

POWERHOUSE HØVIK

HIGH STANDARD

ULTRA LOW EMISSIONS

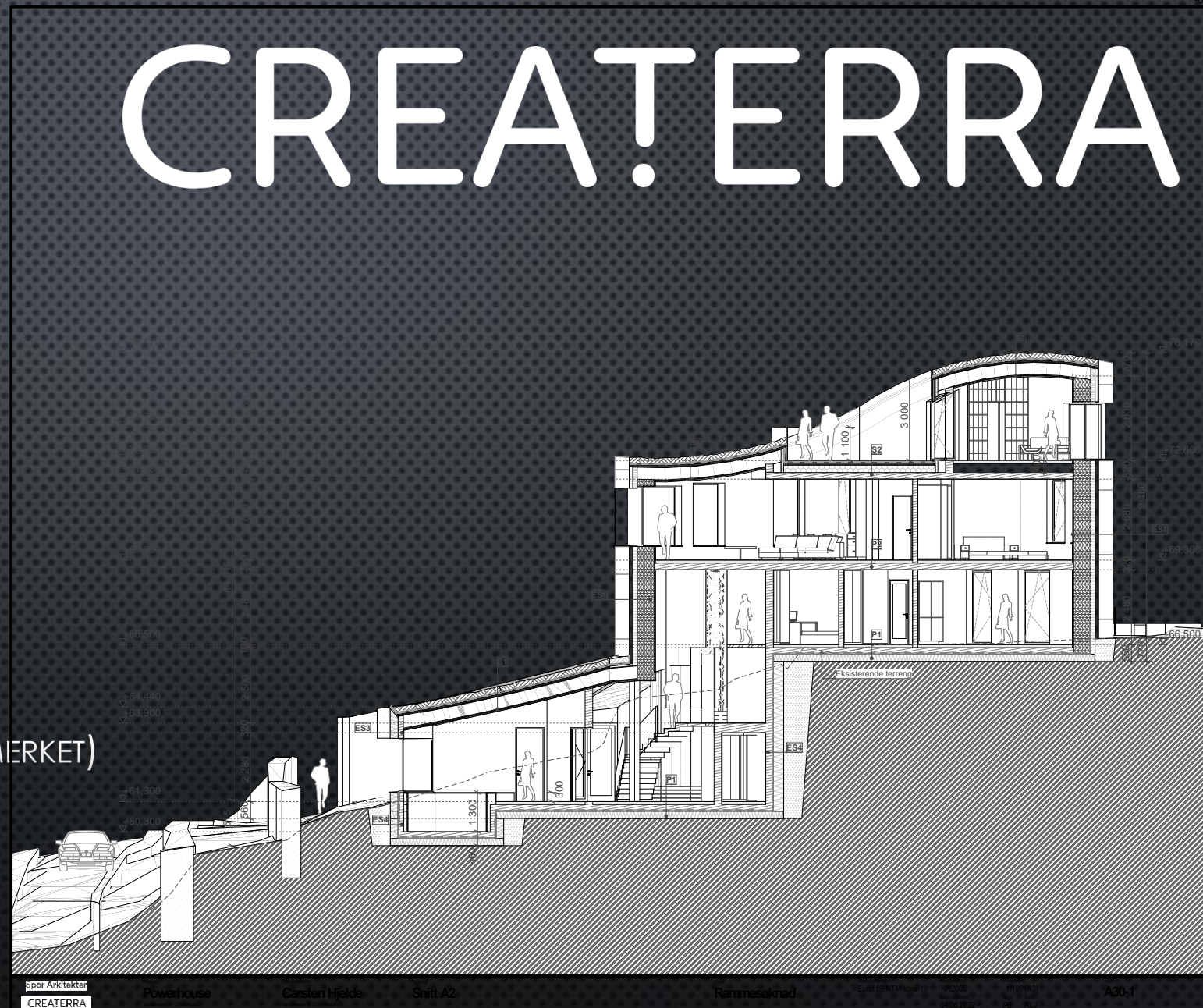
MATERIALS AND LIFE CYCLE



CREATERRA

STANDARDS

- POWERHOUSE – PARIS PROOF
- PASSIVE HOUSE
- GLOBAL ECO LABELLING (SVANEMERKET)



MAIN PRINCIPLES

- LOW EMISSIONS IN EVERY SOLUTION
- CLOSE TO OFF-GRID FOR ENERGY
- INDEPENDENT WATER?
- ANNUAL SURPLUS OF ELECTRICITY
- SOME FOOD PRODUCTION
- UNIVERSAL ACCESS /LIFE STYLE
- HEALTH AND EXERCISE WITHIN HOUSE
- FLEXIBLE BUILDING MASS
- EASY TO REPURPOSE FOR A FAMILY + RENTAL
- STANDARD FINISH
- “NORMAL CONSTRUCTION EXPENSES”
- LOW MAINTENANCE COSTS

Inspire

Change

LOCAL CHALLENGES

- 10 METER
- ACCESS IN WINTER
- VIEW
- PREVIOUS APPLICATION



WALLS ABOVE GROUND

eco
cocoon

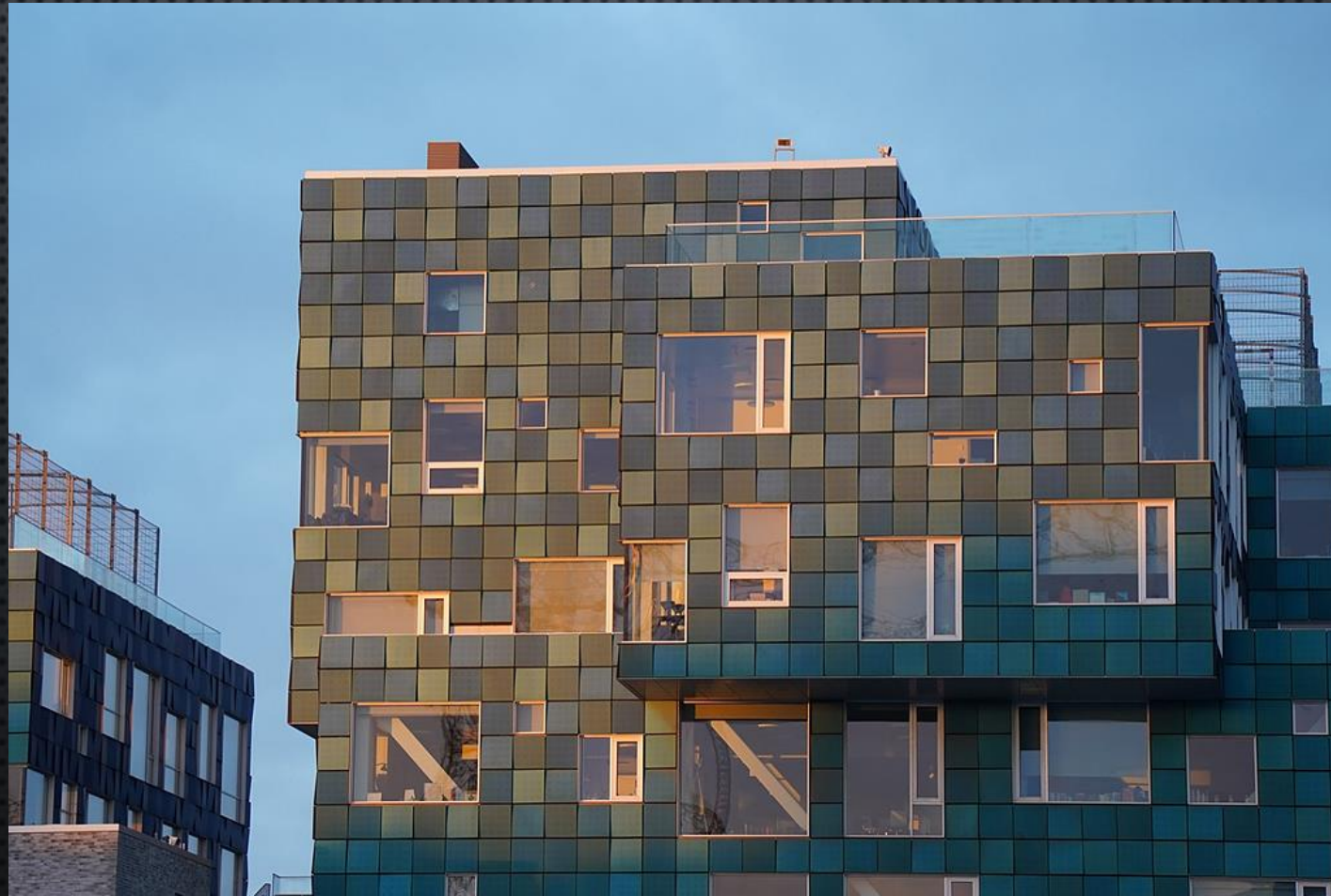


INTERIOR WALLS

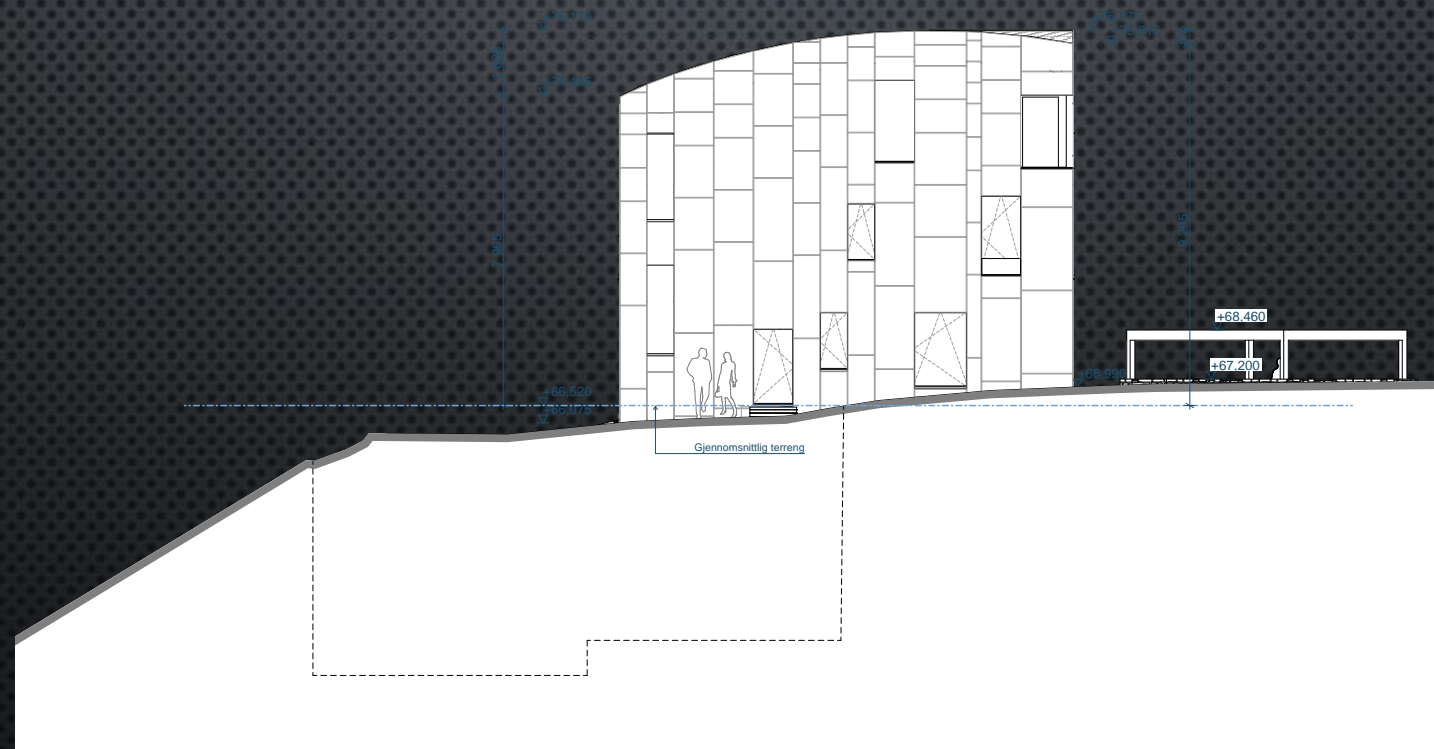


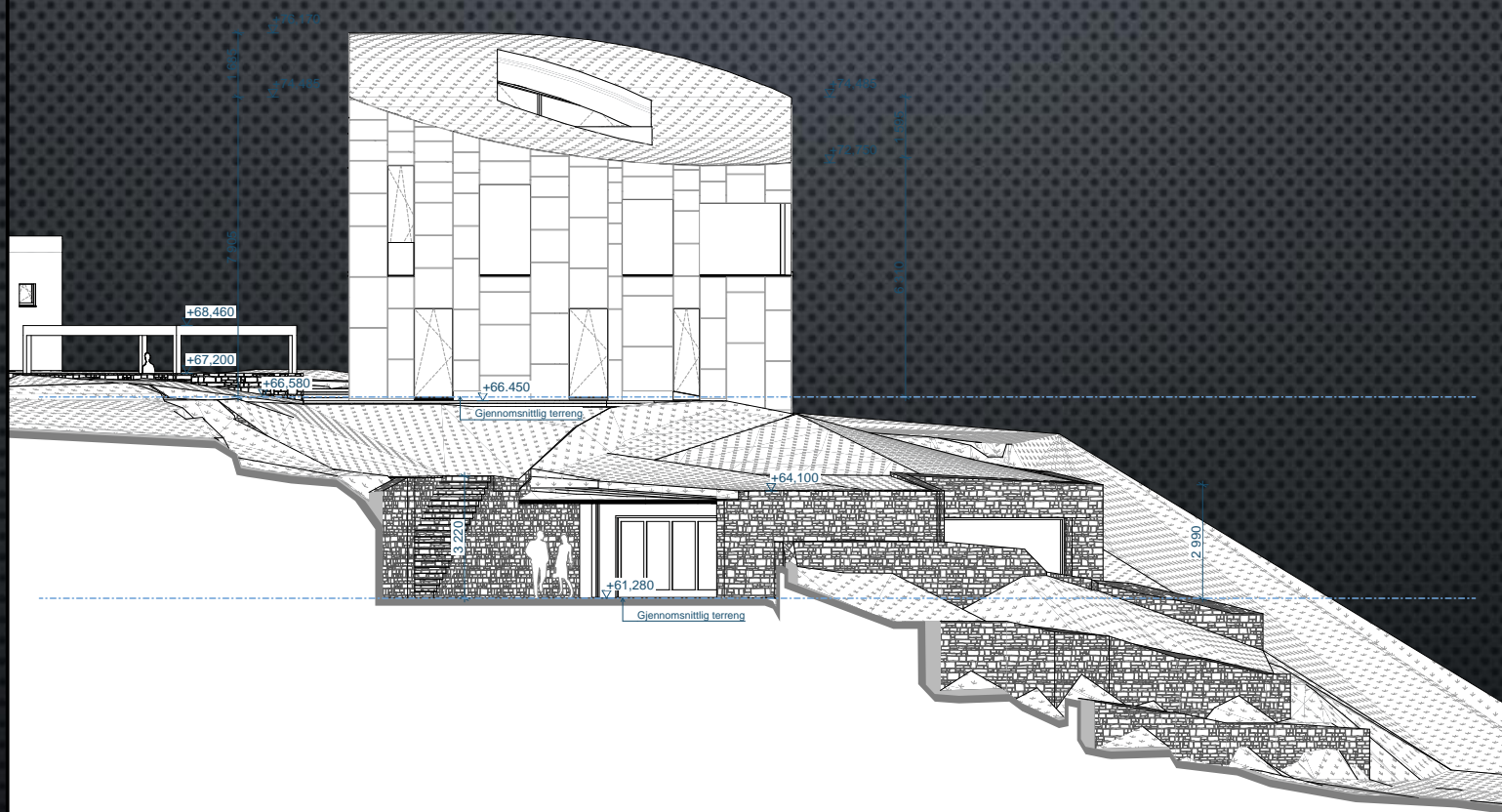
EXTERNAL WALLS

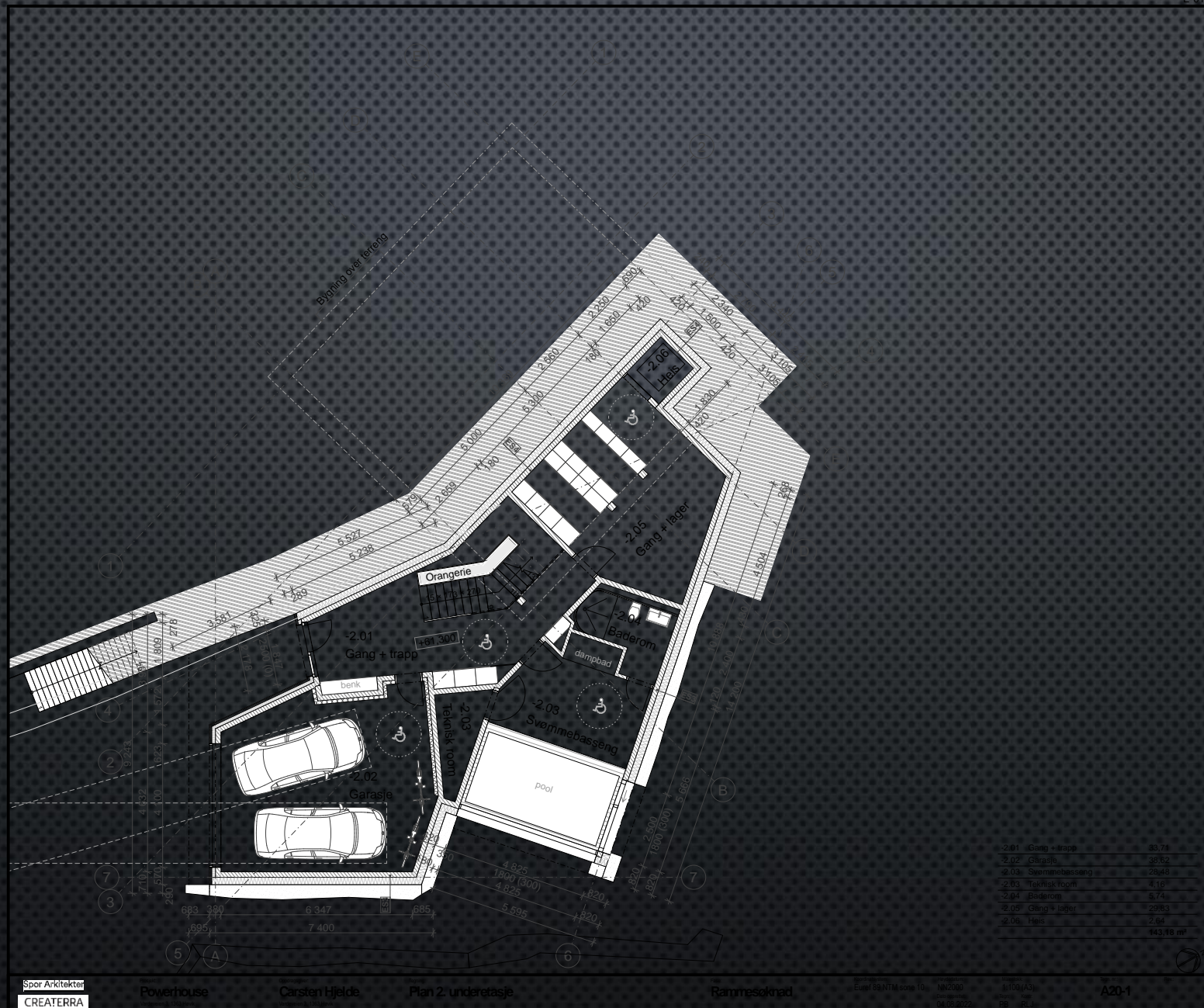
SolarLab



NO CONCRETE UNDERGROUND







CLT IN BASEMENT

- TIMBER STRUCTURES 3.0



GARAGE FLOOR + POOL FOUNDATION

Glasopor

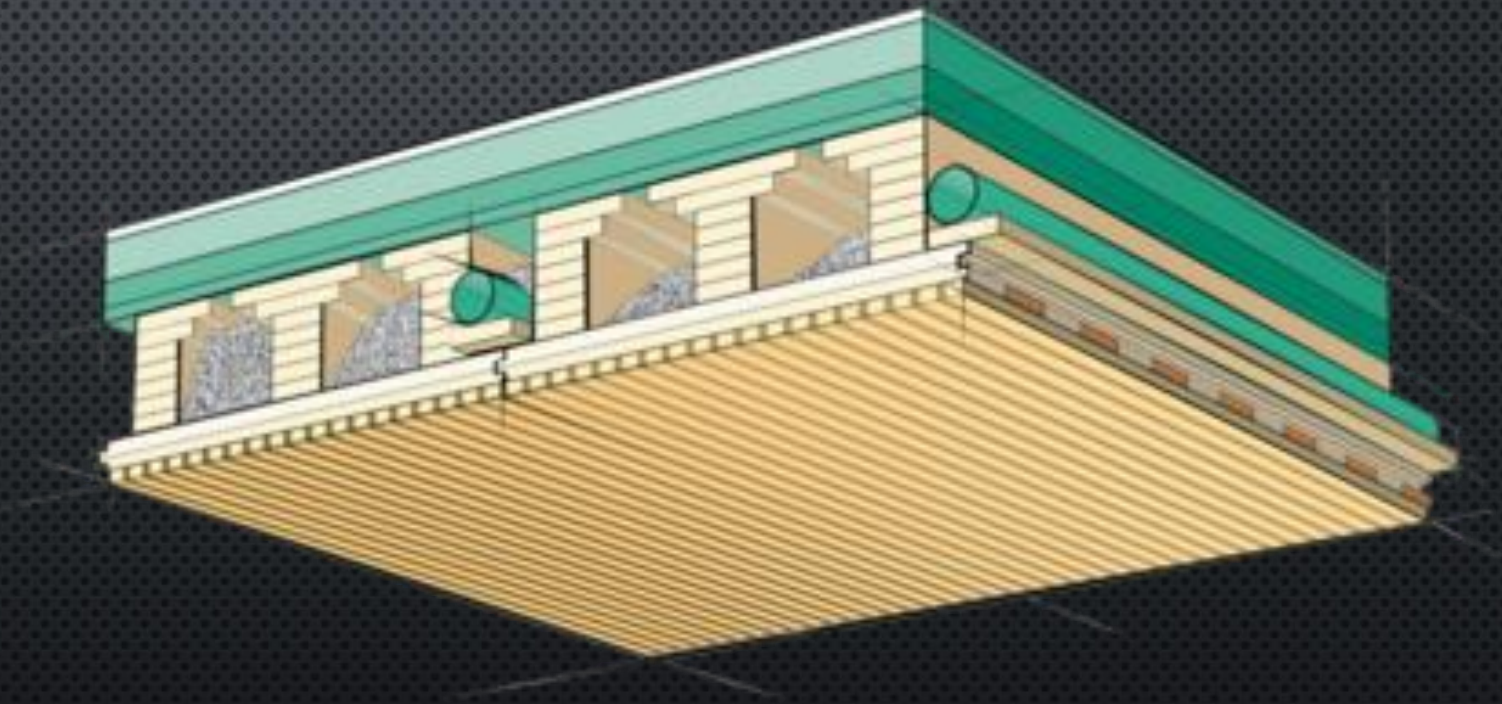


Cellglass



FLOOR SLABS

- LIGNOTREND



GREEN ROOF



CARBON NEGATIVE DRIVEWAY



FOOD PRODUCTION

- LED GREENHOUSE



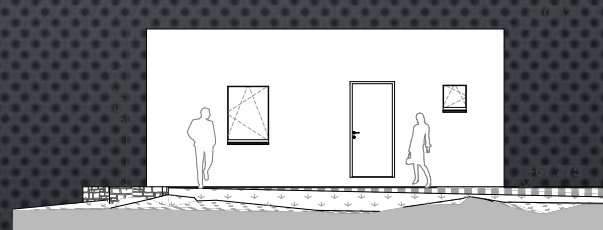
TECHNICAL INSTALLATIONS

- SMART CONSTRUCTION = LESS TECHNICAL
- GEOTHERMAL (ALSO FOR DRIVEWAY) – DEEP?
- COOLING IN WALLS
- HYBRID VENTILATION
- ELEVATOR
- POOL

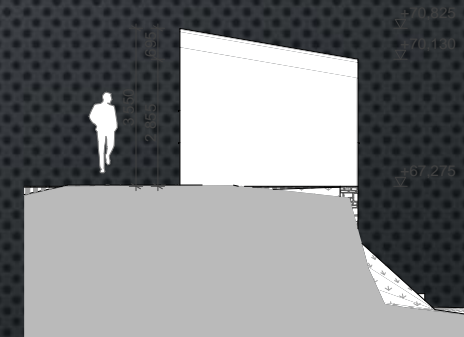


WHAT ABOUT RECYCLING

- GARDEN SHED



Sürlig fasade



Östlig fasade



Nordlig fasade



Vestlig fasade

WHAT IS NEEDED FOR CHANGE IN NORWAY

- WHY WE STARTED THE PROCESS IN 2017
- WHERE WE HAVE BEEN LOOKING FOR KNOWLEDGE
- WHAT WOULD IT TAKE TO PRODUCE HAY ELEMENTS IN NORWAY
- LOCAL ADVANTAGES: SOLAR, GEOTHERMAL, EXPENSIVE BUILDINGS
- BUT:
WE PREFER A NEW KITCHEN TO INSULATED WALLS
LONG HISTORY OF CHEAP ENERGY
- CAN NORWAY MAKE A LEAD IN SUSTAINABLE BUILDINGS



BIG THANKS TO

ASPLAN VIAK

CREATERRA ARCHITECT

SPOR ARKITEKTER

SKANSKA

SNØHETTA

ASSOCIATION OF NORWEGIAN ARCHITECTS



CREATERRA



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