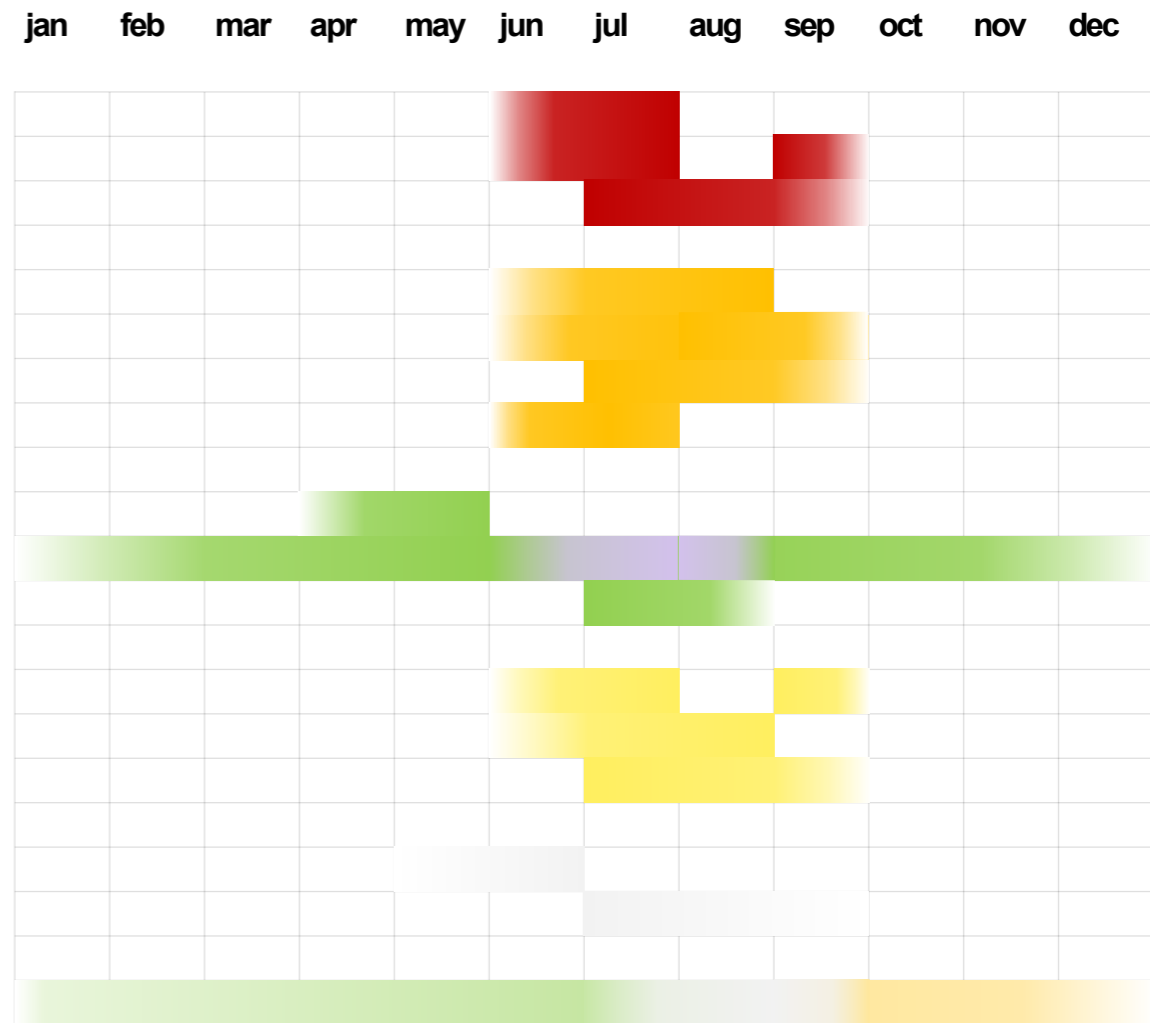
Scale M1:50 [m]





- 44 x Allium Hybride 'Mount Everest' | 11 cm pot
- 46 x Echinops bannaticus 'Star Frost' | 9 cm pot
- 580 x Stipa tenuissima | 9 cm pot | 25 per m<sup>2</sup>
- 7 x planting bag | 45 x 45 x 45 cm

planting plan  
Scale M1:50 [m]



toppingplants / perennials

**red** *Potentilla x cultorum* 'Volcan'  
*Achillea Millefolium* Hybride 'Petra'  
*Echinacea Hybride* 'Tomato Soup'®

**orange** *Asclepias tuberosa* ssp. interior  
*Meconopsis cambrica* 'Aurantiaca'  
*Echinacea Hybride* 'Flame Thrower'®  
*Potentilla x cultorum* 'William Rollisson'

**green** *Euphorbia characias* 'Black Pearl'  
*Salvia officinalis* 'Icterina'  
*Echinacea purpurea* 'Green Jewel'®

**yellow** *Achillea filipendulina* Hybride 'Helios'  
*Santolina rosmarinifolia* ssp. *canescens*  
*Echinacea Hybride* 'Sunrise'®

**decorating sugar** *Allium Hybride* 'Mount Everest'  
*Echinops bannaticus* 'Star Frost'

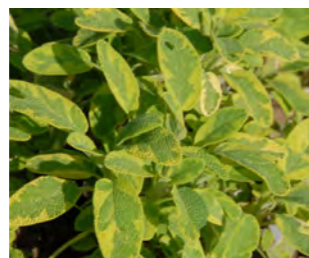
**dough** *Stipa tenuissima*



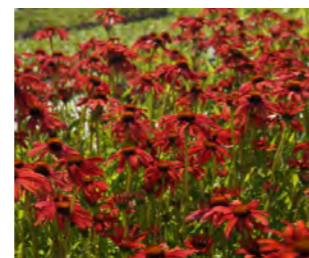
*Echinacea Hybride* 'Flame Thrower'®



*Asclepias tuberosa* ssp. interior



*Salvia officinalis* 'Icterina'



*Echinacea Hybride* 'Tomato Soup'®



*Echinacea Hybride* 'Sunrise'®



*Potentilla x cultorum* 'William Rollisson'



*Echinacea purpurea* 'Green Jewel'®



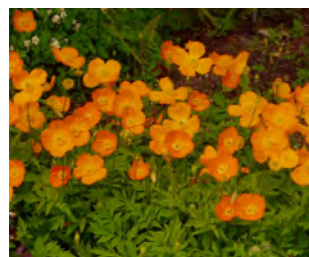
*Achillea Millefolium* Hybride 'Petra'



*Achillea filipendulina* Hybride 'Helios'



*Allium Hybride* 'Mount Everest'



*Meconopsis cambrica* 'Aurantiaca'



*Euphorbia characias* 'Black Pearl'



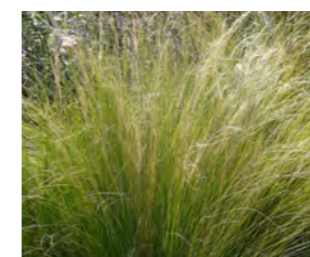
*Potentilla x cultorum* 'Volcan'



*Santolina rosmarinifolia* ssp. *canescens*



*Echinops bannaticus* 'Star Frost'



*Stipa tenuissima*

Code	Material	Dimensions	Source	Price/Unit	Remarks/Calculation	Amount needed	Price Total
02.03. Path design	steel lawn edging galvanized circle	37x12 cm (Radius x H)	<a href="https://metalltechnik-dermbach.eshop.t-online.de/epages/Shop42414.sf/de_DE/?ObjectPath=/Shops/Shop42414/Products/40038">https://metalltechnik-dermbach.eshop.t-online.de/epages/Shop42414.sf/de_DE/?ObjectPath=/Shops/Shop42414/Products/40038</a>	17,33 €		52 pieces	€ 901,16
	water-bound path surface top layer crushed sand 0/5, bulk specific weight: 1450kg/m³	0,06 m x 84,03 sqm = 4,2m³	<a href="https://www.hornbach.at/p/wassergebundene-wegedecke-deckschicht-chateau-beige-0-5mm-1000-kg-big-bag/4688467/">https://www.hornbach.at/p/wassergebundene-wegedecke-deckschicht-chateau-beige-0-5mm-1000-kg-big-bag/4688467/</a>	159,99 €	4,2 m³ x 20% = 5 m³ = 5000 kg	5 x 1000 kg big bag	€ 799,95
	water-bound path surface base layer grit 8/16, bulk specific weight: 1800kg/m³	0,18 m x 84,03 sqm = 15,7254 m³	<a href="https://www.obi.at/schuettergueter/bruchschotter-big-bag-beige-0-32-mm-1000-kg/p/7455165">https://www.obi.at/schuettergueter/bruchschotter-big-bag-beige-0-32-mm-1000-kg/p/7455165</a>	64,99 €	15,73x 20 = 18,84 m³ = 18840 kg	18 x 1000 kg big bag	€ 1 169,82
	Corten steel belt	1000x15 cm (LxH) 0,5 mm thick	<a href="https://www.hornbach.de/p/rasenkante-beeteinfassung-corten-1000-x-15-cm-rostoptik/12000477/">https://www.hornbach.de/p/rasenkante-beeteinfassung-corten-1000-x-15-cm-rostoptik/12000477/</a>	59,95 €	44,39 m (outside border) + 23,06 m (border outer edge cake) = 67,45 m	67,45 m	€ 419,65
	rolled turf	roll in sqm	<a href="https://www.hornbach.de/p/rollrasen-sport-spiel-bestellmenge-50-99-m-tagesfrisch-geschaelt/10004660/">https://www.hornbach.de/p/rollrasen-sport-spiel-bestellmenge-50-99-m-tagesfrisch-geschaelt/10004660/</a>	7,19 €	5,6 sqm (holes) + ~116 sqm (area outside the waterbound surface)		€ 874,30
							<b>€ 4 164,88</b>
02.03. Flower bed	split cover, Edelsplitt 8/16	2 m³	<a href="https://www.zierkieskauf.com/product/granitsplitt-braun-gelb/">https://www.zierkieskauf.com/product/granitsplitt-braun-gelb/</a>		2 x 750 = 1500 kg	1 big bag 1000 kg + 1 big bag 500 kg	€ 657,00
	substrate	11 m³ = 10% compost and 45% ground soil (from site), 40% mineral components 0-16 (Ca/lt)	<a href="https://www.kieskaufen.at/p/kies-0-16-mm-943.asp#prettyPhoto">https://www.kieskaufen.at/p/kies-0-16-mm-943.asp#prettyPhoto</a>	120,00 €	40%=4,4 m³x 1500 kg = 6.600 kg	1 big bag= 1000 kg, 7 bags	€ 912,00
	natural soil base layer	15 m³	natural ground soil from site: other gardens + excavation for waterbound cover		15x1450kg = 221700 kg	soil from excavation: 18,5 m³, 4 m³ on top	<b>€ 1 569,00</b>
03.01 Inlayer Corten steel	corten steel rounded	30/1200/1000 mm (B/H/L)	<a href="https://www.feld-eitorf.de/kreissegment-aus-cortenstahl-blech-starke-3-0-mm">https://www.feld-eitorf.de/kreissegment-aus-cortenstahl-blech-starke-3-0-mm</a>	203,98 €		9	€ 1 835,82
	Garden plate	40/40/4 (B/L/H) cm	<a href="https://www.bauhaus.at/terrassenplatten-gehwegplatten/gartenplatte/p/25847811">https://www.bauhaus.at/terrassenplatten-gehwegplatten/gartenplatte/p/25847811</a>	3,49 €		24	€ 84,00
	corten steel plates for sides	1200/900/3 (H/L/W) mm	<a href="https://www.feld-eitorf.de/rechtwinkliges-dreieck-aus-stahlblech-starke-3-0-mm">https://www.feld-eitorf.de/rechtwinkliges-dreieck-aus-stahlblech-starke-3-0-mm</a>	106,86 €		6 pieces	€ 641,16
	corten steel plate for sides	2500/1200/3 (L/H/W)	<a href="https://www.feld-eitorf.de/cortenstahl-blech-staerke-3-0-mm">https://www.feld-eitorf.de/cortenstahl-blech-staerke-3-0-mm</a>	387,57 €		6 pieces	€ 2 325,42
							<b>€ 4 886,40</b>
03.02 Bench Segment	Holzplatten	13,5/3/2000 (B/H/L) cm	<a href="https://www.hornbach.at/p/konsta-rechteckleiste-kiefer-roh-13-5x30x2000-mm/5491003/">https://www.hornbach.at/p/konsta-rechteckleiste-kiefer-roh-13-5x30x2000-mm/5491003/</a>	2,13 €		26	€ 55,38
	Kantholz Unterkonstruktion	8/8/3000 (B/H/L) cm	<a href="https://www.hornbach.at/p/konsta-kantholz-fichte-80x80x3000-mm/1000471/">https://www.hornbach.at/p/konsta-kantholz-fichte-80x80x3000-mm/1000471/</a>	5,85 €		5,76	€ 33,70
	Schrauben	4x70 mm	<a href="https://www.hornbach.at/p/universalschraube-senkkopf-i-stern-teilgewinde-4-x-70-mm-galvanisch-verzinkt-200-stueck/6531079/">https://www.hornbach.at/p/universalschraube-senkkopf-i-stern-teilgewinde-4-x-70-mm-galvanisch-verzinkt-200-stueck/6531079/</a>	13,85 €		2	€ 27,70
	Winkel	60/60/40 mm	<a href="https://www.hornbach.at/p/lochplattenwinkel-60-x-60-x-40-mm-senzimirverzinkt-15-stueck/794332/">https://www.hornbach.at/p/lochplattenwinkel-60-x-60-x-40-mm-senzimirverzinkt-15-stueck/794332/</a>	12,95 €		36	€ 38,85
	Cortenstahlplatten Verkleidung	30/400/777 (B/H/L) mm	<a href="https://www.feld-eitorf.de/cortenstahl-blech-staerke-3-0-mm">https://www.feld-eitorf.de/cortenstahl-blech-staerke-3-0-mm</a>	51,66 €		9	€ 464,94
							<b>€ 620,57</b>
03.03 Pieces	Steel calculation in 03.01 (2x rounded plates, 4x side plates)						
	Bench calculation in 03.02 (2x bench segments)						

Code	Material	Dimensions	Source	Price/Unit	Remarks/Calculation	Amount needed	Price Total
03.04 Mobile piece	corten steel base plates	695x560x3 mm	<a href="https://www.feld-eitorf.de/cortenstahl-blech-staerke-3-0-mm">https://www.feld-eitorf.de/cortenstahl-blech-staerke-3-0-mm</a>	56,65 €		4	€ 226,60
	rectangle corten steel tube	60x30x3 mm; 2524 mm length	<a href="https://stahlshop.de/stahl-verzinkt/stahlrohre-verzinkt/verz-rechteckrohr-60-x-40-x-3-detail">https://stahlshop.de/stahl-verzinkt/stahlrohre-verzinkt/verz-rechteckrohr-60-x-40-x-3-detail</a>	45,80 €		2	€ 91,59
	rectangle corten steel tube	60x40x3 mm, 2440 mm length		44,35 €		1	44,35 €
	rectangle corten steel tube	60x40x3 mm, 1071 mm length		20,87 €		2	41,74 €
	rectangle corten steel tube	60x40x3 mm, 911 mm length		18,13 €		2	36,25 €
	rectangle corten steel tube	60x40x3 mm, 752 mm length		15,40 €		2	30,80 €
	rectangle corten steel tube	60x40x3 mm, 434 mm length		9,95 €		2	19,89 €
	corten steel plates for compartments (rounded)	1173x204x3 mm	<a href="https://www.feld-eitorf.de/cortenstahl-blech-staerke-3-0-mm">https://www.feld-eitorf.de/cortenstahl-blech-staerke-3-0-mm</a>	40,67 €		1	40,67 €
	corten steel plates for compartments	1515x460x3 mm		110,90 €		1	110,90 €
	corten steel plates for compartments (rounded)	2176x460x3 mm		140,49 €		1	140,49 €
	corten steel front cover	929x155x3 mm		26,06 €		1	26,06 €
	corten steel back cover	2306x155x3 mm		58,81 €		1	58,81 €
	corten steel plates for sides	900x480x3 mm	<a href="https://www.feld-eitorf.de/rechtwinkliges-dreieck-aus-stahlblech-starke-3-0-mm">https://www.feld-eitorf.de/rechtwinkliges-dreieck-aus-stahlblech-starke-3-0-mm</a>	44,34 €		2	88,68 €
	corten steel plates for sides	2235x900x3 mm	<a href="https://www.feld-eitorf.de/cortenstahl-blech-staerke-3-0-mm">https://www.feld-eitorf.de/cortenstahl-blech-staerke-3-0-mm</a>	261,18 €		2	522,35
	corten steel plates for castor wheel assembly	272x235x6 mm	<a href="https://www.feld-eitorf.de/cortenstahl-blech-staerke-6-0-mm">https://www.feld-eitorf.de/cortenstahl-blech-staerke-6-0-mm</a>	24,81 €		4	99,26
	heavy duty castor wheels	wheel Ø 200 mm	<a href="https://rollen-store.at/spd/38_200x50/Aluminium-Lenkrolle-mit-Anschraubplatte-Laufflache">https://rollen-store.at/spd/38_200x50/Aluminium-Lenkrolle-mit-Anschraubplatte-Laufflache</a>	80,44 €		4	321,74
	planting bags	45x45x45 cm, 90 l	<a href="https://www.revarpo.nl/en/webshop/detail/90-liter-garden-bag">https://www.revarpo.nl/en/webshop/detail/90-liter-garden-bag</a>	4,59 €		10	€ 45,86
	c-profile	120x50x30, 2630 length	<a href="https://www.metallparadies.de/stahl-c-profil-nach-mass-3mm.html">https://www.metallparadies.de/stahl-c-profil-nach-mass-3mm.html</a>	€ 73,09		1	€ 73,09
	steel flat section	100x15 mm, 2630 lenfth	<a href="https://www.prokilo.at/flach-profil/">https://www.prokilo.at/flach-profil/</a>	€ 196,18		1	€ 196,18
	metallic threaded sleeve	M20	<a href="https://www.stanz4.eu/Schmiedeeisen/Foerbaender-Anschweisslaschen-Anschweissbaender/Gewindehuelse-zu-120-M20-0000010005.html?add_to_cart=1&amp;skid=0AAAAADv419157U">https://www.stanz4.eu/Schmiedeeisen/Foerbaender-Anschweisslaschen-Anschweissbaender/Gewindehuelse-zu-120-M20-0000010005.html?add_to_cart=1&amp;skid=0AAAAADv419157U</a>	2,20 €		14	€ 30,80
cylinder screws	M20 x 60mm	<a href="https://www.schraubenking.at/M20-x-60mm-Zylinderschrauben-DIN912-Stahl-verzinkt-FKL-88-P008302">https://www.schraubenking.at/M20-x-60mm-Zylinderschrauben-DIN912-Stahl-verzinkt-FKL-88-P008302</a>	1,06 €		14	€ 14,84	
hexagon nut	M20	<a href="https://www.schraubenking.at/M20-Sechskantmuettern-DIN439-Stahl-verzinkt-FKL4-P003593">https://www.schraubenking.at/M20-Sechskantmuettern-DIN439-Stahl-verzinkt-FKL4-P003593</a>	1,56 €		14	€ 21,84	
							<b>€ 521,98</b>
03.05 Crown	rope PESG Expanderseil gelb Gummiseil	100 m length, 8 mm diameter	<a href="https://www.schnurhaus.shop/p/8mm-pesg-expanderseil-100m-gummiseil-verschiedene-gelb">https://www.schnurhaus.shop/p/8mm-pesg-expanderseil-100m-gummiseil-verschiedene-gelb</a>	110,00 €	1,6*24*2*8 = 614,4m	7 pcs = 700 m	€ 770,00
	concrete steel	7 m length, 10 mm diameter	<a href="https://www.schaufler-metalle.at/de/shop/baustahlgitter-betonstahl/betonstahl/7mlaenge/2010004">https://www.schaufler-metalle.at/de/shop/baustahlgitter-betonstahl/betonstahl/7mlaenge/2010004</a>	1,50 €	4,40 kg	24 pcs	€ 36,00
	in-situ concrete	30 kg	<a href="https://www.hornbach.at/p/baumit-all-in-garten-landschaftsbau-beton-30kg/10440562/">https://www.hornbach.at/p/baumit-all-in-garten-landschaftsbau-beton-30kg/10440562/</a>	5,49 €	0,0228m <sup>3</sup> *8 = 0,1824m <sup>3</sup>	0,1824 m <sup>3</sup> = 364,8 kg	€ 65,66
	sewage pipe	1 m length, 11 cm diameter	<a href="https://www.hornbach.at/p/kg-rohr-dn-110-1000-mm/267298/">https://www.hornbach.at/p/kg-rohr-dn-110-1000-mm/267298/</a>	5,99 €	0,8m*3*8 = 19,2m	20 m length	€ 119,80
							<b>€ 991,46</b>

Code	Material	Dimensions	Source	Price/Unit	Remarks/Calculation	Amount needed	Price Total
04.01 Plants	Stipa tenuissima	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/gestaltung/lebensbereiche/trockenheitsvertraegliche-pflanzen/graeser-fuer-trockene-sonnige-standorte/200/stipa-nassella-tenuissima/5506/">https://www.gaissmayer.de/web/shop/gestaltung/lebensbereiche/trockenheitsvertraegliche-pflanzen/graeser-fuer-trockene-sonnige-standorte/200/stipa-nassella-tenuissima/5506/</a>	5,30 €	25 pcs/sqm; 27 sqm area (25 * 27); minus quantity of echinops (47) and allium (48)	580	3074,00
	Potentilla x cultorum 'Volcan'	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/sta9cmuden/stauden-von-p-bis-z/potentilla-fingerkraut/464/potentilla-x-cultorum-volcan/9891/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/sta9cmuden/stauden-von-p-bis-z/potentilla-fingerkraut/464/potentilla-x-cultorum-volcan/9891/</a>	6,20 €		25	€ 155,00
	Achillea Millefolium-Hybride 'Petra'	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-a-bis-d/achillea-schafgarbe/362/achillea-millefolium-hybride-petra/5313/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-a-bis-d/achillea-schafgarbe/362/achillea-millefolium-hybride-petra/5313/</a>	4,90 €		25	€ 122,50
	Echinacea Hybride 'Tomato Soup' ®	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/gestaltung/lebensbereiche/stauden-fuer-sonnige-plaetze/sonnige-besonderheiten/180/echinacea-hybride-tomato-soup/5717/">https://www.gaissmayer.de/web/shop/gestaltung/lebensbereiche/stauden-fuer-sonnige-plaetze/sonnige-besonderheiten/180/echinacea-hybride-tomato-soup/5717/</a>	7,50 €		30	€ 225,00
	Meconopsis cambrica 'Aurantiaca'	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-e-bis-o/m-sonstige/451/meconopsis-cambrica-aurantiaca/2014/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-e-bis-o/m-sonstige/451/meconopsis-cambrica-aurantiaca/2014/</a>	5,50 €		21	€ 115,50
	Potentilla x cultorum 'William Rollisson'	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-p-bis-z/potentilla-fingerkraut/464/potentilla-x-cultorum-william-rollisson/9000/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-p-bis-z/potentilla-fingerkraut/464/potentilla-x-cultorum-william-rollisson/9000/</a>	6,20 €		30	€ 186,00
	Asclepias tuberosa ssp. interior	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-a-bis-d/a-sonstige/384/asclepias-tuberosa-ssp-interior/6846/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-a-bis-d/a-sonstige/384/asclepias-tuberosa-ssp-interior/6846/</a>	6,20 €		15	€ 93,00
	Echinacea Hybride 'Flame Thrower' ®	11 cm pot	<a href="https://www.bamberger-staudengarten-shop.de/de/artikel/1066/echinacea-purpurea-flame-thrower-r">https://www.bamberger-staudengarten-shop.de/de/artikel/1066/echinacea-purpurea-flame-thrower-r</a>	7,50 €		33	€ 247,50
	Salvia officinalis 'Icterina'	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/biokraeuter/kuechenkraeuter/kuechenkraeuter-von-a-bis-z/511/salvia-officinalis-icterina/7971/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/biokraeuter/kuechenkraeuter/kuechenkraeuter-von-a-bis-z/511/salvia-officinalis-icterina/7971/</a>	4,90 €		30	€ 147,00
	Echinacea purpurea 'Green Jewel' ®	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-e-bis-o/echinacea-sonnenhut/406/echinacea-purpurea-green-jewel/8654/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-e-bis-o/echinacea-sonnenhut/406/echinacea-purpurea-green-jewel/8654/</a>	7,50 €		42	€ 315,00
	Euphorbia characias 'Black Pearl'	11 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/euphorbia-wolfsmilch/412/euphorbia-characias-black-pearl/3881/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/euphorbia-wolfsmilch/412/euphorbia-characias-black-pearl/3881/</a>	7,50 €		21	€ 157,50
	Santolina rosmarinifolia ssp. canescens	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-p-bis-z/s-sonstige/483/santolina-rosmarinifolia-ssp-canescens/2798/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-p-bis-z/s-sonstige/483/santolina-rosmarinifolia-ssp-canescens/2798/</a>	4,40 €		36	€ 158,40
	Achillea Filipendulina-Hybride 'Helios'	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-a-bis-d/achillea-schafgarbe/362/achillea-filipendulina-hybride-helios/8586/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-a-bis-d/achillea-schafgarbe/362/achillea-filipendulina-hybride-helios/8586/</a>	4,90 €		27	€ 132,30
	Echinacea Hybride 'Sunrise' ®	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-e-bis-o/echinacea-sonnenhut/406/echinacea-hybride-sunrise/2106/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/stauden-von-e-bis-o/echinacea-sonnenhut/406/echinacea-hybride-sunrise/2106/</a>	7,50 €		33	€ 247,50
	Echinops bannaticus 'Star Frost'	9 cm pot	<a href="https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/disteln/222/echinops-banaticus-star-frost/5725/">https://www.gaissmayer.de/web/shop/pflanzen-sortiment/stauden/disteln/222/echinops-banaticus-star-frost/5725/</a>	4,90 €		46	€ 225,40
	Allium Hybride 'Mount Everest'	11 cm pot	<a href="https://www.meingartenshop.at/allium-mount-everest-11-cm-topf-a14439.html">https://www.meingartenshop.at/allium-mount-everest-11-cm-topf-a14439.html</a>	6,76 €		44	€ 297,44
							<b>€ 5 899,04</b>

## TOTAL CALCULATION

CONSTRUCTION MATERIALS

€ 12 754,29

PLANT MATERIALS

€ 5 899,04

TOTAL PRICE BRUTTO

€ 18 653,33

TOTAL PRICE NETTO

€ 15 544,44