

profile 1 - architecture

developing sustainable, affordable and practicable construction techniques

Maathuis / JoustraReid

The construction sector is seeing many changes. Although the need to build in a sustainable, circular and climate-proof manner is widely acknowledged, at the project level there are often pragmatic circumstances that can hinder the willingness to adopt innovative processes and ideas. Further, a construction assignment often involves a wide range of forces and considerations. As a result, it may be difficult to persuade partners of the need and added value of sustainable alternatives not based on traditional ideas and familiar construction methods. Our office embraces sustainable and circular construction techniques. We participate fully in the field and work with passionate clients, consultants and builders. Our projects are contemporary and tangible.

We are eager to perform more research into sustainable construction techniques and into the interests and motivations of other parties in the construction sector that influence building design. The goal is to better enable ourselves and other partners to truly implement innovation in the building sector. We believe that this is an inspiring challenge for a proactive and analytical young talent to contribute to.

The research at the heart of the collaboration project consists of two parts and is aimed at assignments and partners within our own environment. These two parts are:

1: Design research

Research into alternative circular techniques to be used for the type of assignment that our office performs.

2: Network research

We engage our partners in a dialogue – our clients, consultants, builders – to map out the factors which, from their viewpoint, influence sustainable innovations in construction.

More information:

https://maathuisprojecten.nl



profile 2 - architecture

renewal project for energy-efficient dwellings at Rotterdam's Waterwerk

Linea architects

Linea architects is working on the Energy dwellings on Waterwerk in the former DWL grounds in Rotterdam. The central question is; how can we renew these dwellings in a manner that, forty years after their construction, represents a fresh statement with respect to energy-inventive construction for the next forty years?

This assignment requires the energy and the eagerness of someone who can think in innovative, out-of-the-box ways, yet pragmatically as well. The talent will need to elaborate many aspects of the discipline in a very concrete manner within a short space of time, and to weave them together to form an architectural image. The talent will need to interview residents, suppliers of building products, as well as specialists in the field of sustainability. The knowledge thus acquired will need to be elaborated further and converted into specific advice for the renovation project, and translated into image and technique. The talent must be able to present this advice in a clear visual manner.

This integrated assignment requires an engineering background with a strong affinity for and interest in architecture; or an architectural background with a strong affinity for and interest in sustainable technology. Use, space and engineering aspects need to be aligned in an integrated manner in a new picture that does justice to the current architecture and urban development of this symbolic complex of 'energy dwellings'.

The talent must be able to work independently with an investigative attitude. He/she must take an active interest in modern sustainability techniques in the building sector, and must already possess some knowledge in this field. He/she must be able to convert research results into specific and suitable architectural solutions.

The talent must have clear communication skills, as the project will entail talking to many different people. He/she must be able to present him/herself well in a variety of settings. A good command of the Dutch language will help in this respect.

We very much look forward to supervising and supporting the talent. Our ambition is to see a shared enthusiasm for the assignment result in a forty-year prolongation of this remarkable building project.

More information:

www.linea-architecten.nl

https://rotterdamwoont.nl/items/view/134/Energiezuinige_woningen_DWL_terreinhttps://www.sacon.nl



profile 3 - architecture

significance of materials, dimensioning and detail in the current and future construction culture

Studio VVKH

In every project undertaken by Studio VVKH, the materials, dimensioning and details play a pivotal role in the design process. For us, architecture is first of all a craft. Based on accumulated professional knowledge, we investigate and apply new construction techniques and expressions.

The research centres on the work by architect Sir Edwin Lutyens (1869-1944), which will be used to reflect on new questions arising in today's design practice. Which design choices can be made in a time where new techniques demand a new approach to dimensioning, detail and materials? How is architecture still a craft in the contemporary world, and how can we connect new traditions to those of the past?

The research project consists of two sub-projects that complement and support each other:

1: Dimensions & materials as one-off use

The first sub-project researches the dimensioning systems used in architecture. Based on a number of case studies to be selected by the talent, we will investigate how Luytens used materials and detail in relation to dimensioning systems and proportions.

2: Dimensions & materials in relation to new techniques

The second sub-project will examine how the new techniques that determine construction practices nowadays, such as prefab construction, 3D designing, light-weight constructions, energy-efficient and circular construction, compel us to deal differently with dimensions and materials.

More information: www.vvkh.nl



profile 4 – urban development and planning

new core values for Amsterdam as a social and sustainable city

BURA urbanism

How can urban development contribute to more equal opportunities? Our quest to create a social and sustainable city is at the heart of many of BURA's urban development projects. In our view, the social and sustainable city is one with open and diverse urban environments where health is linked to a strong social basis for all citizens. The increasing population density of inner city areas gives reason to improve the quality of the living environment. Population density not only offers economic and sustainability benefits, but can go perfectly hand in hand with social equality and a stable urban ecosystem.

In many respects, Amsterdam resembles the ideal city. It is social, liberal, tolerant, has an enterprising climate, offers a rich and varied range of facilities as well as a varied mix in terms of living, working and recreation. However, the city's attractiveness is undermined by a reduction in social diversity and tensions between population groups. The high ambitions with regard to sustainability, combined with high land prices are leading to an unaffordable city and a displacement of population groups and types of work. As we see it, population density should be used as a vehicle to achieve societal goals and to promote a neighbourhood-centred, participative strategy.

In our research (case study Amsterdam) we wish to examine more closely the themes underlying the 'attractiveness paradox' and to conduct a number of experiments to that end. Through interviews with experts in the field of area development, social renewal, mobility and place-making, and in collaboration with city makers and the Amsterdam public authority, we (and the talent) will seek to uncover the new core values of the social and sustainable city.

The talent we seek will preferably have a background in the social sciences and be able to analyse, combine and convert knowledge from various disciplines into concrete recommendations and strategic principles.

More information: www.bura.city



profile 5 – urban development and planning

healthy urbanisation

PosadMaxwan

For PosadMaxwan, healthy urbanisation is an essential theme. The Netherlands is in a process of change, as is the rest of the world, and we aim to take an integral approach to these transitions. The theme of health helps us to think about the future of the city and its surroundings in an integral manner. Given the increasing population density within the city, it is high time to start focusing again on designing vital cities. The living environment has an impact on the health of body and mind. The theme of health also lets us connect to other essential changes such as the mobility transition, climate adaptation and biodiversity.

We pioneered the development of a generic toolbox with spatial design interventions to create a healthy city. Our toolbox has put the healthy city on the map nationwide as a priority in urban development. The principles have been applied successfully in the station redevelopment project in Utrecht and fulfil a guiding role in many of our projects. For instance, we developed a masterplan for the In de Boogaard shopping centre in Rijswijk, transforming it into a green and multifunctional city hub. For the city of Rotterdam we have sketched several future scenarios with a focus on healthy urbanisation, and our walkability tool is contributing to improving the environment for pedestrians.

Within the theme of healthy urbanisation, we offer the talent ample room for research and experimentation and will furnish him/her with a valuable and personal role within the whole organisation, in line with his/her particular qualities. We would also like to let the talent play a role in our current projects to help consolidate the relationship between independent research and practice. We are open to new insights and refreshing perspectives on the theme of healthy urbanisation.

More information: https://posadmaxwan.nl/



profile 6 - urban development and planning

Theory & Practice: 3 challenges for tomorrow's city

Rademacher de Vries Architecten

There is a housing shortage in the Netherlands. The ambition is to increase population density in the direct vicinity of the national public transport grid with sustainable and affordable dwellings. Unfortunately these goals are not yet being achieved and many unanswered questions remain regarding how to tackle these challenges.

Our office is working on an ambitious plan to build 5000 dwellings within a highly urban living environment on a former logistics terrain near Rotterdam. The ambitions are considerable: an innovative combination of living and working; applying shared mobility and minimal car ownership at the neighbourhood level; transforming old warehouses into new functions; maximum use of CLT wood construction; and an energy infrastructure that exchanges heat and electricity with the adjacent business park. Our office is working on this assignment with a number of ambitious entrepreneurs in the area who take a hands-on approach to experimenting with the realisation of this new city district. For this project we have formulated 3 urban and architectural questions to investigate over the coming six months:

- 1. What is the spatial effect on tomorrow's city of shared mobility, electric cars, mobility hubs and self-driving vehicles?
- 2. How can we achieve a better combination of living and working, so that production and other previously peripheral functions are again integrated into city life?
- 3. Can we rethink the box-typology (distribution halls, etc.) in urban and architectural terms?

Over the course of three months, we wish to work with the talent to flesh out these three themes, one per month. First, theoretical and precedents research will be conducted, followed by the development of practicable concepts, to be presented to the clients by the young professional.

We are seeking a talent able to understand complex societal challenges and to convert these into practicable spatial concepts. Prior knowledge with respect to the themes above is strongly preferred. The goal is to summarise the research and the concepts in strong graphic visuals, scale models, animations and other media. Above all, we are seeking an inquisitive and motivated person, eager and committed to contribute to the challenge outlined above. Rademacher de Vries is an architectural office focusing on the urban environment. Through theoretical research, applied practice and education, we engage with strategic area development, design of public space, infrastructure and architecture. Through this versatile approach, we seek to produce relevant insights rooted in a self-conscious understanding of our discipline and of contemporary culture.

More information:

www.rademacherdevries.com



profile 7 - interior architecture

work environments of the future

Hollandse Nieuwe

This summer, BOZAR (Centre for Fine Arts, Brussels) is peering into the future through a series of conversations with writers, scientists and philosophers. In one of these talks, architect Rem Koolhaas is asked for his vision of the world after COVID-19, to which he replies: 'It will have some impact but I'm not sure yet if that impact will be very deep'*. In September's edition of Vogue**, a number of leading fashion designers describe the opportunities for change. These are future visions that balance between hope and fear and have a powerful impact on our working lives.

In our designs we also seek the positive impact humankind can have on the environment. We also wish to approach this challenge from this angle. We wish to investigate how, based on the knowledge accrued in the past months, we can adapt office environments to the 'new need', allowing people to perform to the best of their ability. The new form of 'communal working' should form a positive and inspiring manifesto, making the office garden debate a thing of the past. b

In three months we shall develop a vision supported by inspiring design proposals. The talent should have strong analytical skills, a natural aptitude for concept elaboration and storytelling, the ability to apply boldness and a sense of humour at the right time, and be able to bring ideas to life with strong visual skills.

*YouTube: (Repairing the future with Rem Koolhaas | Interview | BOZAR at home from 49:45)
** Vogue | Activism Now, The faces of hope (UK) (from page 264: A change of pace)

More information: www.hollandse-nieuwe.com



profile 8 - interior architecture

repurposing Fort Kudelstaart

Serge Schoemaker Architects

Fort Kudelstaart (1906) is a fortress island situated in a unique location in the municipality of Aalsmeer. The fort is part of the Defence Line of Amsterdam, built around the capital city between 1880 and 1920. Fort Kudelstaart is a national monument and a listed UNESCO World Heritage Site.

In the coming years, the island will be transformed into a nautical centre with sailing, catering, hotel and conference facilities. Thanks to the direct connection with the Westeinder lakes, the island is a perfect jumping off point for water sports. Serge Schoemaker Architects has been commissioned by Zeilsport Kudelstaart to elaborate a masterplan for this repurposing project.

As part of this process, we – together with the talent – aim to elaborate the plans further. Part of the site extension will need to be realised inside the earthen ramparts of the fort, resulting in an unusual experience and architecture. The interior will have a vital role in the plan: the space, the entry of light and the materials used for the underground extension, and the design of the transition from the existing fort building to the new build.

For this project, we are seeking a young professional with architectural knowledge and an affinity for creating sensitive architecture. This design brief is all about the experience of the (spatial) interior. Prior experience with comparable (study) projects is considered an asset.

More information:

www.sergeschoemaker.com



profile 9 – garden and landscape architecture

research into robust water system combined with circular agriculture on higher sandy soils

H+N+S Landschapsarchitecten

H+N+S Landschapsarchitecten is a landscape architecture office where spatial design, vision development and research go hand in hand. Our collaboration programme will focus on design research into a robust water system combined with circular agriculture on the higher sandy soils. Aridity on mainly higher sandy soils as well as flooding after strong rains and major challenges such as the energy transition, climate goals and the transition to circular agriculture all require a different approach to our living environment and the water system. What we need is land design 2.0.

The current water system is mainly geared to draining away water to enable agriculture. We are searching for a future-proof water system that also serves other goals in the region. We are investigating the possibilities of circular agriculture based on the resource flows (the metabolism) of the area. Through an integral approach based on sub-basins, we connect the themes of (drinking) water and agriculture to various initiatives and developments in the area, for instance in the field of energy transition (elaboration of Regional Energy Hubs/Regionale Energieknooppunten), soil remediation, and challenges regarding N2000/nitrogen and industry.

The area around the Sallandse Heuvelrug (moraine complex) in Overijssel has been selected as case study area. We are conducting two projects here on which to build further. The ultimate goal is to create a pilot project to test a robust soil and water system in combination with circular agriculture.

We are seeking a systems thinker with a passion for the themes described above and a proactive attitude, who can participate in the different studios to be organised in this context. This assignment requires a good command of the Dutch language.

More information: http://www.hnsland.nl/



profile 10 - garden and landscape architecture

green housing in the Netherlands and new ecologies based on energy production

Studio Hartzema

Studio Hartzema and its research dept. FRESH want to expand their knowledge and research on projective ecologies and integrated visions of living. Following this line, the topic of the assignment will revolve around green living in the Netherlands (with an emphasis on the Randstad) and new constructed ecologies based on energy production, local production cycles and sustainable development. The recent COVID-19 pandemic shed additional light on the relevance of this topic.

The main goal will be to research, develop and deliver a large-scale vision of green living in the Netherlands where local production cycles and constructed ecologies are integrated. The vision will be manifested in various scales and will set the basis for future design frameworks and masterplans in different areas of the Netherlands.

The ultimate aim will be to present the vision to our circle of professionals, academics, municipalities, government representatives and businesses at the end of the three-month period and determine a potential follow-up phase.

Our team intends to welcome our apprentice as a thinker and incorporate them in the FRESH dept. We look for solid design and analytical skills, creativity and imagination and an interest in design research, projective ecologies and scaled-up thinking. Our continuous support, training and guidance will allow for a mutual exchange of ideas and a shared definition of new content and experiments.

More information: www.studiohartzema.com www.freshresearch.nl



profile 11 - interdisciplinary

MAISON CIRCULAIRE

Jacques & André

'Maison a Bordeaux' by Rem Koolhaas and 'circular design': these are two concepts in architecture (with one more established than the other) that are rarely mentioned in a single sentence. But if you do, the result is a rousing transition challenge: 'Maison a Bordeaux, one hundred percent circular, and not one percent less'. The point is not to criticise either 'Maison a Bordeaux' or Rem Koolhaas, but to set an ambition level for our work in conceptual, aesthetic and constructive respects. It creates a framework that challenges us, but also serves as a mirror to reveal the shortcomings of circular design.

To do so, the oddest conversations will take us to the strangest places. We will visit junk yards, personal attic rooms and digital platforms. We shall make scale models, drawings and collages. We will draw up data sheets and flow charts and devise details, material principles and assembly methods. And we shall not shy away from either debate or hard work. For one thing is sure: the circular challenge means extra effort. More work, more intensity, more reward.

And if even this does not satisfy one's hunger, there's an assignment on the shelf to create a 'green garden shack' for filmmaker and fantasist Noël Loozen.

Bruno Vermeersch, founder of Jacques & André – an office where the main work tool alternates between a computer and a saw bench, for plots ranging between zero and ten thousand square metres. A place where I design but principally make. As the discipline is relying ever more heavily on the computer, I pledge allegiance to the indestructible bond between the digital and the physical world, and between the dreamer and the builder.

N.B. Because of the search in Dutch material depots and digital material banks, this assignment requires a good command of the Dutch language.

More information:
http://www.brunovermeersch.be/
http://www.jacques-andre.com/



profile 12 – interdisciplinary

design to lower energy consumption in the Mariahoeve neighbourhood through a socially engaged approach

Vanschagen Architecten

Vanschagen Architecten is working to renew the city. The city as it exists is for us a starting point and source of inspiration for the future user. Through targeted maintenance, small adaptations, robust renovation, rigorous transformation or demolishment/new build, we let neighbourhoods and buildings participate naturally in renewal processes.

The collaboration programme will focus on the Mariahoeve neighbourhood in The Hague: an organically designed neighbourhood from the liberal 1960s with a tottering balance between types of residents, water and greenery, varied urban and open construction. The neighbourhood is on the verge of drastic programmatic and spatial changes in the fields of climate, sustainability and demographic transition, which can only occur in stages and in close collaboration with the neighbourhood. Despite the divergent economic interests, stakeholders will need to join forces in order to make the neighbourhood more future-proof. There are several dials to turns and knobs to tweak. Still, the aim to achieve a more sustainable, energy-neutral and nature-inclusive way of life is the pre-eminent tool with which to achieve this overall transition.

Specifically it means for this neighbourhood that:

- The building energy requirements must be reduced drastically (CO2/environment);
- Energy should be sourced from clean and renewable sources (sun-PV, thermal energy storage, industrial residual heat-SV);
- The insulation value of buildings must be improved substantially:
- Purifying greenery should be cherished again;
- Car use should be reduced (through shared cars and E-car as temporary solution).

While steadily restoring the fragile equilibrium between greenery, users and buildings, it is vital to preserve and strengthen authentic cultural-historical elements to prevent the physical disfiguration of buildings and inner estrangement of users.

To conduct this research, we need to talk to neighbourhood residents and (local) professionals. That is why we are seeking a socially engaged, patient urban physician with cultural-historical interest. Someone able to 'read' the neighbourhood and who can understand its residents through observation and participation.

More information:

www.vanschagenarchitecten.nl