



# cepezed

develop | design | build

menno rubbens, msc architect

director cepezedprojects

member

transitionteam circular construction economy

october 3rd, 2023

staalbouwdag 2023  
AFAS theater, leusden



# cepezed

develop | design | build



initiative



design / engineering



execution



cepezedprojects

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cepezedinterieur

cepezedbouwteam



cepezed

# circular construction

transitionteam

circular construction economy



**The circular  
construction  
economy**

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# urgency

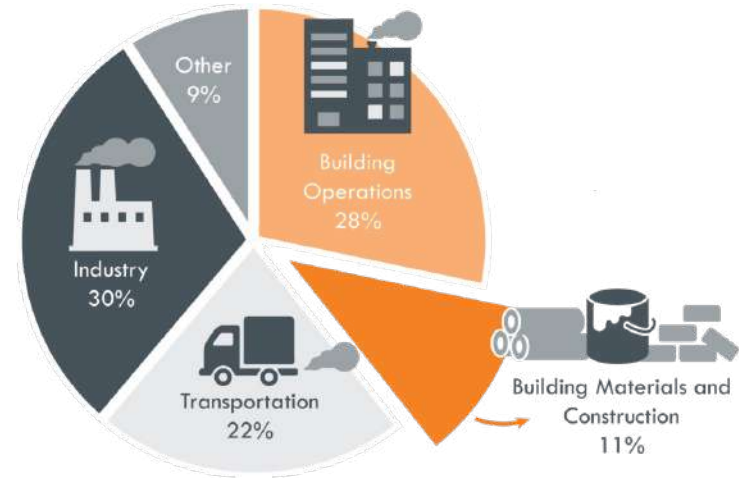
carbon budget

1,5 degrees

paris



bron: 'whole life carbon' dgbc



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sustainable  
development



**meet the needs  
of the present**

**without compromising  
future generations**

brundtland commission, 1987

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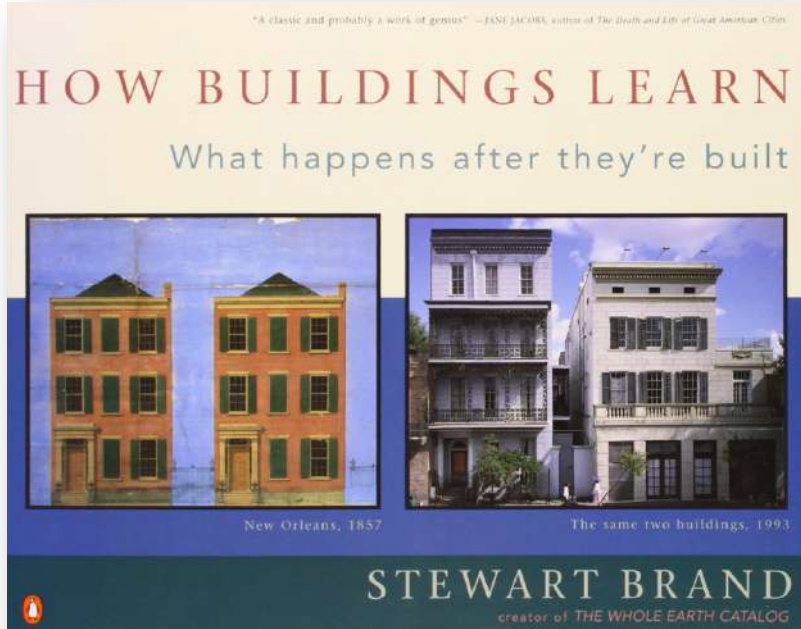
# stewart brand

## how buildings learn (1994)

buildings are predictions

premature complexity

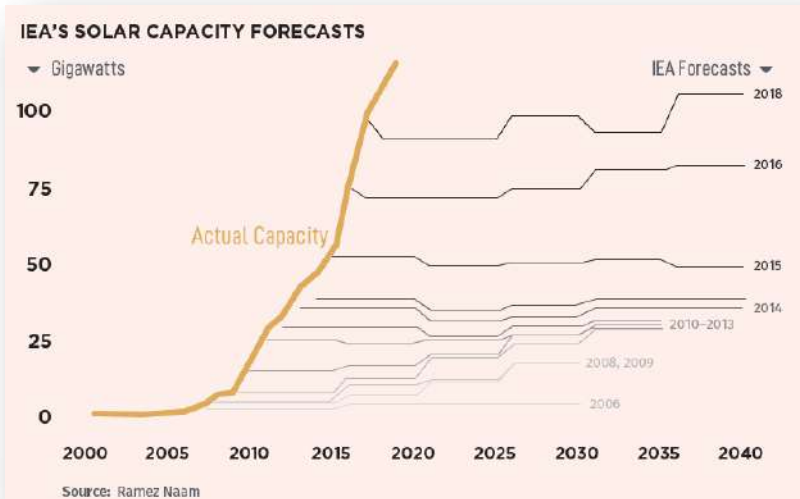
shearing layers



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“

**all buildings  
are predictions**



**all predictions  
are wrong**

stewart brand, 1994

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“

**buildings suffer from  
premature complexity**



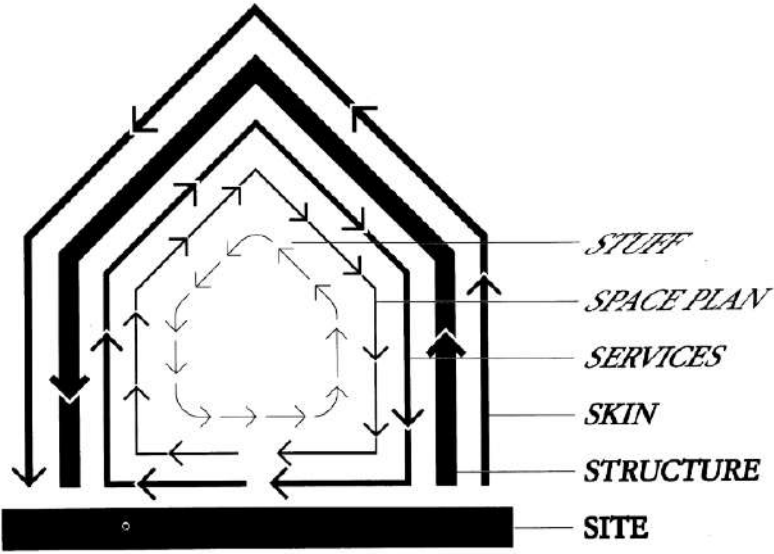
stewart brand, 1994

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“

# shearing layers



stewart brand, 1994

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# circular construction

r-priority

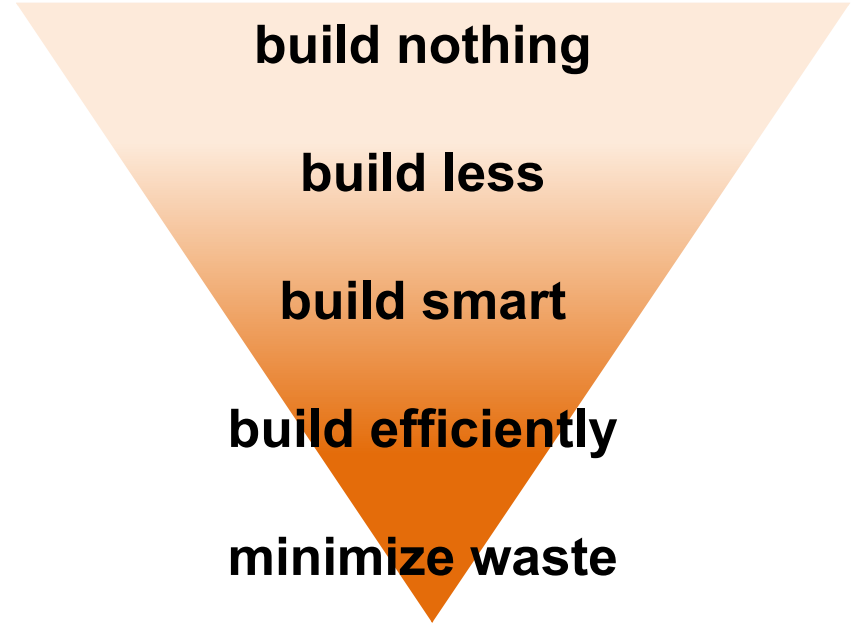
high



low



- Refuse**
- Reduce**
- Re-use**
- Repair**
- Refurbish**
- Remanufacture**
- Re-purpose**
- Recycle**
- Recover**



**...what we build**



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circular construction

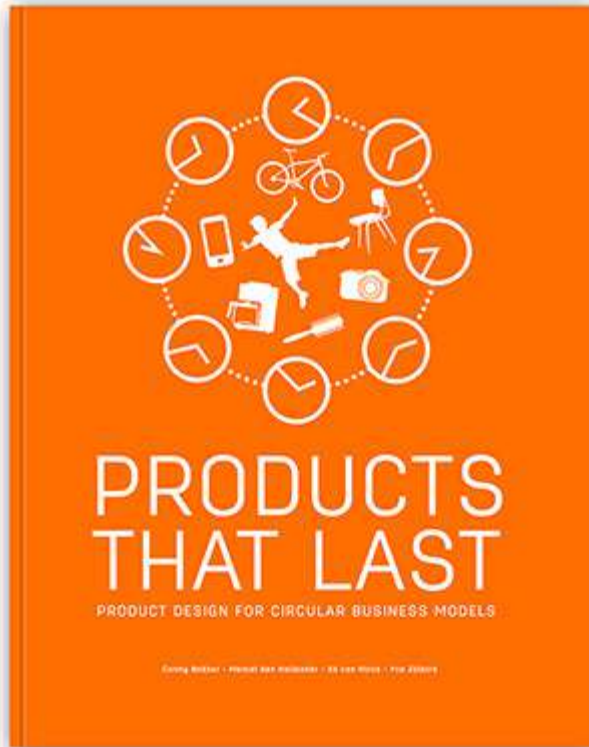
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circular construction

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# products that last



[www.productsthatlast.nl](http://www.productsthatlast.nl)

## **the classic long-life model**

robust, *'not cheap, but never fails'*

## **the hybrid model**

exploitation (eg. ink-cartridge)

## **the gap exploiter model**

adapt and resell

## **the access model**

rent, pay per use

## **the performance model**

*'building as a service'*

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An aerial photograph showing a massive, dense fleet of colorful fishing boats packed closely together in a harbor. The boats are in various colors, including yellow, blue, red, and white, creating a vibrant, textured pattern. The boats are arranged in roughly parallel rows, filling most of the frame. There are a few small, clear patches of water visible between the boats.

**circular economy**

excess

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# circular construction

6 principles

**circular-ready  
construction**

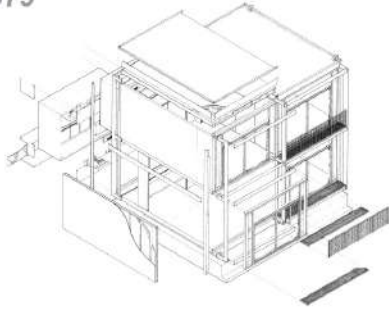
- 1 don't compromise the future
- 2 acknowledge deficiencies in forecasts
- 3 avoid premature complexity
- 4 design with shearing layers
- 5 high on the r-priority ladder
- 6 choose the right business model



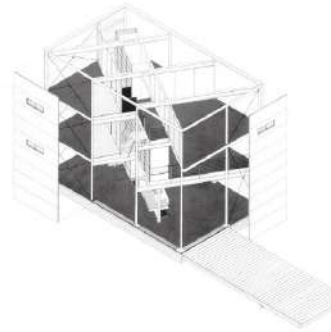
# circular construction

kit of parts

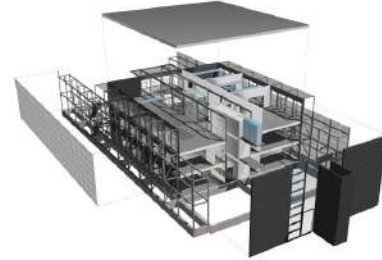
1979



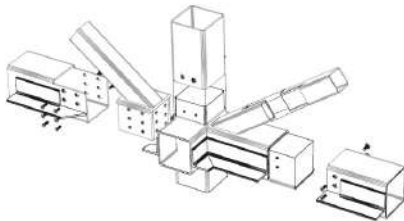
1989



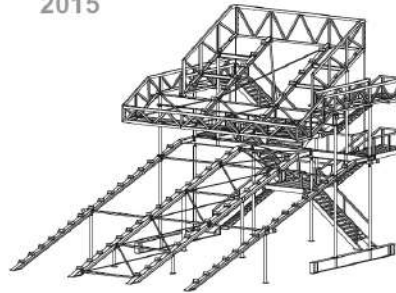
1995



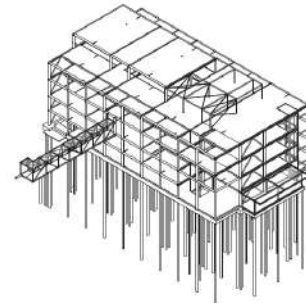
2004



2015



2016



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# circular construction

examples



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# zuidstrandtheater

scheveningen



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# zuiderstrandtheater

scheveningen

Gemeente Den Haag

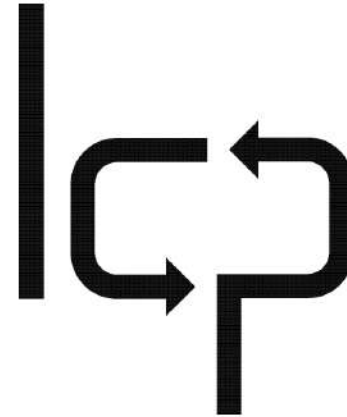


Den Haag

**Nationale aanbesteding, openbare procedure,**  
conform ARW 2016 hoofdstuk 2  
**Verkoop, demontage en herbouw Zuiderstrandtheater**

**Inschrijvingsleidraad**

Versie	1.0
Datum	31-08-2021
Referentie	200047
Aanbesteder	Gemeente Den Haag
Copyright	Bedrijfsvoeringsexpertisecentrum Inkoop Fysiek Domein

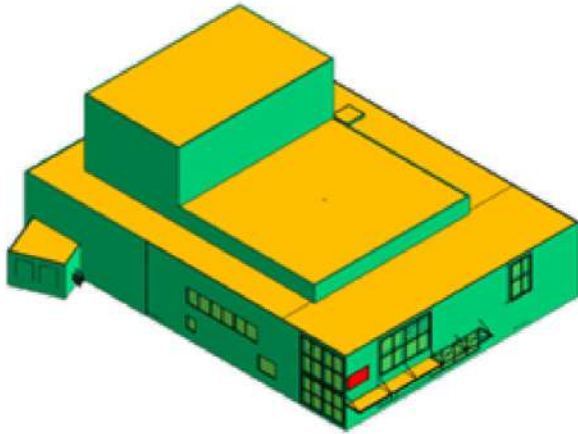


lcp circulair  
lagemaat &  
cepezedprojects

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# zuiderstrandtheater

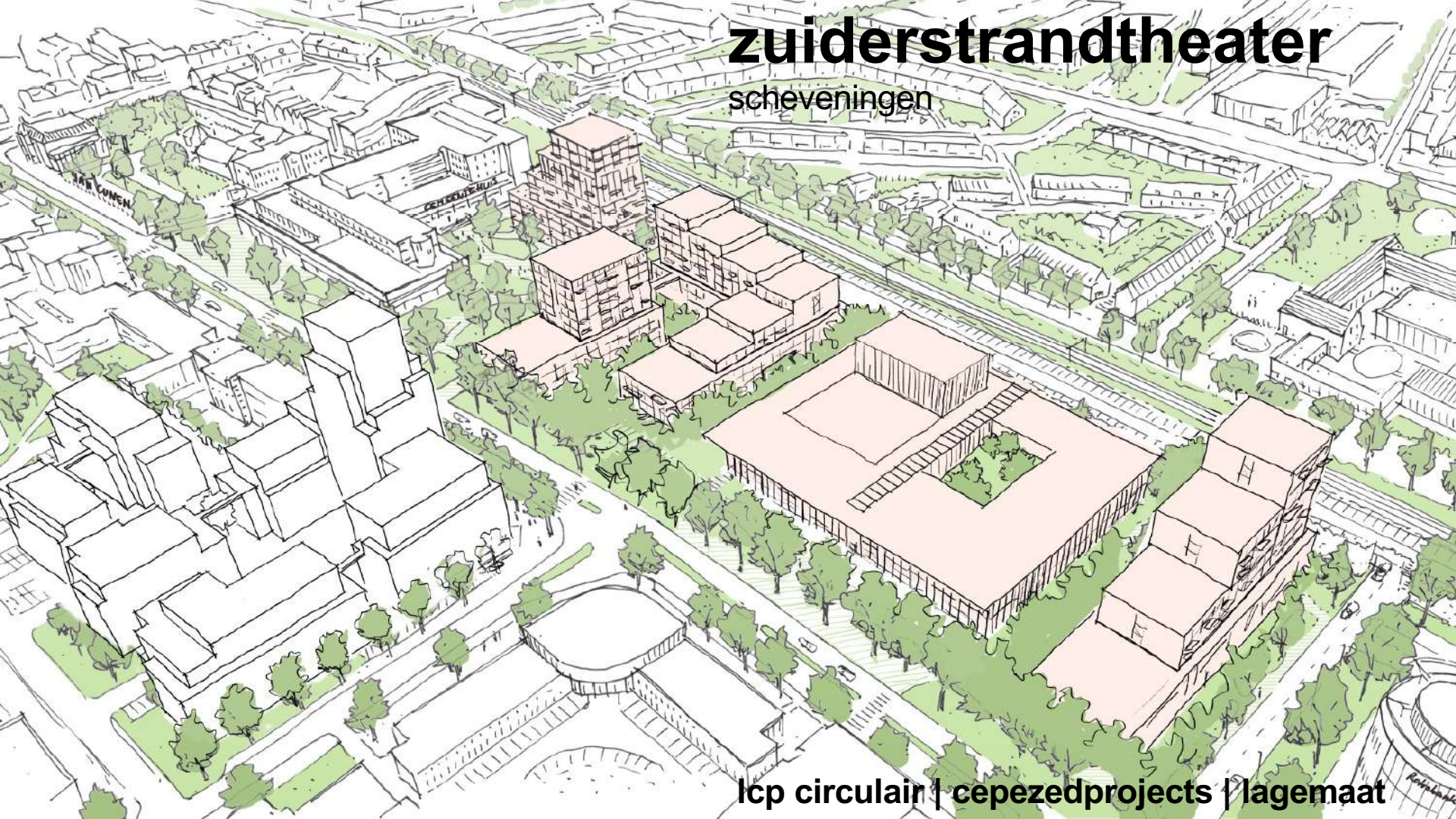
## scheveningen



R*	- Register	Registreer wat er al is (mat. paspoort)
R0	- Refuse	Weigeren/voorkomen waarde vernietiging
R1	- Reduce	Gebruik minder grondstoffen
R2	- Redesign	Herontwerp met oog op circulariteit
R3	- Re-use	1-op1 hergebruik (2 <sup>e</sup> hands)
R4	- Repair	Onderhoud en reparatiek
R5	- Refurbish	Product opknappen
R6	- Remanufacture	Nieuw product van 2 <sup>e</sup> hands
R7	- Re-purpose	Hergebruik product maar anders
R8	- Recycle-H	Hergebruik grondstof
R9	- Recycle-L	Downcycle grondstof
R10	- Recover	Energie terugwinning
R*	- Redistribute	Slimme logistiek (cross-branche)

# zuiderstrandtheater

scheveningen



# zuiderstrandtheater

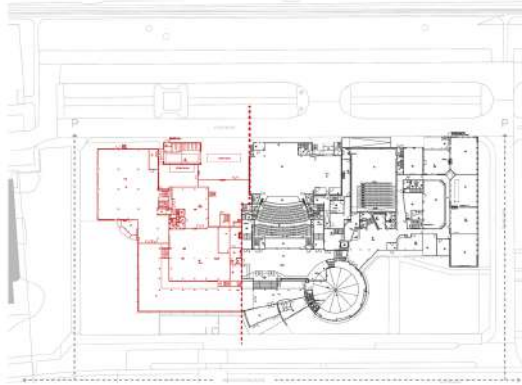
scheveningen



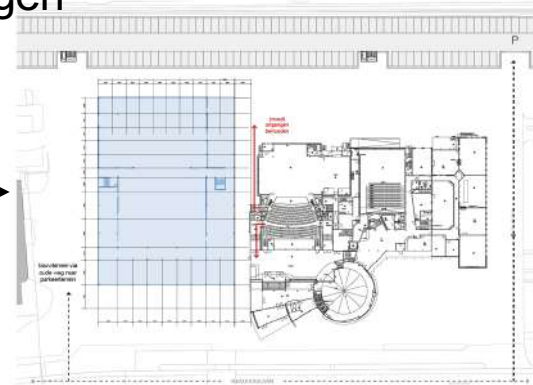
# zuidstrandtheater

scheveningen

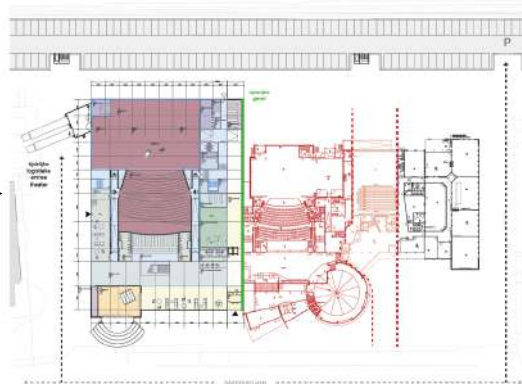
1



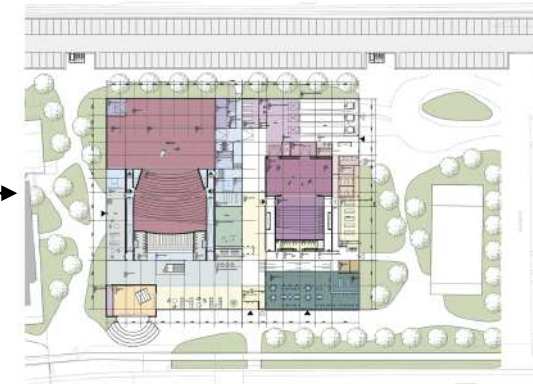
2



3



4





# zuidstrandtheater

scheveningen



# zuiderstrandtheater

## scheveningen



# zuiderstrandtheater

scheveningen



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# zuidstrandtheater

scheveningen





# zuiderstrandtheater

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zuiderstrandtheater  
scheveringen

# zuidstrandtheater

scheveningen



# zuidstrandtheater

scheveningen

0531884  
20-21

05318833-0001 54  
20-21-32-34-82-9

05318838-0001 54  
20-21-32-34-82-9

05318840-0001 5  
20-21-32-34-82

05318831-0001  
20-21-32-34-82

05318834-000  
20-21-32-34



# zurderstrandtheater

## scheveningen



# zuidstrandtheater

scheveningen



zuiderstrandtheater  
scheveningen



STRAND  
ATER

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# zuidstrandtheater

scheveningen

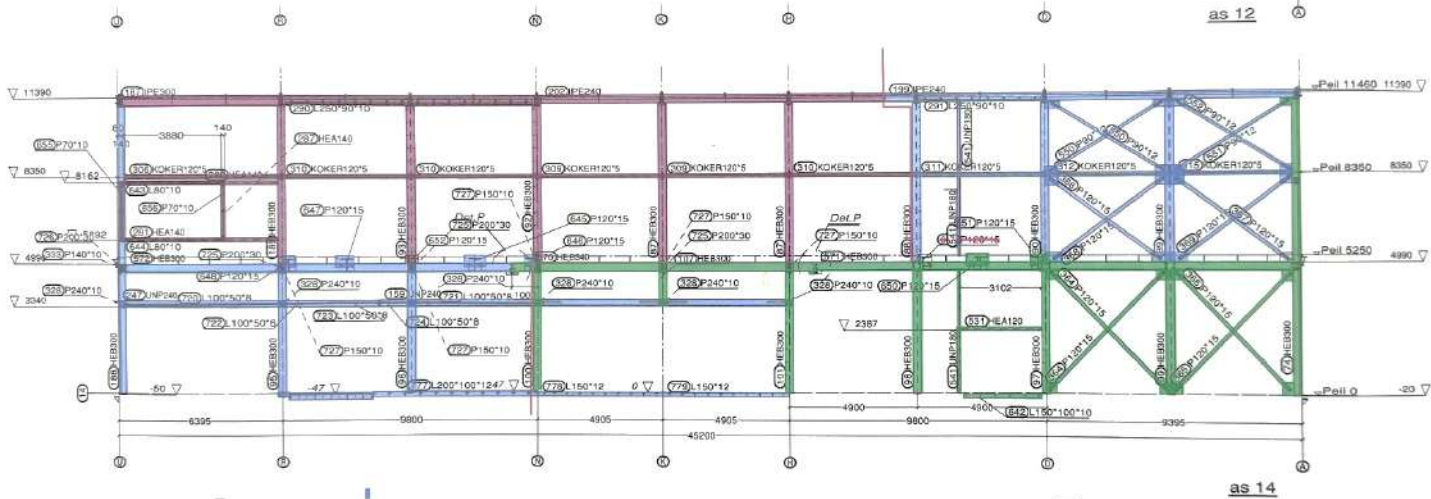
# remolition



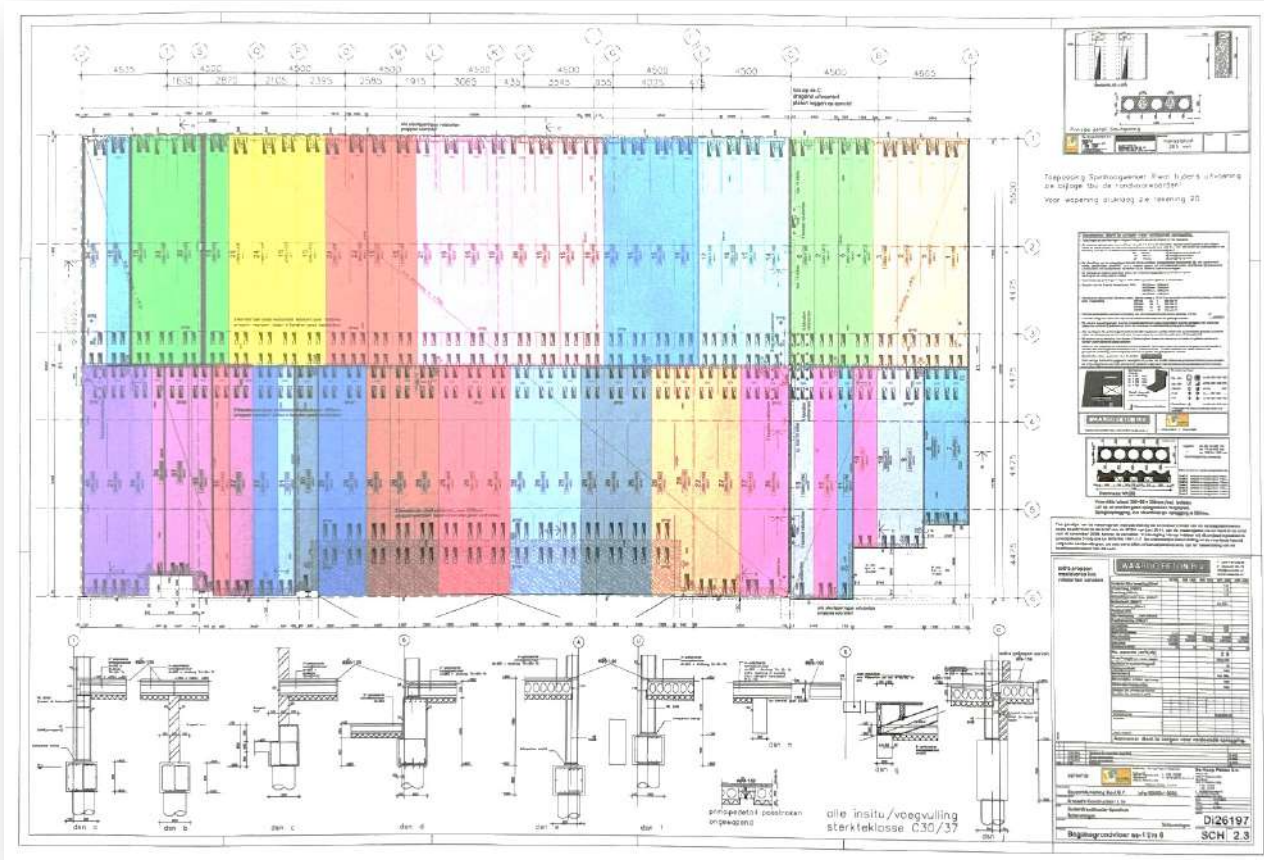
# remolition



# remolition



# remolition





# remolition



# zuidstrandtheater

scheveningen



# zuidstrandtheater

scheveningen



# zuiderstrandtheater

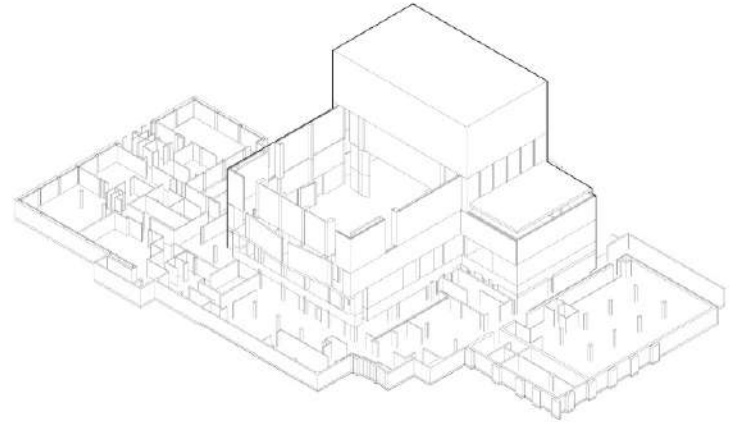
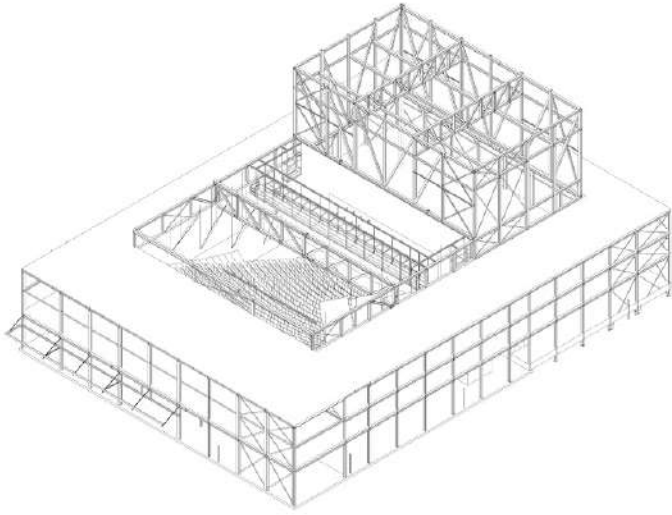
scheveningen



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# de lievekamp

OSS



# de lievekamp

OSS



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# de lievekamp

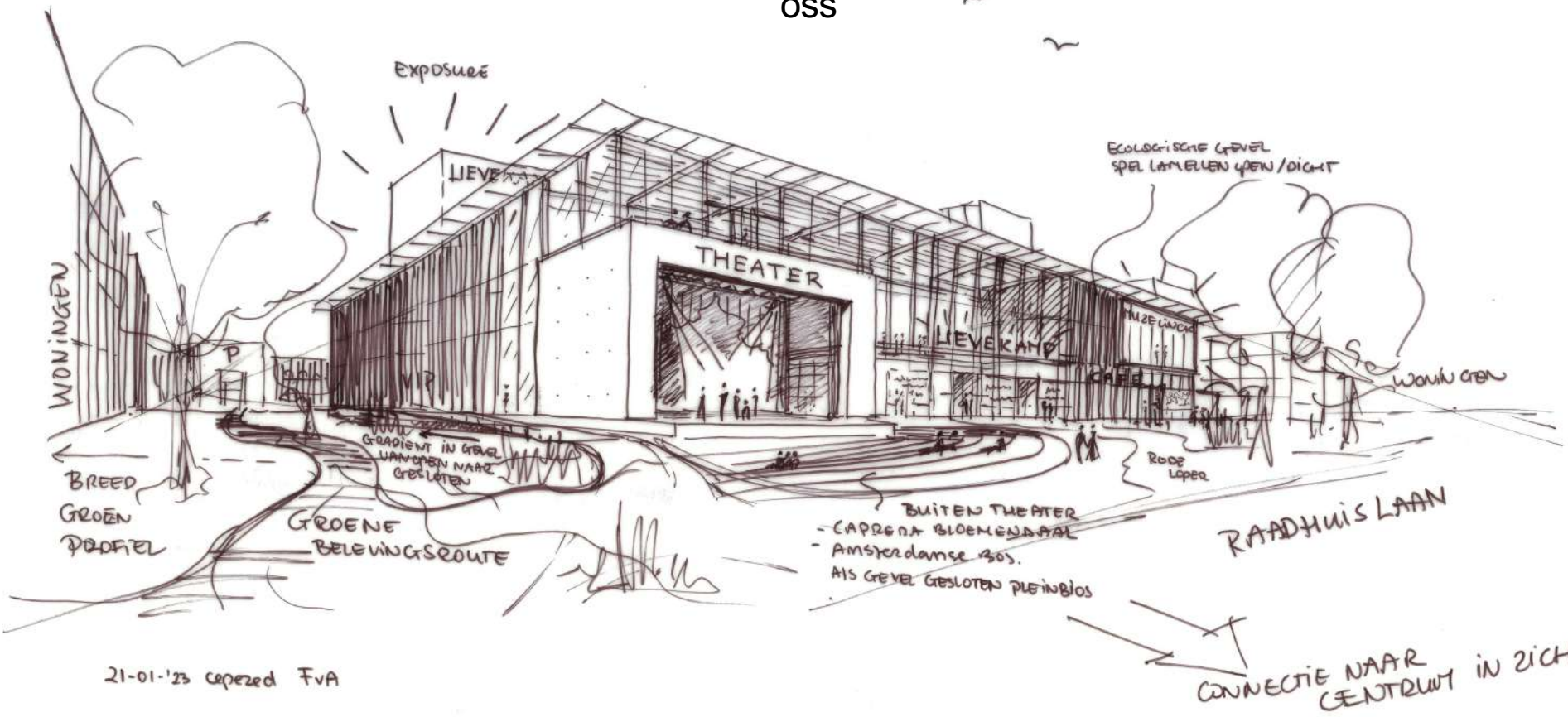
OSS



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# de lievekamp

OSS





# circular construction

6 principles

**circular-ready  
construction**

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