

# intern

ARKINORD A/S

Internship report Allan Virefeldt Hansen 20112388 MSc3-ARCH Architecture & Design Aalborg University

# ship



Fall  
2015

# ABSTRACT

This report is based on my internship from 3rd of September to the 17th of December 2013 at ARKINORD a/s in Frederikshavn. I divided the report into two parts - an internship report and an experience report.

The first part of this report will provide a description of Arkinord as a business and a workplace as well as giving an insight into the projects I have worked with and participated in, the second part will be a description of my personal experiences through the internship.

The subject of this report is the manner by which the outline procedure works practically speaking, contrasted with the integrated design process of Mary Ann Knudstrup, which is being taught at Aalborg University.

# TITLE

Aalborg University  
Architecture & Design  
3<sup>rd</sup> semester M.Sc architecture

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# INTRODUCTION

The purpose of embarking on an internship is to give students the opportunity to use some of the skills acquired on the bachelor and candidate. It is in the Internship that you can show that you can work in a job with a professional mindset.

I choosed a danish architecture company - ARKINORD a/s situated in Frederikshavn.  
A relatively small company with a wide variety of projects.

When choosing the place of my internship it was important for me to identify myself in the company's profile in terms of construction projects and what I wanted to achieve with my internship. I would like to start small, to achieve a deeper understanding of architecture for both private and public. and as ARKINORD is a drawing office that covers a wide field of different project types and types, it provides the chance to gain experience and qualifications in different fields too. which also gives the opportunity to dig into fields of interest.

# EXPECTATIONS

## Gathering Skills & personal development

During my internship at ARKINORD i expect to gather further understanding of how to work as an architect and experience with the following skills:

- Achieve advanced technical knowledge, when working as an architect.
- Build up a more deeper approach to the clients.
- Cover a wider field of projects and job tasks.
- Be a part of a professional team.
- Achieve knowledge of how an Architect are working in real life.
- Attend client meetings.
- Where should i improve my skills and knowledge according to my further studies.

## Socially & team related

I expect to cover a wider field of projects in the company, and to be a part of a professional team of architects, designers and engineers. to establish a good contact for the future work in the branch. Also i expect to achieve knowledge of how a meeting with a client proceeds.

## Expectations of the company

In my internship agreement that i got return from ARKINORD it is mentioned that, the expectations to me as a intern are as following.

- Understanding the different phases in a project from start to finish
- Preparation of a project, before it leaves the house to ex. engineers.
- The economic perspective in a project.
- New working methods and architectural tools.
- Gain experience and qualifications in different fields.
- Dig deeper into fields of interest.

# COMPANY PROFILE

## HISTORY

The firm ARKINORD was created in 2006 when the two companies Jørgen & Lasse Andersen, Arkitekter MAA and Crocuis Arkitekter a/s merged. The architects, Jørgen & Lasse Andersen MAA is one of North Jutland's famous and well-established architectural firms. With a history that stretches back to 1935, the company has over the years proven its ability to fulfill quality solutions for all spectra of architectural activities. The firm now has offices in both Aalborg and Frederikshavn, and 12 fulltime employees are divided between these two departments. Out of these 12 employees, only four are women. ARKINORD is currently owned by 3 partners made possibly because of its status as a stock company.

## WORKING FIELD

ARKINORD is very versatile in the variations of projects. The company's work has been widely ranging from exciting family homes to housing for social housing associations, large public buildings in the elderly sector which possessed great expertise, kindergartens, day care centers and schools. There are also performed many commercial buildings, city planning and special layout tasks.

## VISION

The philosophy behind the architecture has always been that architecture will form the framework around life and expression by its simplicity to be eventful and inspiring, marked by quality, functionality and craftsmanship. ARKINORD is an architectural firm that makes architecture, project and construction management based on some core values, which are; Creativity & Communication, Respect & Presence.

The occupation of the two main roles in one building creates the preconditions for the successful construction where functionality and good architecture go hand in hand. The key word is dialogue. It is in the interaction between the devoted builder and architect the ideas are rising, an opportunity that none of the actors separately beforehand had imagined.

(arkinord.dk. 2015. arkinord.dk [ONLINE] Available at: <http://arkinord.dk> [Accessed 18 December 2015].)



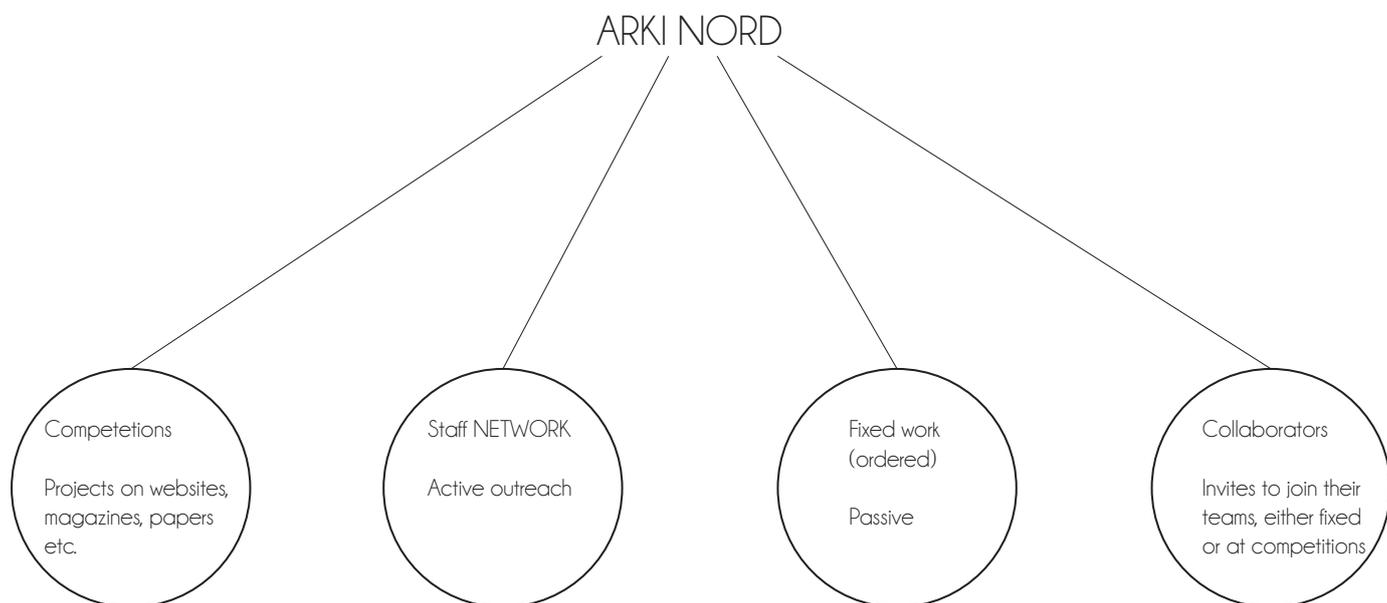
Builder and architect is rarely represented by individuals. Idea and program phase often involves many people and interests. They are important to get all the way around before final designs are decided. Words such as citizen participation and user influence has become commonplace terms in the architectural industry.

**ORGANISATION**

**Aquiring new projects**

Everybody in Arkinord is gathering the projects for the company, but it is mainly up to the director and the partners to aquire new projects and customers via their broad network. Arkinord also get projects from competitions, that they are invited to/ or find in websites, papers, magazines and so on. The staff also have theirs to say, when it comes to acquiring new projects from their networks.

Arkinord have many collaborators , such as COWI, Niras , Brix & Kamp . these partners often invites to join their teams , resolving tasks. like Arkinord also invites its collaborators, these new projects is aquired either on demand or by competition.



III. 2 - Aquiring new projects

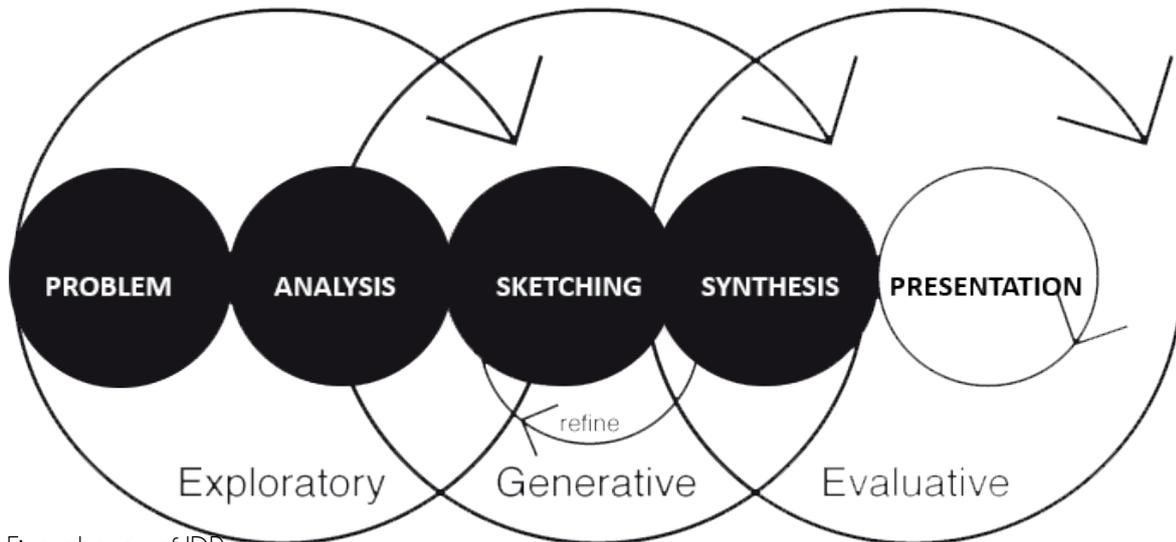
**Ensure devolopment**

To ensure that the staff are not getting stuck, each employee has the opportunity to attend different courses of self-interest, of course it has to have something to do with their working field. this happens once a year, further than that the staff attend communication courses, and you have the ability to learn how it is to work as an construction manager, and by time, be one.

# IDP

The integrated design process as it is being learned at Aalborg University is a method that gives the architect the opportunity to integrate the engineering and technical aspects of a project.

The IDP is based upon five phases.



Ill. 3 - Five phases of IDP

**Problem**, is where you think the first thoughts on the design, to conceive how the product should function, both architectural and technical. The most times these criterias are given, ex. a competition.

**Analysis**, is where you go in and investigate on one's previous thoughts feasible both architecturally and technically, analyzing all the parameters that affect the design. One finds deficiencies here, one can go back, and an iterative method is used.

**Sketching**, is where you are modelling your thoughts. this can be done in varoius means, either handdrawn, digitally or simply by small physical models, as an example to demonstrate technical or architectural needs.

**Synthesis**, is where you put all the pieces together to create a design where the whole phase has been cooked down to a single solution. this is where you collect all the parameters for the final design.

**Presentation**, is where you gathers all that is needed to disclose the information that interested parties have in the project. Here it's important to communicate the work down to the smallest detail, in order to get the full benefit.

(The Integrated Design Process (IDP) - Forskningsportal, Aalborg Universitet. 2015. The Integrated Design Process (IDP) - Forskningsportal, Aalborg Universitet. [ONLINE] Available at: [http://vbn.aau.dk/da/publications/the-integrated-design-process-idp\(3b1b32f0-32d6-11db-8b1e-000ea68e967b\)/export.html](http://vbn.aau.dk/da/publications/the-integrated-design-process-idp(3b1b32f0-32d6-11db-8b1e-000ea68e967b)/export.html). [Accessed 18 December 2015].)

# METHODOLOGY

During my time as an intern at Arkinord I have not let me pin down as just an "ideamaker", I always asked questions to my supervisors, Frank Svendsen and Sanne Vilsen, and others in order to expand my own horizons, this has also resulted in more exciting work which allowed me to calculate the cost of a building, and to attend constructions- as well as craftsmans-meetings. I have had the honor to interview Sanne Vilsen, an architect who has the same background as me, with a degree from Aalborg University in architecture and design, which helped me to gain knowledge about the company and their methods.

## Tools

### SketchUp

In Arkinord the architects uses SketchUP a lot, combined with V-ray renderer and LayOUT.

SketchUp is an application used by architects, construction engineers, and private individuals. Here you can create 3D buildings with a variety of tools, however the options are more limited than in software for professional use. Sketchup is easy to use and reminiscent of an advanced form of MS Paint program, Sketchup is to be seen as a tool if you are missing a quick visualization and you are in a need of time. Chaos Group have expanded their horizons by developing the V-Ray for SketchUp, this allows you to create stunning visualizations that takes your mind off Sketchup, and get projects to appear more professional.

Layout is a program developed by Google as a counterpart to Sketchup, the tool allows you to produce dimensionally stable plan-, section- and elevation-drawings directly from the Sketchup model. SketchUP combined with V-ray and LayOUT are some of the programs I've used the most during my internship at Arkinord. only the people in the architecture department uses this at Arkinord.

### Autocad

AutoCAD is an application for 2D and 3D drawing / modeling, it comes in different versions, Common to them is the content of a wide range of software tools for mapping of working drawings, etc. such as. vector graphics. AutoCad is used frequently in Arkinord as there is much need for 2D drawings, this applies to both plans, sections and façade drawings, all of Arkinord can use Autocad.

### Revit

Revit, is like Autocad available in several versions, BIM and architecture just to mention a few, Arkinord uses mostly the Architecture version, which is an advanced system for building construction, designs and documentation that works the way you think. Autodesk Revit Architecture is designed specifically for building information modeling (BIM). The program lets you change everything - anytime, anywhere - and coordinates itself, the changes throughout the entire project at once. Only the building constructors are compatible in the use of Revit, but the Architects are soon to be taught in this application, because mostly of the future building projects requires a digital model made in Revit. I have used Revit for about 7 years now.

### Photoshop, illustrator and InDesign

Photoshop is an image editor, which allows the user to change graphics and cut/paste objects together, and use a variety of filters. Illustrator is a vector based application which are good at making large scale images. InDesign is an application used to setup documents, books and other presentation materials.

### Handsketching

At Arkinord, hand drawing is used as a quick way to express yourself, Arkinord have an architect who still use hand sketching as a way to present the material on. and it is magnificent, how nice it is.

## PROJECTS

In this section, I will briefly tell about the projects I have been a part of, in the time I have been working as an intern at Arkinord. each case has a little intro, an explanation of what my task was and what I have gained from experience as I have worked with the projects.







The old main street, Algade, and its continuation behind the abbey church in Strandgade is a unique area that is preserved in its entirety and connection between river and harbor.

(Velkommen til Skagen | Toppensafdanmark. 2015. Velkommen til Skagen | Toppensafdanmark. [ONLINE] Available at: <http://www.skagen-tourist.dk/>. [Accessed 18 December 2015].)

The site and the property was originally used by recreational fishermen, with the property located at the top of the ground, so there was room to fold out fishing nets and traps when these had to be repaired, the very long site consists of 546 square meters, with only 6m at its widest. This project is regarding an addition to the existing complex.

## MY TASK

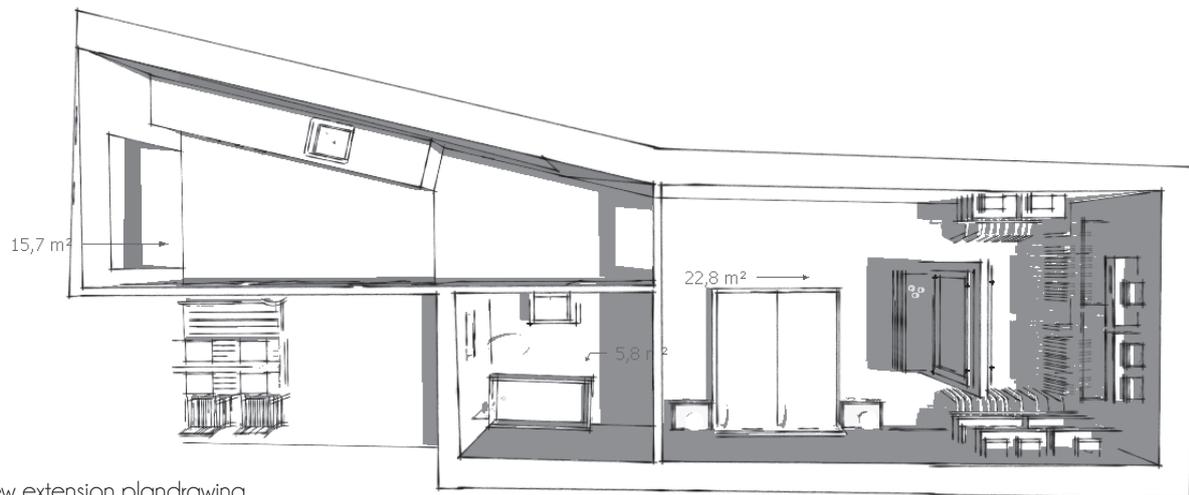
My task was to make an addition to the existing timberhouse, which aimed to exploit the sites potential, and to make room for a new utility room including washing/dryer machine & sink, new bathroom with the ability to shower and a new bedroom complete with walkincloset. Furthermore the builder wanted a workshop as an extension of the new building-part. At the same time it should fit into the existing surroundings, and of course had to take account of normal building practice.

## EXPERIENCE

What made the biggest impression on me, was how difficult it was to meet all the builder's wishes, while having to get it to fit on such a different site. especially when taking into account of the site boundaries, and how the windows were placed in relation to fire safety.

With the newer requirements for wall thicknesses and a site of maximum 6m at its widest. it should be positioned in order to got the best yield and most space in the interior space.

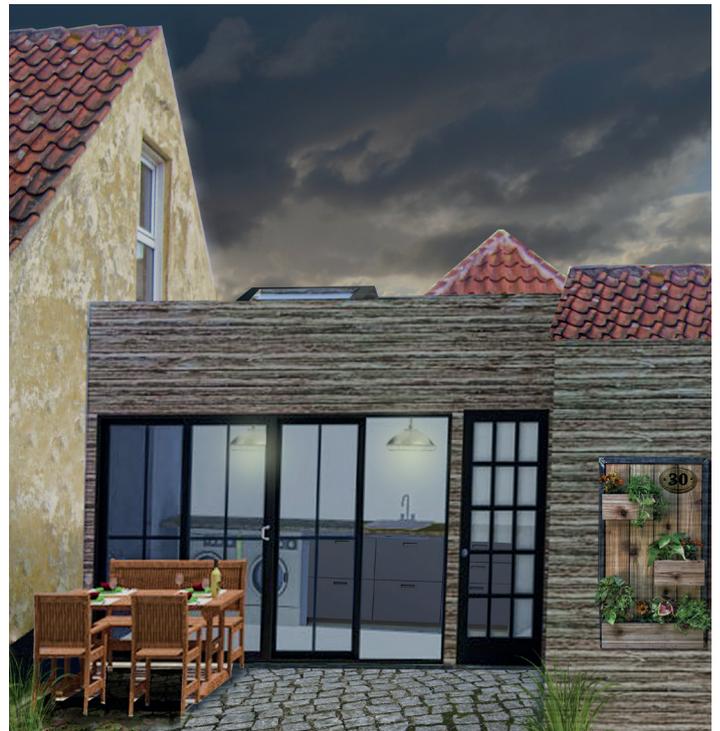
It was also particularly challenging to place the workshop so it was possible for the builder to move from the residence directly into the workshop, without having to go outside. without the building is shaping up as a long snake of over 30 meters.



III. 5 - New extension plandrawing



III. 6 - View from Street



III. 7 - View on entrance



III. 8 - New utility room



III. 9 - New bedroom



Frederikshavn famous palm beach is just one of the wonderful child-friendly beaches that stretch from Frederikshavn and further north.

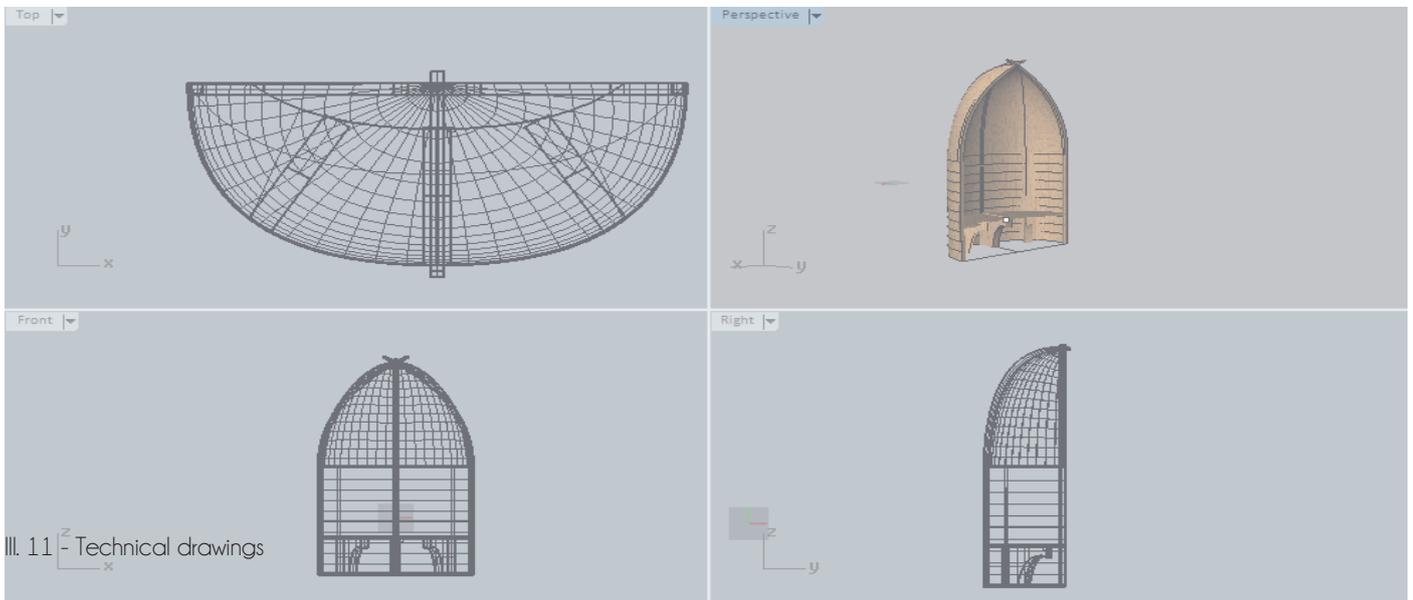
In addition to the palm trees, it offers the local beach which is in bike distance from the center, beach volleyball courts, barbecue, dunes and seaweed parasols. The southern part of the beach is shallow and very suitable for families with small children.

(Velkommen til Frederikshavn | Toppenafdanmark. 2015. Velkommen til Frederikshavn | Toppenafdanmark. [ONLINE] Available at: <http://www.visitfrederikshavn.dk/>. [Accessed 18 December 2015].)

This task is regarding designing a multifunctional furniture / element.

## MY TASK

This was only a small task, which was already pointed out according to the design, my task was to visualize this idea of a multifunctional element which could be used for brief stay if there was bad weather or you needed to sit in the shade, but also could be used to place barbeque trays so the element could act as a kind of shield from any weather. The design should be able to tell something about frederikshavn, that could relate to some of the values the city has.





# CITYDRESSING, FREDERIKSHAVN

In Frederikshavn there is an active sports and athletic-life with ice hockey, women's handball and floorball as the main attractions. Previously, the city also prevailed in wrestling, archery and football. Frederikshavn has a good sports facilities stadium, ice hockey, golf course and iceskating areas such as Arena Nord - the great arena of 2003.

And now they are the hosts of the 22nd IHF Women's handball World Championship. This task is regarding dressing the city, to advertise for Frederikshavn as the host city 2015.

## MY TASK

My task was to come up with some creative ideas in cooperation with the other intern and the architect, Sanne Vilsen, of how we could dress the city, so that it relates to Frederikshavn but also gives an impression that it has something to do with the world championship. This was again a small task meant as inspiration for the municipality of Frederikshavn.

Again a quick task, where the main idea was to brainstorm.

## EXPERIENCE

There was a boundary of what the related costs should be, and it was close to zero, meaning that it should be something that the locals could produce without a big cost, it was a big challenge. Economics in this case is a big opponent. But I experienced how an architect uses creativity in real life.

# CITYDRESSING



# ARKINORD



# MOBILE SALE SHOPS, FREDERIKSHAVN

Frederikshavn each year hosts several recurring events, open air concerts and many other events. The city center is characterized by the fact that Frederikshavn is the gateway to Scandinavia, and are visited annually by an estimated five million people. Tourism has become an important source of revenue for the city, so the shop surface is characterized by specialty shops alongside the nationwide chains. During weekends and peak seasons it is primarily visited by our Scandinavian neighbors, which benefits from cheap prices on food and alcohol.

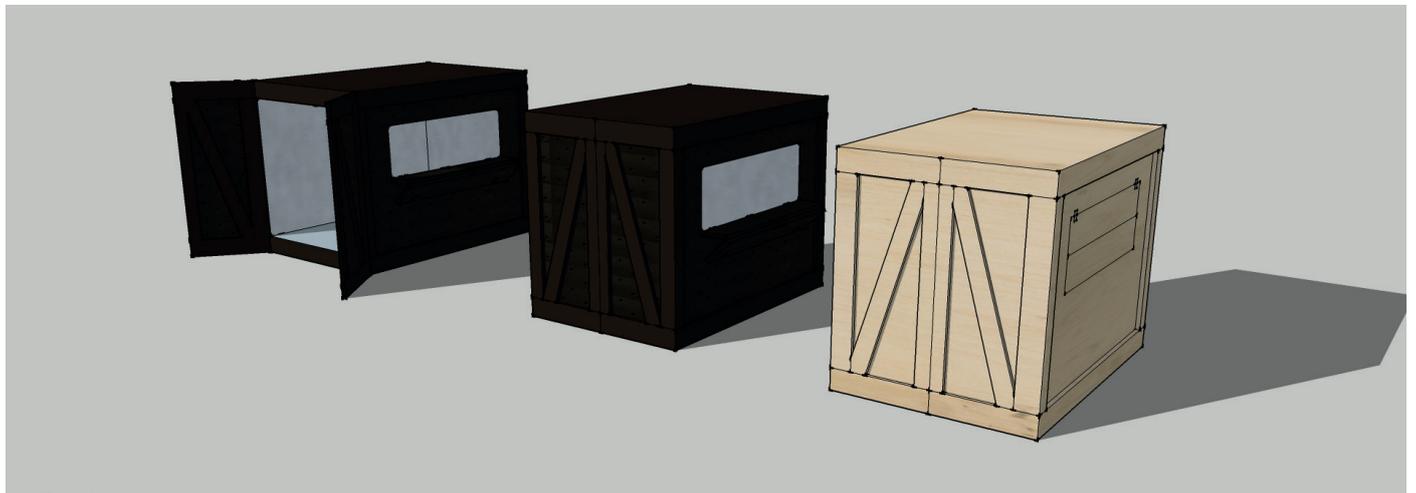
This task is regarding designing mobile sales shops.

## MY TASK

My task here, was to deliver an idea of how a mobile sales shop could look, again in cooperation with the other intern and architect, the main focus here was to make it affordable and easy to set up and take down, other than that it should be easy to store. The sales shop should be easy decorable to any event, such as "Tordenskjoldsdagene", "christmas markets or any other event in Frederikshavn.

## EXPERIENCE

In this project i got the honour to present together with the other intern and architect, the ideas to a man from the municipality and a carpenter, and i experienced how much economics played along both according to materials and also the transportation possibilities.



III. 17 - Mobile sales shops



The housing company BSB, Åbybro today consists of 7 sections with a total of 450 homes and three businesses. The housing organization is managed by a board of five members, of which three members are appointed by the company's residents and two appointed by the municipality.

This task is regarding creating a small presentational report on future housing.

(Domea Aabybro - Startside . 2015. Domea Aabybro - Startside . [ONLINE] Available at: <https://www.domea.dk/organisationer/aabybro-boligselskab/sider/default.aspx>. [Accessed 18 December 2015].)

## MY TASK

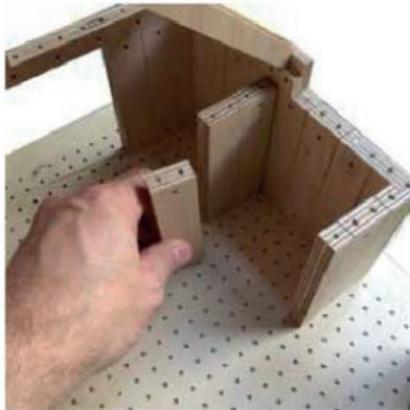
My task was to investigate on how the future housing would be like, both with my own experiences and also look into the tendencies as they are right now, from my investigation i should create a report which were presented by my supervisor at a meeting with Domea in order to get the priority of new projects for the company.

## EXPERIENCE

From this project i experienced that a lot of the future housing has something to do with user involvement, both before- during and after the project. the users want to help determine when it comes to their homes, because it gives a sense of ownership, which can help to raise the pleasure of living.

Energy optimization is also a big part in the design of future housing, this is something that can save money with the new and old residents. I found out that good daylight plays a major role when it comes to housing, whether it is for new buildings or renovation. Future residents would like to have well lit apartments with enough space for them to feel free. Further tendencies are that many prefer to monitor their energy consumption using intelligent solutions.

Hvis arkitekten tilrettelægger fleksibel skabte rum, kan man selv vælge, hvilken funktion de skal have.



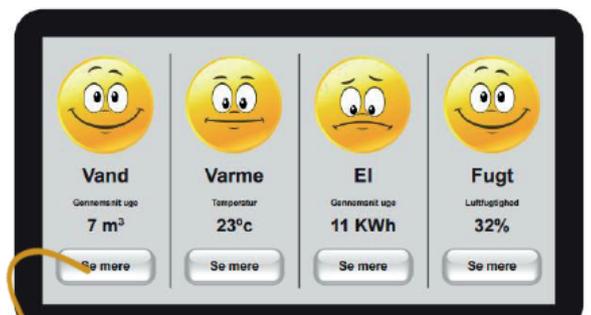
III. 19 - Flexible rooms



III. 20 - Energy optimization

### Intelligente boliger

For at muliggøre adfærdscændringer i forbrugs mønstre, skal der først og fremmest informeres om det aktuelle forbrug. Her motiverer du beboerne til at ændre deres adfærd til at præstere en indsats for et bedre miljø.



III. 21 - Intelligent homes



Bannerslundshallen is situated in Elling city, about 5 km. north of Frederikshavn. In bannerslundshallen you have the opportunity to play handball, badminton, gymnastics, etc. Adjacent to the hall there is a meeting room, relaxing rooms with pool, table soccer and a cozy union-run cafeteria.

The hall's facilities are used by schools, day-care centers, associations and clubs. This task is regarding designing an extension for Bannerslundshallen.

## MY TASK

My task in this project was to come up with an idea of how to design an extension that made it possible for the football club SEIF to have premises in Elling, SEIF has their club in Strandby on an ordinary basis. the extension should include new storage rooms of approximately 100 square meters, a clubhouse, and related restrooms, it should also include outdoor areas, which should provide an overview of the surrounding football lanes. an extension of the current kitchen and living areas should be designed too.

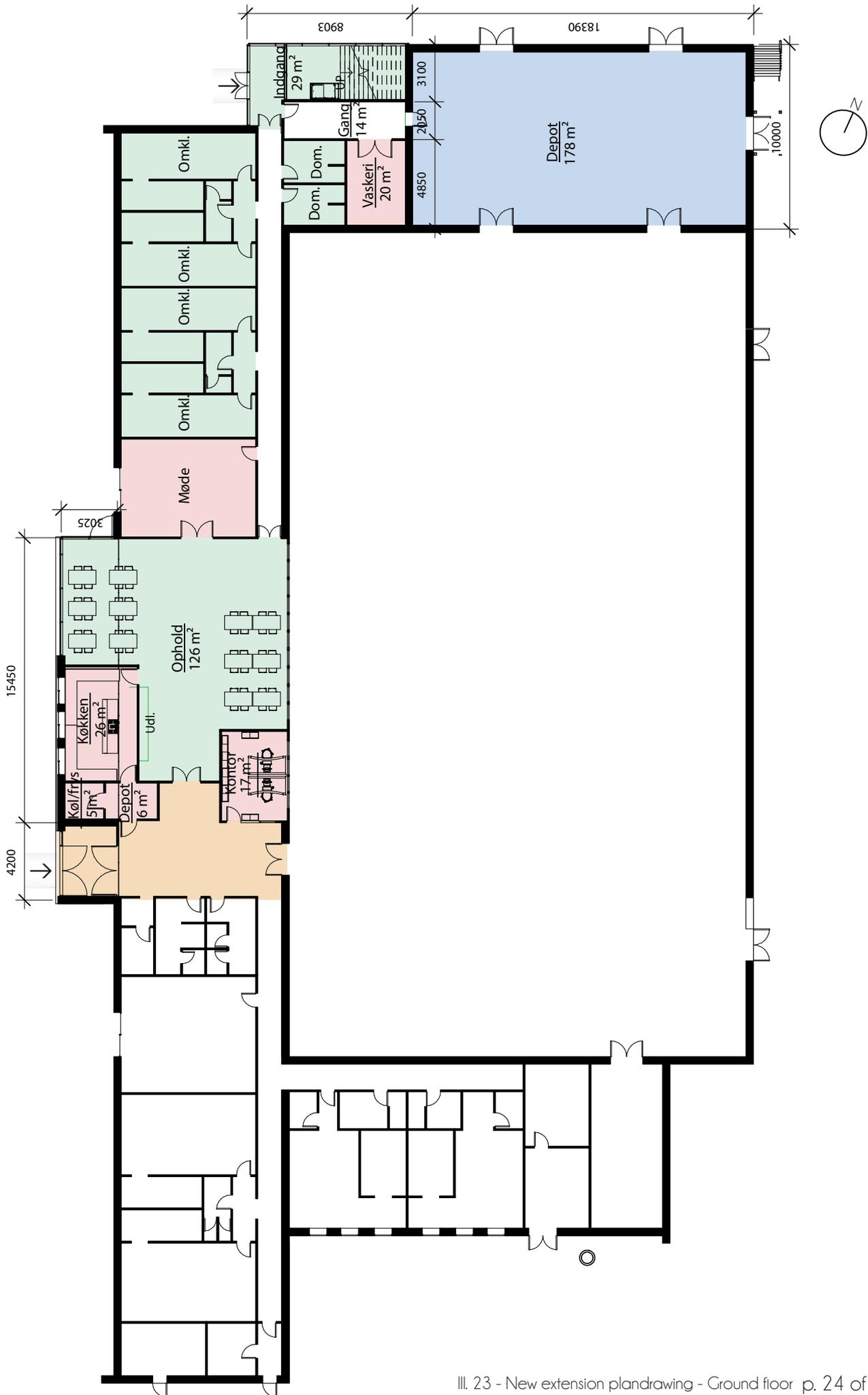
The design should be done so that it is accessible for disabled people, all this had to be placed appropriately in relation to each other to get an optimal flow while simultaneously seemed logical.

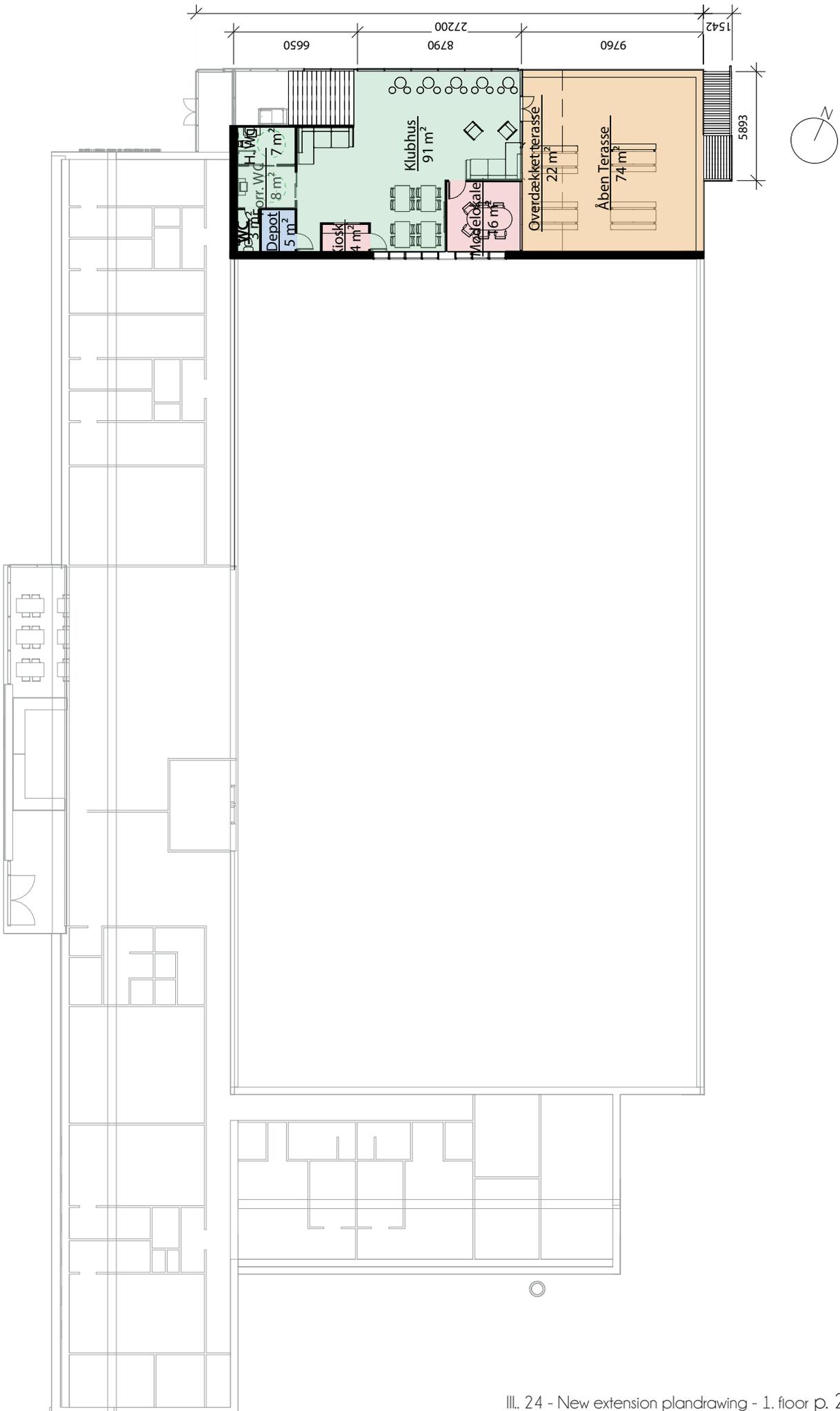
Another task was given afterwards, i should present it for the builders, we had a meeting and they really liked it.

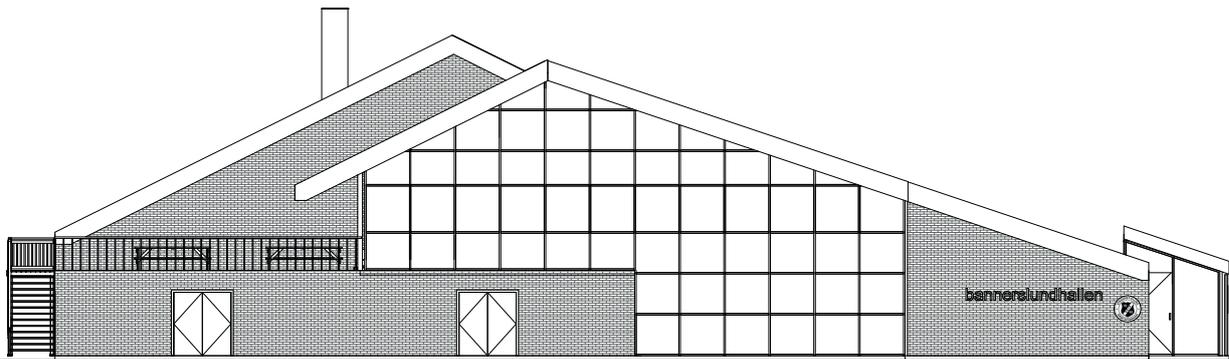
## EXPERIENCE

In this project it really occurred to me how much the economy come into play, I was told from the beginning that im in charge of the design, so I immediately started to make a glass cage that could really provide an overview of the surroundings, and because it was not a housing unit, i thought that it was okay, because i didnt have to think about excessive heating. i finished it , and without having calculated on it, I was told that it probably was too expensive by one of the other architects, made a total of four proposals, each with less glass area than the previous one, until I hit it right where It needed to be. where i had also taken my first intentions of the design into account.

I got the opportunity to sell the idea my self at a meeting with the builders, where i got to talk all the way through and really express my self and my design proposal.







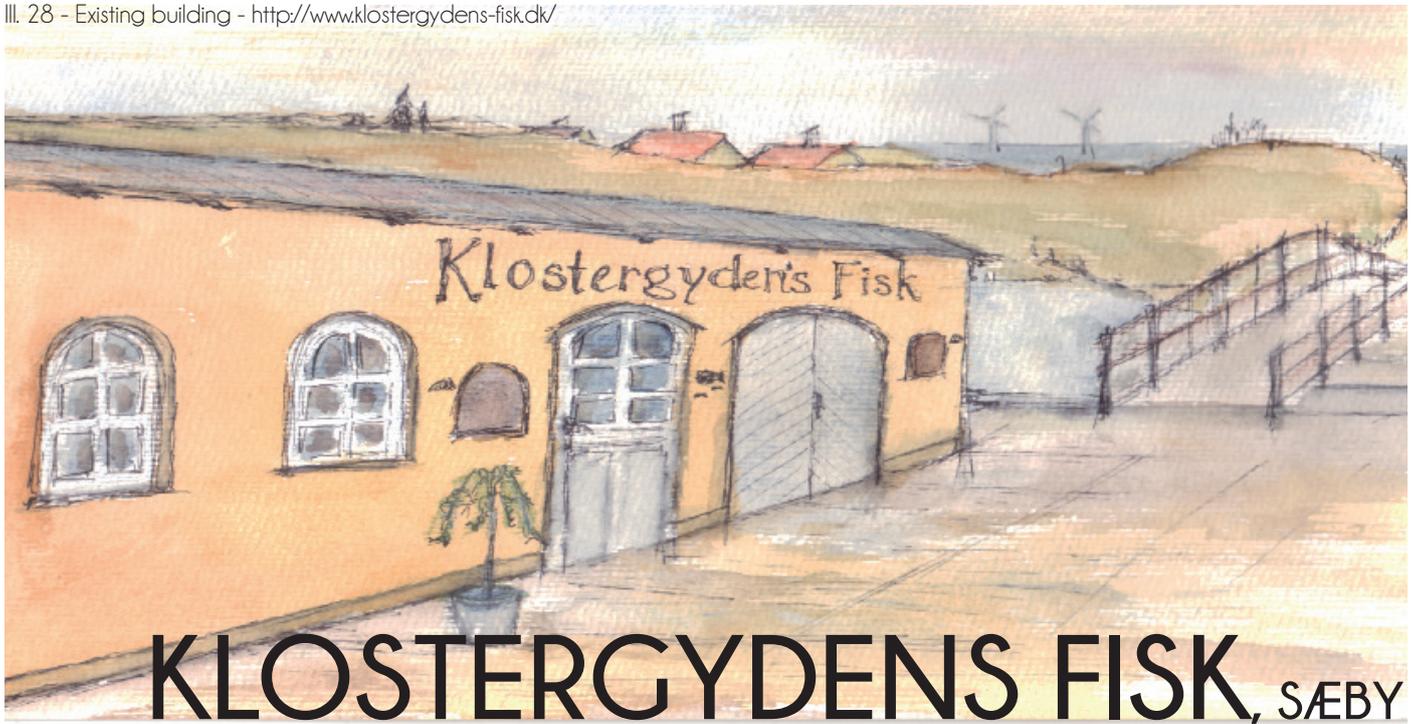
III. 25 - Facade SE



III. 26 - New extension, Clubhouse/ storage / outdoor area



III. 27 - New extension, kitchen/ dining area



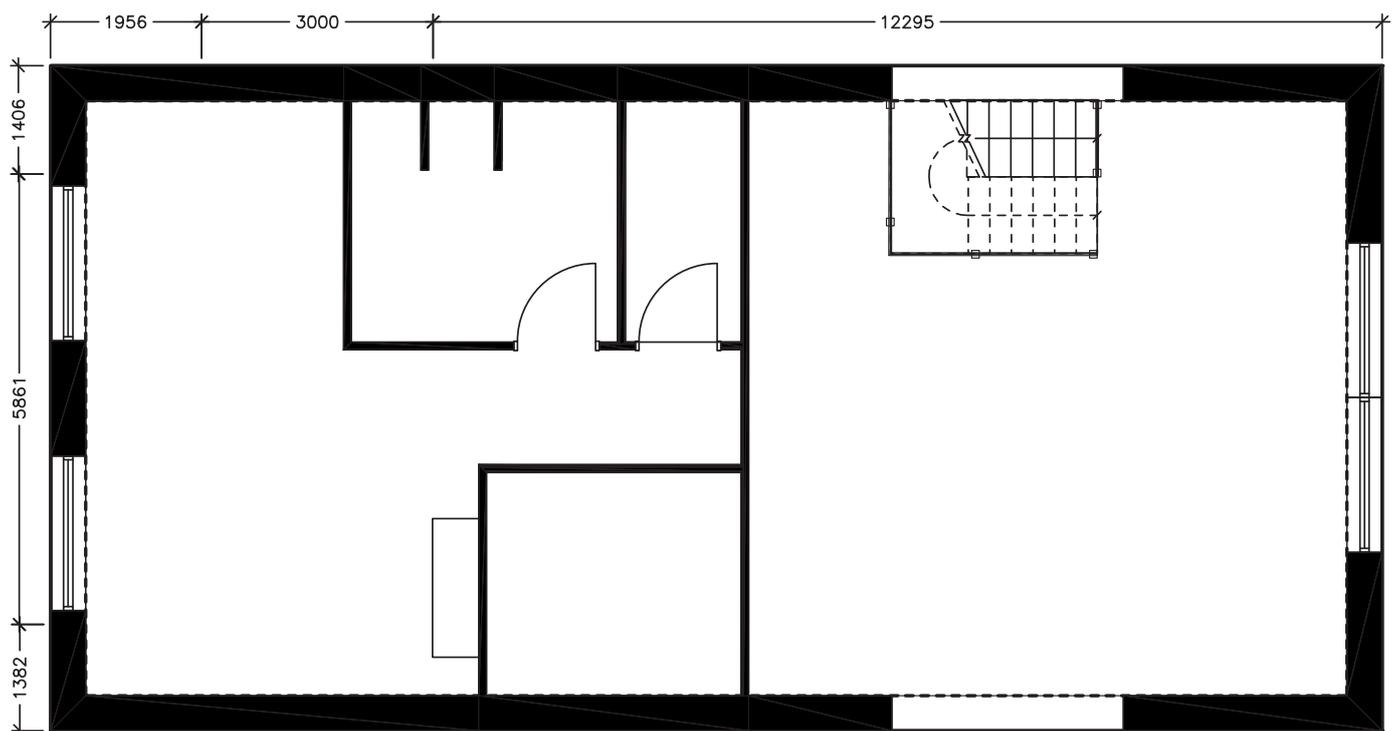
# KLOSTERGYDENS FISK, SÆBY

Klostergydens fisk is a company that has been selling prepared fish since 2005, it is located i Sæby, and is well known for their dishes and specialities, this project is regarding their plans of an addition floor. which in the first place should function as employee locker and storage space, but in time it will function as a place where their guests can enjoy their food.

(Forside (Klostergydens-Fisk.dk). 2015. Forside (Klostergydens-Fisk.dk). [ONLINE] Available at: <http://www.klostergydens-fisk.dk/>. [Accessed 18 December 2015].)

## MY TASK

My task was to draw the additional floor in Autocad, and provide a solution to some of the interior design, it was a quick task that just had to be drawn, so I have not got so much experience on this particular project.







Cloosparken consists of 24 detached single family homes, built in 1954 and is a part of Frederikshavn housing association. Two of the houses have been empty for several years because of subsidence damage. Because of the houses condition. the housing association has started an inventory of the buildings in the spring of 2011. There has been made a report that shows that one of the buildings should be demolished.

Samples have been taken for mold in 12 homes. In 11 of the homes have been found mold attacks that go significantly beyond the usual limits, and thus can be characterized as hazardous. In three of the houses there have been found nearby unhealthy, and these homes are vacated. This project was made in cooperation between Kuben management, Brix & kamp, Arkinord and Frederikshavn Housing association.

This project is regarding creating masterplan to make the area and housing units liveable again

(Ingeniørrapport: 9 ud af 24 boliger bør rives n. 2015. Ingeniørrapport: 9 ud af 24 boliger bør rives n. [ONLINE] Available at: <http://www.kanal frederikshavn.dk/vis/nyhed/ingenioerrapport-9-ud-af-24-boliger-boer-rives-ned/>. [Accessed 18 December 2015].)

## MY TASK

My task was to help the architect to setup and put the master plan into a folder to be sent out to the various parties involved, including the residents, since the master plan had to be approved by a majority to be implemented in the near future.

## EXPERIENCE

In this particular project i realised that not all projects are valuable for everyone, meaning that this masterplan demanded that more of the residents, which was typically elderly should be re-homed, and many of them did not have the chance to move back again, so they needed to find a new place to live. Some of them voted against the proposal, resulting in a master plan which could not be implemented with economic assembly support from Landsbyggefonden. this resulted in an acceptance a rise in payments in their rent over the next 20 years.



Bakkegården built in 1951-1953, and in 1995 it was decorated with 22 studio apartments in the attic.

The master plan should, when it was finally adopted, bring leases up to contemporary standards, and focus on minimal energy consumption. This project was made in cooperation between Kuben management, Brix & kamp, Arkinord and Frederikshavn Housing association.

## MY TASK

My task was the same as in the previous assignment on Cloosparken, to help the architect to prepare the master plan so it was understandable to all parties in this project I was involved in drawing the new apartment plan drawings related to the presentation material for the residents together with the other architect.

## EXPERIENCE

In this project i experienced the joy that suddenly appeared, when a proposal which has been on for about 3 years are finally being granted, this project and Cloosparken made me realise just how long time it takes to develop a working masterplan.



Linnemann escape is a project regarding a new cottage house i Gistrup, Arkinord has made several proposals in cooperation with the builder.

## MY TASK

My task was to sketch some of the recent changes for the next meeting, and create some visualizations.

## EXPERIENCE

In this project i gained a deeper knowledge with the features in SketchUp.

I also got an understanding of how the builder reacts, if the visualizations are to realistic, i was told by the director of Arkinord, that it is better to create visualizations that look like drawings, in order of giving a better understanding to the builder. it is a practice that he has been using in several years to make sure that the builder and the architect are speaking the same language.



Ill. 34 - Overall view



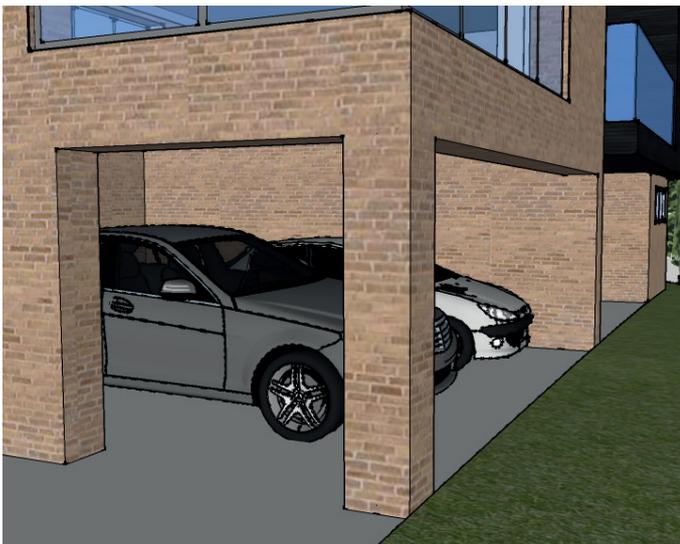
Ill. 35 - View from side



Ill. 36 - View from side



Ill. 37 - View on entrance



Ill. 38 - View carport



Ill. 39 - View outside



# BOFORM BROVST, BROVST

Social Psychiatry Boform Brovst is an accommodation facility for adults aged 18-65 years who have severe mental illness, complicated mix with severe side problems like abuse also called dual diagnosis, court actions, severe social uncomfotabletion etc.

Social Psychiatry Boform Brovst is situated in Brovst since 2004. this project is a competition that Arkinord won earlier in 2015, regarding and expansion of the complex. Currently there are 12 residents, and it is planned that an additional 12 are moving in when the expansion is completed.

(Velkommen til Socialpsykiatrisk Boform Brovst. 2015. Velkommen til Socialpsykiatrisk Boform Brovst. [ONLINE] Available at: <http://www.boformbrovst.rn.dk/>. [Accessed 18 December 2015].)

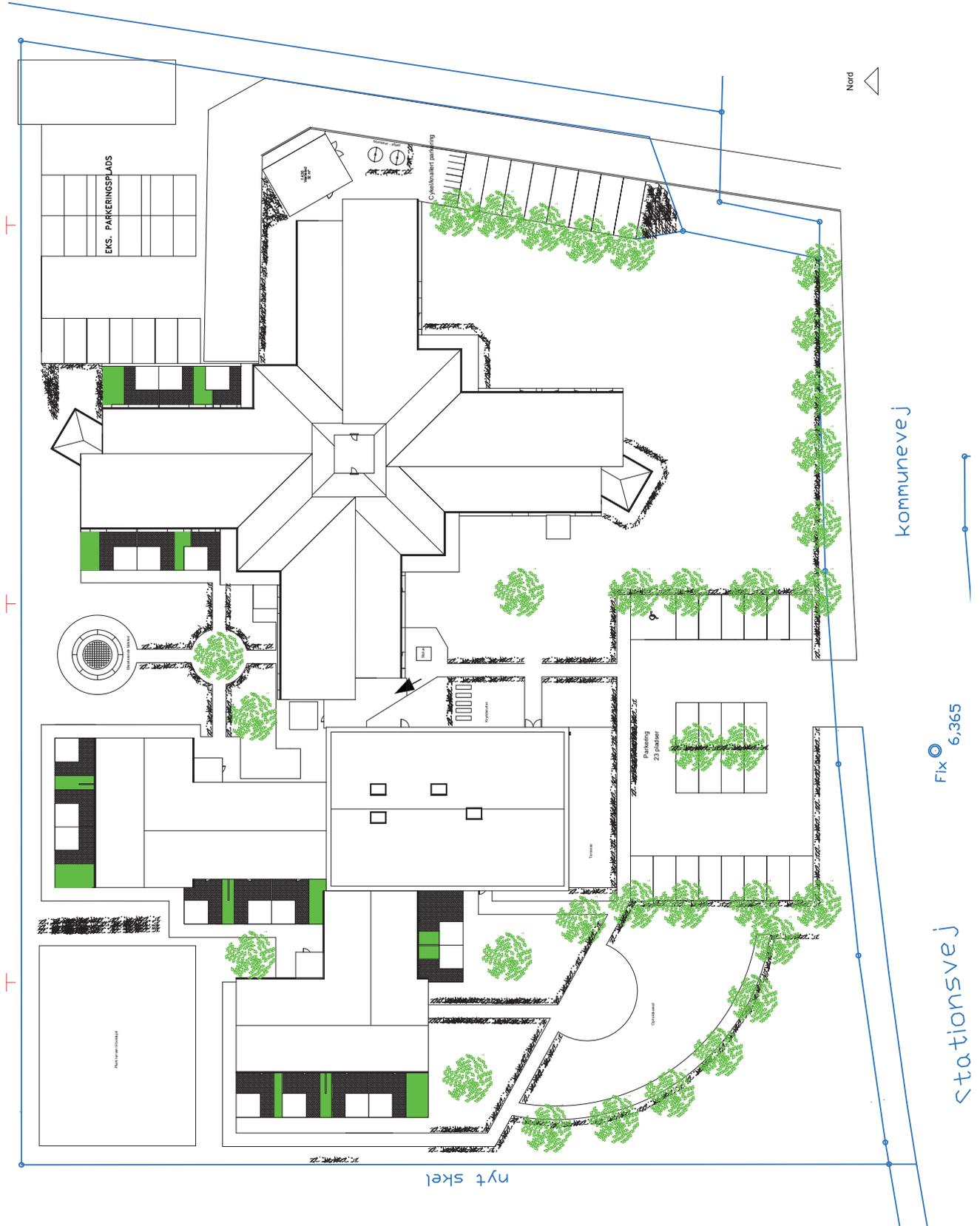
## MY TASK

My task was to develop on the first plan drawings in cooperation with the other architects, designers, the region and the staff at Boform Brovst. I was involved in this project, from the beginning of the sketching phase, and attended a meeting with the facility leader, to visit the site aswell as balance the expectations. Before i started as an intern, Arkinord had allready won the rights through a competition in 2012.

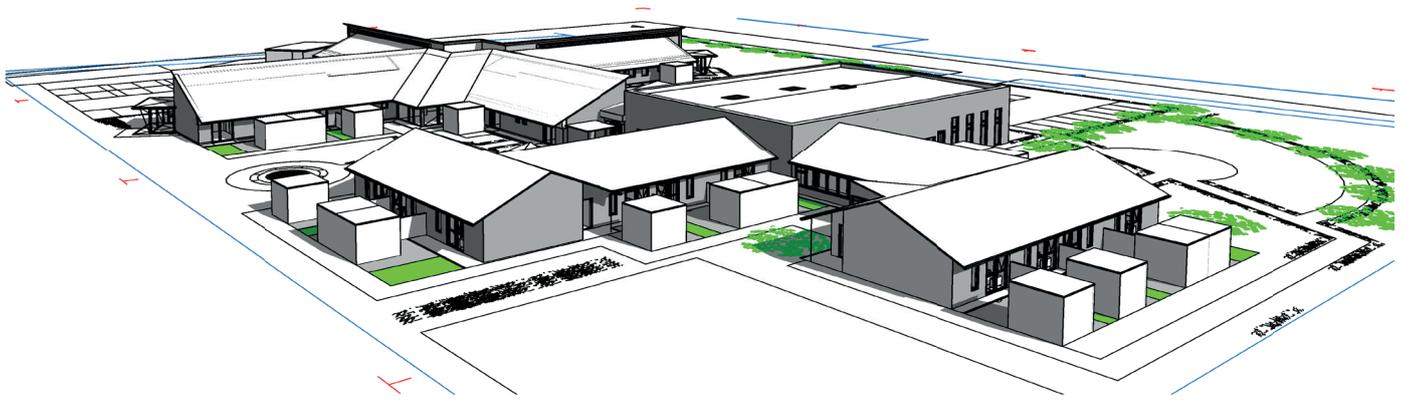
## EXPERIENCE

In this project i gained a deeper knowledge of exactly how much the economic determines the final outcome in such a project offered by the region. the first couple of proposals we had way too much area according to the allowed, and we had to cut down on so many wishes from the builder. There has been made so many revisions of this project that I cant count them on one hand, and it has really put my patience and Revit skills to the ultimate test. I have also experienced just how easily information can pass between designers and architects.

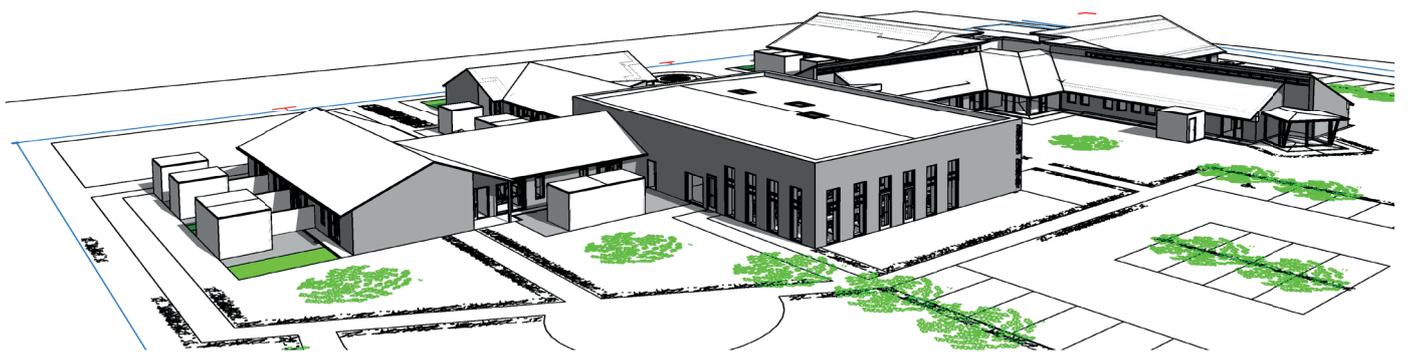
In this project i have also gained a much deeper understanding on the outcome of how a project should look like before sending it to the engineers, and i learned a lot about the design phase and got familiar with some of the uses of encyclopedias, that we as students has never seen.



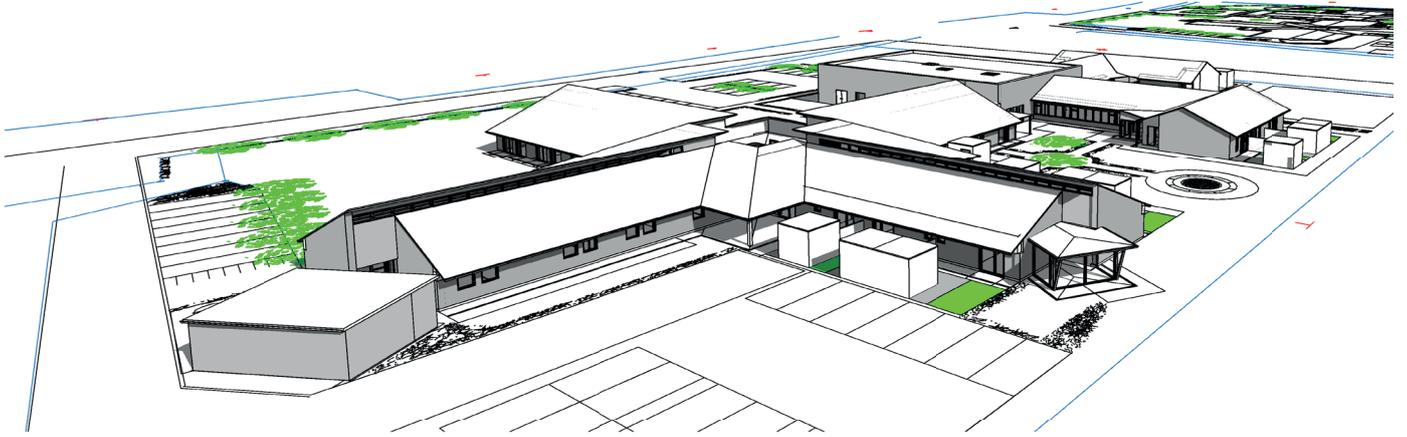




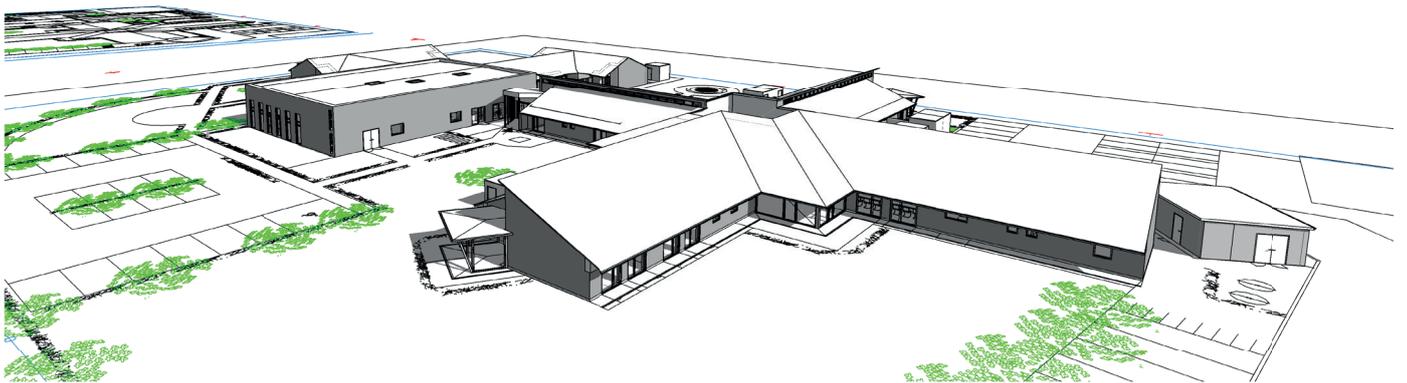
III. 43 - Perspective NV



III. 44 - Perspective SV



III. 45 - Perspective NE



III. 46 - Perspective SE





This project is regarding some interior design changes in Sæby church

### MY TASK

My task was to create a visualization on how it would look with flatscreen tv's instead of the regular hymn boards.



This project is regarding some interior design changes in Hou church

### MY TASK

My task was to calculate on the costs of what a total renovation on the inside of the church would cost, i asked if it would be possible for me to get a case like that.

### EXPERIENCE

In this project i gained further understanding about how much it costs to have all the different craftman in over a renovation project and how strict it can be when it is a historic buildings you are working on.



# RESCUE STATION, LÆSØ

In 1871, Læsø, established the rescue station at Tyvhullerne east of the existing port. The rescuers' principal task was the actual rescue work - and in the station's first 125 years they rescued 532 shipwrecked - but they also took care of marking the navigation routes. After some years, the rescue station was moved to its present location in Østerby harbor western end, and it still covers large parts of the Kattegat.

This project is regarding an extension of the existing.

(Facebook group - Østerby redningsstation 2015. . [ONLINE] Available at: <https://www.facebook.com/Redningsstationoesterby/posts/1043161519049187>. [Accessed 18 December 2015].)

## MY TASK

My task was to prepare the visualizations, the facades and a building sign which was supposed to show the outcome of the renovation process.



Ill. 51 - Visualization for building sign



Bispensgade is a pedestrian zone in the center of Aalborg, the street has existed since 1554, This project is about a completely new complex housing shops and residents, the adress is currently hosting venini shoes and some apartments in the top.

(Bispensgade - Wikipedia, den frie encyklopædi. 2015. Bispensgade - Wikipedia, den frie encyklopædi. [ONLINE] Available at: <https://da.wikipedia.org/wiki/Bispensgade>. [Accessed 18 December 2015].)

## MY TASK

My task was to make some minor changes in the Revit files, when they appeared from the engineers or the director, further than that i have made analysis according to shadow, to make sure that the new building complex doesnt shade for the surroundings. In this project Arkinord has had an surveyer on site to measure and make sure that the heights are correct. other than that i made some changes in some visualizations whenever, they needed it.

## EXPERIENCE

In this project it was nice to experience, how it was drawing from a surveyers measurements instead of thrusting the downloadable city model from the technical department at Aalborg Municipality, which we always do at the university.



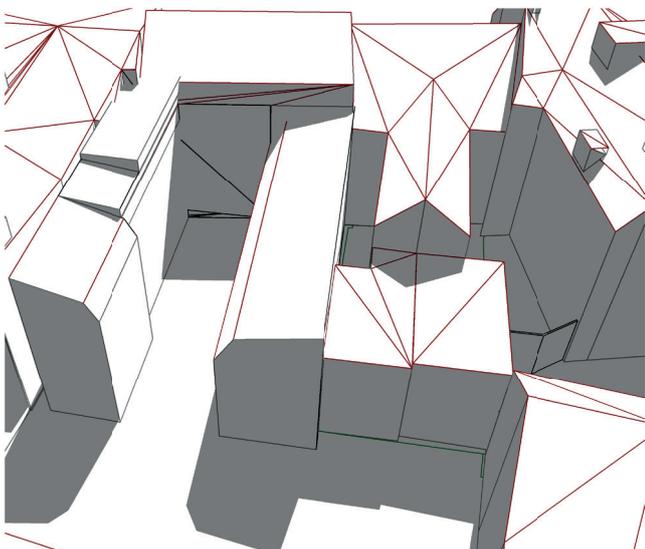
Ill. 53 - The new back alley



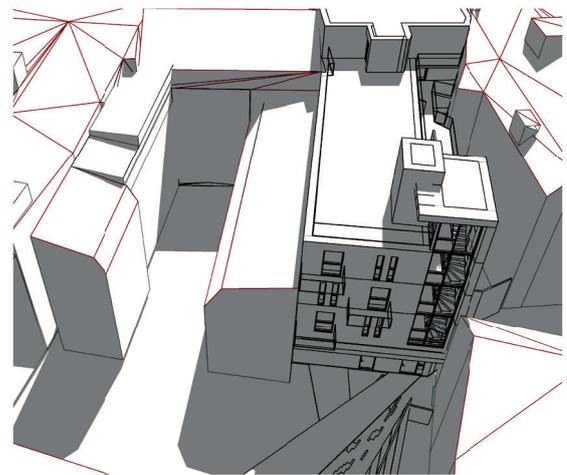
Ill. 54 - Line drawing



Ill. 55 - New apartments



Ill. 56 - Shadow diagram existing



Ill. 57 - Shadow diagram new



Algade is Aalborg's oldest street, Algade used to be the town emergence which linked the east and west of Østerås broad street. The street can be dated back as the city's main street in the early year 1000.

This project is regarding a new block with apartments and shops. i three to four floors. the old architect gor bought out and Arkinord took over.

(Algade (Aalborg) - Wikipedia, den frie encyklopædi. 2015. Algade (Aalborg) - Wikipedia, den frie encyklopædi. [ONLINE] Available at: [https://da.wikipedia.org/wiki/Algade\\_\(Aalborg\)](https://da.wikipedia.org/wiki/Algade_(Aalborg)). [Accessed 18 December 2015].)

## MY TASK

My task was to draw the complex in SketchUP, to make some visualizations, this was yet another quick task.

## EXPERIENCE

In this project it got some deeper knowledge of how to use SketchUP. And i was taught how to use module projecting





Lerstien is the name of a street in Freerikshavn, it is situated on the high end of frederikshavn with a panorama view over Frederikshavn and the harbour.

This project is regarding an additional covered terrace, and was one of my own projects.

## MY TASK

My task was to draw the complex in SketchUp, in order to prepare some visualizations, this was yet another quick task.

## EXPERIENCE

In this project it got some deeper knowledge of how to use SketchUP and the V-ray renderer, combined with Photoshop.





# SÆBY FISKE-INDUSTRI, SÆBY

The factory in Sæby stretches over 60,000 m<sup>2</sup> building under the same roof, and the outside-area comprises about 42.6 ha. The factory consists of a major receipt of goods and a receipt of freezing and storage capacity and a separate freezer compartment with a storage space for raw materials. In addition there is, a large area of commodity processing, production machines and packing area. A small area of the factory is used for offices and a laboratory for quality control and development of sauces.

This project is regarding a factory as an expansion of the old one.

(Sæby fiskeindustri. 2015. Sæby fiskeindustri. [ONLINE] Available at: <http://www.sæby.com/>. [Accessed 18 December 2015].)

## MY TASK

I was so lucky to have the opportunity to attend a building meeting, with all the craftman parties, and my task was to simply just watch, listen & learn.

## EXPERIENCE

In this project it got some deeper knowledge of how it is "behind the scenes" of a building project this size, i got a deeper understanding of how many parties was involved, and how strict the time horizonz were.

In this project Frank Svendsen from Arkinord together with a representative from Niras split the role as construction manager, they are allways two in such big projects because then they can act as acessors to each other.



# SINDAL HALLERNE, LENDAL

Sindal Hallerne offers two mini halls, swimming pools, meeting rooms and a gym, its about 10 km from Sindal in a small town called Lendal and 10 min in car from Frederikshavn..

This project is regarding a new interior and new measures to secure the future of the hall and thus the citizens of Sindal and the surrounding area, prefers bathing in Sindal swimming pool instead of going to Hjørring water park. This is a catalog of ideas, and is also one of my own projects.

## MY TASK

My task was to come up with an idea of how to attract and keep the citizens in Sindal/Lendal. i was focusing of what could be done in order to make it attractive to people with handicaps also, in order to make a collaboration with one of the local rehabilitational clinics.

## EXPERIENCE

In this project it got some deeper knowledge of how to use SketchUP combined with V-Ray, InDesign and Photoshop.



## OUTRO

In this section i will summon up what i have learned in my time as an intern at Arkinord, the methods used for this is a refletion based on my experience, interviews and finally my experience report will describe how it is to be an intern at Arkinord according to the social and the professional environment, but also the relation between theory andd practice.

# REFLECTIONS

## IDP

The integrated design process is a big part of the education at architecture and design in Aalborg University, therefore it is only natural to compare this theory with the reality at Arkinord.

There is not far between theory and practice, and the phases are identically in the IDP, however, there are a few exceptions where there is further between the different phases in real life versus academic situations, for example. It is in an academic environment, the group's task to identify a problem formulation as the focal point for the final project presentations. At Arkinord as well as real life situations, you get the problem with a complete problem description and formulation. The first phase of "problem" is often made in advance in real life.

The analysis phase is basically the same as at the university, whether it's in an academic environment or design office the agenda is the same, where you go through the various iterations of the analysis, for example. sun, shade, or wind etc. keep them up against each other to find important parameters for the further design. The biggest difference lies in the time frame for the projects. As a student, the analysis phase is to be very slow, which often takes several months, this is not an issue in real life.

For example, I made the shadow diagrams of a new penthouse construction in the middle of Aalborg, here I had a time frame of a few hours, in the university this could easily take about a week, not because it's slow, but because everybody has their say about it. Compared to the sketching phase, everything goes much more quickly in real life, in my internship at Arkinord I have not sketched more than one to two days merged before I had to move on with my ideas, in the academic environment it may take several weeks before you feel you are on the right track.

In the sketching phase you often discover mistakes, that make you have to go a few steps back and analyze again, this is called the iterative process, and this method was used a lot in my work with Boform Brevst, a project I spent in roughly 70% of my time as an intern, this phase is much alike real life.

The Synthesis and Presentation phases merge in real life, here, you try for example to make a series of ideas to the builder, instead of presenting them one opportunity, they get more choice. This also gives the disadvantage that there may be changes from both builder, engineers and constructors late in the process, which means that you sometimes have to start over. This is also a phenomenon that you are used to as an architecture student at Aalborg University.

## Conclusion

During my time as an intern at Arkinord I have become wiser about how big the difference is in the IDP in an academic environment versus real life as an architect in a professional studio.

The difference is not very large, the only thing that really defines inequality is the economic aspect, a parameter which we as students do not think about or has been taught in. The economic aspect is paramount in real life, and can change everything in a project in no time.

I was so lucky to experience at how much the economy had to say in my work with Boform Brevst, since it's a case offered by the region as the builder, they go very much up in the economy, here I had to keep cutting elements, functions etc away, since there was no money for it, and sometimes add this something back again, because of a sudden money approach from nowhere. In Boform Brevst I have really experienced what it is like to work in an iterative process. Determined by the economy, the whole project was calculated with a sqm price, which was very strict, it resulted that I had to find 300 sqm to cut away from the first draft to the last. Other than that the building was too big as it exceeded the site boundary that was bought by 2 meters. I had to correct it all.

# EXPERIENCE

In this section I talk about my general experience from going as an architecture and design student from Aalborg universitet to work as an intern at a professional studio as Arkinord.

## Tasks

I have been sitting in what Arkinord describes as the "idea department" another term for drawing studio, and has received assignments from both architects and designers, which I mainly helped throughout my internship. I have further been allowed to be the main architect of some projects, which for me as a student was a great experience because they hopefully are going to be build.

## Working environment

As an intern, I got very flexible working hours, but would keep however the meeting times agreed with my supervisor one of the first days; working hours were usually; Monday-Thursday 8-16 and Friday from 8 to 12.30. Beside this I have sometimes worked overtime to achieve some of the many deadlines you experience as an architect. this is for me a part of "the game" and therefore something i'd do with pleasure, to help my colleagues, while making a difference with something I like to do.

## Company equipment

Arkinord has two offices in North Jutland, the head office in Frederikshavn, Which is was employed in, and a minor in Aalborg. Arkinords head office is in the old customs house near the port of Frederikshavn. The building has three floors, ground plan houses the meeting room, two large office with 2 desks and a single office. 1st floor has 3 large offices, meeting room and depot with office supplies, printers, plotters and a large paper cutter. 2nd floor contains the kitchen and dining area to the employees, which also is used when held large meetings. Each floor has their own toilet.

## Social environment

There is a very good social environment at the office in Frederikshavn, all the employees like and respect each other, even though they have very different interests. they are very professional in their work approach, still there is also time for some humor.

I have been well received by Arkinord, and I've got the feeling thats they are like one big family where everyone helps each other, though sometimes they are busy with their own duties. Arkinord are planning excursions a few times a year and also social events, and I was fortunate to be able to attend with their annual Christmas party, which was an incredibly fun experience.

## Conclusion

I have been very happy to have had the opportunity to be part of the Arkinord "family" I have throughout my internship, had the feeling of being in a professional setting, with a working structure that is particularly suitable for trainees, the good colleagues and the well functioning work environment is the essence of Arkinord.

For me it has been very inspiring and instructive to be among the professional people, it's something I do not want to be without and I can only recommend Arkinord to others who are considering applying at Arkinord

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