

Limited Architectural Competition

## **NEW OFFICE BUILDING STATOIL FORUS WEST, SANDNES**

**Extract**

# **JURY REPORT**



## 1. THE COMPETITION

The architectural competition was announced and carried out as an International Limited Architectural Competition, complying with the principles for full anonymity throughout the whole process.

The prequalification for the competition was announced on August 21, 2013 on Norske Arkitekters Landsforbund's web pages [www.arkitektur.no](http://www.arkitektur.no) and corresponding pages in Sweden and Denmark. It was also announced on several international architectural competition databases. By the deadline for application on September 21, 2014, a total number of 48 applications, from all over the world, were received. After an evaluation of the prequalification applications the following architectural firms were invited to take part in the competition:

- Forster + Partners (UK) together with Space Group (NO)
- OMA (NL)
- Wingårdhs (SE)
- Snøhetta (NO)
- Helen & Hard (NO) together with SAHAA (NO)

A kick off meeting and inspection of the site were held at Forus on November 6, 2013. Questions related to the "Instruction to Tenderers" were asked and answered in plenum during this inspection. During the competition period a total of 36 questions were received and answered jointly to all competitors.

The deadline for the submission of project proposals was at 12:00 am on January 31, 2014. On the expiry date of the competition, Statoil had received four project proposals. One of the architectural firms had, shortly before the deadline, announced their withdrawal from the competition. All four other competitors delivered complete drafts and on time, according to the requirement specification, and were accepted for evaluation.

The jury of the competition was held 5 full-time meetings between February 5, 2014 and February 26, 2014. The jury decision and jury report were submitted to the evaluation team leader on February 26, 2014.

NAL was involved in the preparations for the jury work and acted as the secretary in the period of evaluation.

## 2. THE COMPETITION PROGRAM

The architectural competition consists of two parts.

Part 1: Proposal for an office building for 3500 new office work places on the site

Part 2: Proposal for a master plan for the entire Statoil property at Forus West

Statoil has through the "Instruction to Tender" expressed expectations for a building with high architectural and functional qualities that will be a landmark in the Forus area. The building shall contribute to developing the organisation and bring pride among the employees. It shall also be a benefit to the development of the Forus area.

### 3. PROJECT PROPOSALS

The four submitted project proposals had the following slogans:

<b>Tenderer A</b>	<b>“Cambia Siempre”</b>
<b>Tenderer B</b>	<b>“The Geology of Minds”</b>
<b>Tenderer C</b>	<b>“A walk in the park”</b>
<b>Tenderer D</b>	<b>“<math>E=mc^2</math>”</b>

### 4. THE JURY WORK

All submitted project proposals have been evaluated by a jury.

The jury has consisted of seven members; four Statoil employees and the following three architects :

- Helle Juul Architect MAA
- Henrik Lundberg Civil architect MNAL
- Svein Lund Civil architect MNAL

Civil architect Per Rygh from NAL secretariat for competitions has been the jury secretary.

The jury has evaluated the project proposals according to the requirement specification and the described criteria for evaluation.

The evaluation process has been as follows:

- Evaluation day 1: Formal clarifications related to the technical evaluation of the project proposals. Familiarise with the project proposals
- Evaluation day 2 and 3: Critical evaluation of the proposals  
Reduce the number of winning candidates from 4 to 2
- Evaluation day 4: Cost and detailed evaluation of the two remaining project proposals.  
Conclusion and final scoring of the project proposals
- Evaluation day 5: Prepare jury report

### 5. CRITERIA FOR EVALUATION

According to the requirement specification for the competition, the judging criteria for the jury have been (not in prioritised order):

- Architectural and functional solution
- Overall land utilisation – master plan
- Financial impact (investment and operational)
- HSE aspects related to construction- and operation

In its work the jury further detailed the evaluation criteria in sub criteria and discussed these thoroughly and systematically.

Judgment of detail solutions has only been done in accordance with Statoil’s functional requirements for the building.

Besides this, the jury has put its emphasis on finding a winner that is visionary and sustainable and a concept that is robust and can allow all the changes that one must expect will be done in the detailed design and construction phase.

In addition to the technical evaluation, the project proposals have been evaluated commercially according to the following criteria:

- Quality and suitability of offered personnel
- Commercial and contractual terms
- Overall project risk and success factor assessment

The two evaluations of the project proposals have been carried out in parallel by two separate, independent juries.

The project proposal that is considered as the overall best is the winner of the competition. This report only describes the evaluation from the technical jury (the architectural evaluation).

## **6. TECHNICAL EVALUATION**

The four project proposals received are evaluated according to the criteria for the assignment.

The jury concludes that the project proposal from Tenderer D is the best. This is the proposal that meets the requirements specified in the Instruction to Tender. This project proposal is the proposal which, in the best way, fulfils the project's ambitions:

- High architectural and functional qualities
- An efficient building for Statoil
- Enable organisational development
- A landmark at Forus suitable to its surroundings
- Represent Statoil as a significant company
- A benefit to the region and bring pride to the organisation

Following this conclusion it is the jury's recommendation that Tender D, with the motto " $E=mc^2$ ", is the preferred project proposal for further work in developing a new building and a master plan for the Statoil site at Forus Vest, and that the authors of this project proposal shall be engaged to carry out this work.

The project proposal needs to be adapted in several areas. The jury recommends that the notifications and comments on the proposal in this jury report will be carried on and used as a basis for the negotiations for further work with the winner.

## **7. JURY EVALUATION**

The jury sees the competition as successful, due to the selection of a winner that has very good qualities.

The jury thinks that everyone has provided models of high quality, which has been a great help for the jury's work, and that will be very valuable in the subsequent process. The tenderers have put in extensive work in their submitted project proposals. The project proposals are characterized by professional and skilled work and are mainly produced in a clear and easily accessible manner.

The project proposals are mutually very different, both in the structural design and proposal for utilization of the site. This gave the jury a valuable, broad clarification of the scope of work and provided the basis for good and thorough discussions.

The jury discussed the projects in relation to an overall understanding of the area's character, now and in relation to the future development of Forus. The submitted project proposals do not give an extensive description of this. The jury misses a complete understanding related to Forus, beyond the site boundary.

The Tenderers A and C have based their competition proposal on a phased development that does not meet the program's requirements. The described programs, in terms of total area and functional requirements, are not fully satisfactory. These project proposals did not reach the final round of evaluation.

The jury points out that the two best project proposals show good solutions to most of the different challenges related to the requirement specification. This includes compliance with the area and performance requirements related to the room program, a pleasant and inspiring working environment, a unique and distinctive exterior, and the desire for a landmark that fits at Forus.

In the master plan it has been important for Statoil to have outlined a solution that provides the most flexibility over time. The hardest part of the task has been to fulfil the desire for a natural, phased development and to describe a good allocation of the existing office building.

A and C have shown a solution for the total site with one building for a total of 8,000 work places, with a phased development. B and D show a solution in which to develop the site with several buildings, with a total of 8,000 work places. Proposal B assumes existing Forus West demolished in phase two. The jury doubts this solution and believes that it is likely to be demolished in connection with phase 1. Proposal D shows a more flexible development, where existing Forus West is integrated into the solution until a possible third phase. This is also positive for the development's overall economy. Being able to keep the current buildings will provide significant cost savings and flexibility related to Statoil's utilization of own building volumes.

The jury finds it very regrettable that one of the five invited firms withdrew in a limited competition in which a very high number of architectural firms sought prequalification.

## 8. EVALUATION OF THE SPECIFIED CRITERIA

### 8.1 Architectural and functional solution

Tenderer A, motto: "Cambia Siempre"



The project is on a highly conceptual level. The project shows a building kit-like structure with clear associations to a drilling platform, located in the south-western corner of the site. The site is fully planted with dense forest, with hiking trails and a woodland pond in the centre. The author's stated ambition is to create a public park area, as a necessary focus for the entire Forus area. The area should be a green lung that can be used by anyone working at Forus, with opportunities for recreation, exercise, picnic, dining, skating, hiking trails etc.

The idea is to provide a building with maximum flexibility and with mostly open floor plans. This is proposed achieved through a structure where four concrete towers with integrated stairs and lifts are connected with giant trussed beams in steel. These are placed in an altitude equivalent to 14 floors above ground level. Over these beams mounted a series of box-shaped floors of prefabricated composite steel, arranged to form an atrium in the structure midst. The highest altitude of the structure is approximately 30 floors. In later building phases the idea is to add the desired number of new floor boxes, freely placed and hanging under these beams, the lower ca. 4-5 floors above the ground.

The project appears to be unfamiliar with the program description and the Forus area. The jury has a certain understanding of the draft idea, the author has been inspired by a drilling platform, but this is not realised in a credible building structure.

The floor layouts are only very sketchily indicated in the written material. The layouts are printed directly onto the floors in the model. Given that all fixed installations are located in the "core towers", all floor boxes have a fully open plan that allows for total flexibility. It is not shown how the internal horizontal communications between the different parts of the floor plans are intended to be solved. As the floor plans in the model are glued, it is only possible to control the layout of the upper floors. Beyond that, one must resort to pure guesswork to try to understand the total room program, and what the individual areas are intended to be used for.



Because only a small number of floor plans can be controlled, it is difficult to make any area or volume controls, or count of the number of work places. This limits the possibilities to conduct a qualified cost assessment and this is not done for this project.

**Tenderer B, motto: "The Geology of Minds"**



The author has been inspired by Statoil's leaf shaped logo, referred to as "a joining star", where the different buildings on the site are made out of polygon-shaped individual elements radiating from a common core.

The project's first building phase is located at the northeast corner of the site, in order to achieve the shortest distance and highest possible synergy with Statoil's office building at Forus East. The project proposes to establish a park-like landscaped public zone along Vassbotnen, called "Statoil Plaza". A sports centre with a café, changing rooms and bicycle parking is placed along this plaza, west of the proposed building.

The building's front portion is positioned somewhat close to the main road to the north; cf. "Green Plan for Forus area". This can be compensated for by moving the building to the south, but will result in additional consequences for the existing building on the site.

The author has been inspired by Statoil oil drilling and shows a geological sedimentary layer structure that governs the building's facade design. The jury considers this as only partially successful. Despite the original starting point, the facades are not particularly distinctive.

The building grammar with a large overhang appears in a slightly unfriendly manner, as seen from ground level. The overhanging volumes seem dominant, especially in the entrance area.

A special building technical design is proposed. The three lower floors are constructed out of concrete, while the floors above are built-in wood structures. The motivation is to reduce CO2 consumption, in line with Statoil's environmental ambitions. The jury doubts if this solution is environmentally sound and technically feasible. This material related dichotomy should also be clearer in the project's architectural expression.

The building's office floors are well designed. The building's fan-shaped plan provides great facade lengths and very good lighting. It is well adapted for social meeting places in the core area to the south, close to the work places through the intermediate and screened core area. It is shown generous balcony spaces westward adjacent to the social area. This is an impressive solution, but the jury is sceptical to the frequency of use of this space.

A count of the number of work places shows that the project proposal has approximately 3 200-3 300 work places, slightly below the requirement of 3,500. The meeting room capacity as shown in the proposal is too small regarding m2 per meeting chair. Many of the meeting rooms are designed too narrow to meet the requirement for a dual monitor solution in the meeting rooms. Number of focus rooms is satisfactory. Number of copy/print rooms should be reduced to about half of what is drawn.

Number of parking spaces in the project is 489 (500 required). It is shown how this can be expanded to 1,000 parking spaces in the later phases.



**Tenderer C, motto: "A walk in the park"**



Similar to project B, this proposed building is located in the northeast corner of the site. The motive for this is to achieve a short distance to Forus East and to release the largest possible part of the site to a sculpture park, which the author believes can be Statoil's gift to the environment and that can be a cultural centre of gravity and attraction for the region. The area to the south is here allocated permanently as wetlands.

The project shows a phased development of the site. The project proposal is based on the existing buildings being demolished immediately after the first phase of 3,500 work places is completed, and that the 1,100 employees in the existing office building move into the new building.

Office floors in the tower block are very traditionally designed, with little flexibility, small social zones and with few spatial qualities. The jury is sceptical of the selected schematic design methodology, in that the space program is considered as a long 21 meter wide strip, which is "cut up" and distributed to the building's lower floors and tower block. The office space could benefit from being organised differently in the lower and higher parts of the building with different width and thereby achieved greater flexibility.

The construction technology is based on cantilevered steel frames on decks of solid tree elements. This will reduce the building's mass to only 30% of a concrete construction. The project proposal shows a facade solution that does not embrace the challenges of gaining control on incoming heat radiation and cooling.

The project's architectural design emerges as conventional, with a small degree of uniqueness and innovation. The towers lack an identity-creating quality.

The sculpture park design is described in detail, but appears on the illustrations rather rigid and desolate, with few spatial and experiential qualities. There is also a lack of contact and integration between building and park. The transition towards the wetlands to the south is undefined.

**Tenderer D, motto: "E=mc<sup>2</sup>"**



The first building phase of the project proposal is located towards the crossroads in the north west of the site, with close connection to existing building at Forus West and to the central point at Forus and the planned public transport lanes at Vassbotnen. The jury considers this as a solution which offsets that the distance to Forus East has become longer compared to placing the new building in the north east corner. The location contributes to strengthening a desired urbanization of the area, as described in the Forus vision.

The building's ground floor is parallel to Vassbotnen and Svanholmen with large window openings onto these. The visual contacts with the interiors on the ground floor will enrich the area.

Above the ground floor the building has an elliptical form. The building volume is chamfered, falling from a 16 story height towards ground floor facing south. The sloping south facing roof surface consists of glass and solar panels with recessed terraces. This gives the building a strong and distinctive shape.

Parking facilities with an overhead sports hall are placed under an undulating roof surface along Vassbotnen.

The program requires that the new building should be a passive house, but has not requested a calculation that documents this. According to the jury's assessment, this project has a great potential to achieve such energy objectives. One obtained assessment of HVAC consultant support this, and describes the author's energy and climate strategy as inspiring and confident.

The entrance is located on the south side and relate to existing buildings in a good way. The entrance is designed in a friendly and welcoming manner. Office areas and working environment are solved in an inspiring, clear and forward-looking manner. All work places are against the facade with daylight and views.

Service areas with toilets, meeting rooms, technical rooms, etc., are placed as a clear separation between workplace and social meeting areas and communication areas in the building's core. This core has a very attractive design, located around and in between three large, open atriums, where elevator cores and open staircases are located. The atria and the short distance up to the sloping glass roof also gives these core areas good lighting. The solution provides opportunities for varied design and motivates collaboration, both formally and informally.

Because of the building's sloped shape, the office floors get progressively smaller toward the top. This results in different group sizes and identity, which the jury sees as positive. The gradual areal reduction also means that the atria are becoming fewer and cropped differently on each floor, which contributes to variation and provides exciting spatial sequences.

A control counting shows that the project responds very well to the program's area and functional requirements. The requirements for the number of work places, focus rooms, social areas, meeting spaces and canteen capacity are met in a very good way. The project proposal is well documented and a precise counting showed that the project meets the program requirements.

The project has some fire safety challenges. The jury has obtained a fire professional assessment which concludes that these can be solved. This involves, among other things, the glazing throughout the atria in the building's core and at the forefront of the terraced office spaces against the glass ceiling in the south.

The project has good potential to be a great landmark and a point of reference in the Forus area. It has a distinctive, easily readable, iconic shape with high quality figure. It is both a low and a lofty building and relate well to the site, to the existing building and to Forus. It is this project that maintains coexistence with existing Forus West building in the best possible way.

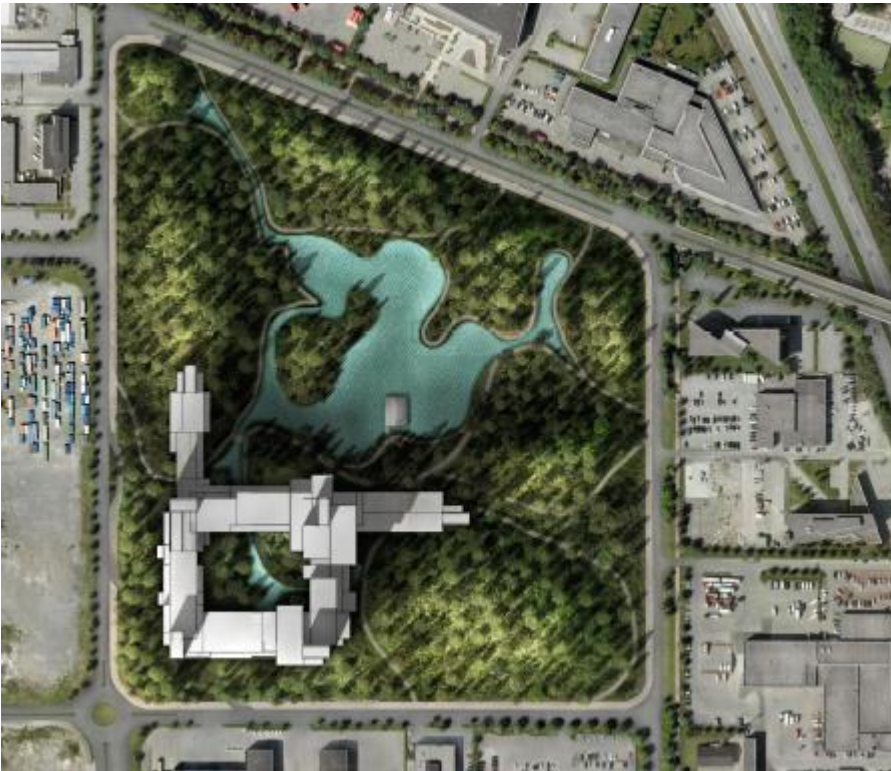
The jury sees the potential for project D to be a distinct identity carrier for Statoil, which will both strengthen the Forus area and give Statoil employees pride and inspiration. The project has a significant innovative nature through advanced technological solutions, which fits well with Statoil as a leading technology company. Its clear inclined surface towards the sun is suitable for Statoil's energy and environmental ambitions.

Because of a very space efficient building shape and office solution, the gross area is far lower than the other project proposals.



## 8.2 MASTER PLAN

**Tenderer A, motto: “Cambia Siempre”**



The idea of a forest/park contradicts Statoil communicated idea of the development of the plot. The project does not correspond with the intentions described in the Forus vision of an urbanization of the area.

**Tenderer B, motto: “The Geology of Minds”**



The main concept of this project is to use the same structural typology throughout. A future park-like area is placed in the centre with the buildings placed around.

The authors show a structural design for utilization of the entire plot.

The project shows a development in several phases, where after the first phase covering 3,500 work places, it outlines two additional buildings of about 2,000 work places each. Parking is placed below ground level and should therefore not be included.

The project's first building phase is located at the northeast corner of the plot, in order to achieve the shortest distance and highest possible synergy with Statoil's office building at Forus East. The project proposes to establish a park-like landscaped public zone along Vassbotnen, called "Statoil Plaza". A sports centre with a café, changing rooms and bicycle parking is placed along this plaza west of the proposed building.

The project's weakness is that the existing office building, if being demolished at a late stage, remains all too close to the new development. The proposed park in the middle cannot be realized before this building is removed. The jury's perception of this project is that existing office building at Forus West should be demolished in connection with first phase.

The master plan concept provides for the southern part of the site for alternative use, and shows how this can be part of the total plan.

**Tenderer C, motto: "A walk in the park"**



The master plan proposal shows a building consisting of two relatively similar constructions that can accommodate a total of 8,000 work places. The building is located in the north-eastern part of the site. The remaining site area is proposed to be used for a sculpture park. The area to the south is here allocated permanently as wetlands.

The sculpture park design is described in detail, but appears on the illustrations rather rigid and desolate, with few spatial and experiential qualities. There is also a lack of contact and integration between building and park. The transition towards the wetlands to the south is undefined.



**Tenderer D, motto: “ $E=mc^2$ ”**



The master plan shows a development in three phases. The first building phase of the project proposal is located towards the crossroads in the north west of the site, with close connection to existing building at Forus West, to the central point at Forus and the planned collective axis at Vassbotnen. The first phase consists of an office building with 3,500 work places. The next two phases are of two similar shaped buildings, although with lower and smaller footprints and with a capacity of approximately 2,000 and 2,400 work places.

The project's total development provides a relatively high degree of flexibility because the three buildings are of varying size from 2 000-3 500 work places. Moreover, it also provides flexibility for existing Forus West that may be retained until phase 3.

Emphasis is placed on park-like landscaping along an inner pedestrian zone, clearly separated from parking areas and other traffic. The pedestrian zone runs diagonally through from the future large parking construction at Svanholmen towards the crossing of the highway and to Forus East, connecting the entrances of the three buildings and creating a number of informal meeting places and attractions. In the jury's opinion, this is a successful approach. The traffic pattern shown is vague in relation to transport of goods, other motorists and pedestrians.

The draft provides for the southern part of the site for alternative use, but does not show any suggestions for how it can be utilized.



### 8.3 COSTS

As part of the evaluation, high level cost estimates have been prepared for the various competitive proposals.

The following assumptions form the basis for the cost calculations:

- 1) Parking included, 500 places
- 2) The outdoor work is included
- 3) Margin, reserves are included with 18%

The area calculations given in the project proposals from the tenderers were checked. Cost estimates and area utilization shows that tenderer D will be most economically robust for Statoil.

### 8.4 HSE

All tenderers were asked to carry out a risk assessment of their project proposals. The tenderers were evaluated based on submitted risk assessment.

## 9. TOTAL EVALUATION

The jury has made an overall assessment of the project proposals based on the evaluation criteria.

## 10. JURY RECOMMENDATION

The jury for the technical evaluation ranks project proposal D as the best proposal. This recommendation is made by a unanimous jury. The jury recommends that this project be the basis for further work.

## 11. OPENING OF THE NAME ENVELOPES

After the jury had reached a final decision the submitted name envelopes were opened. The papers showed that these architects were behind the respective project proposals:

#### **Tenderer A      "Cambia Siempre"**

- Foster + Partners (UK) together with
- Space Group (NO)

#### **Tenderer B      "The Geology of Minds"**

- Helen og Hard (NO) together with
- SAAHA (NO)

#### **Tenderer C      "A walk in the park"**

- Snøhetta (NO)

#### **Tenderer D      "E = mc<sup>2</sup>"**

- Wingårdh (SE) ((Winner))

OMA (NL) did not submit.