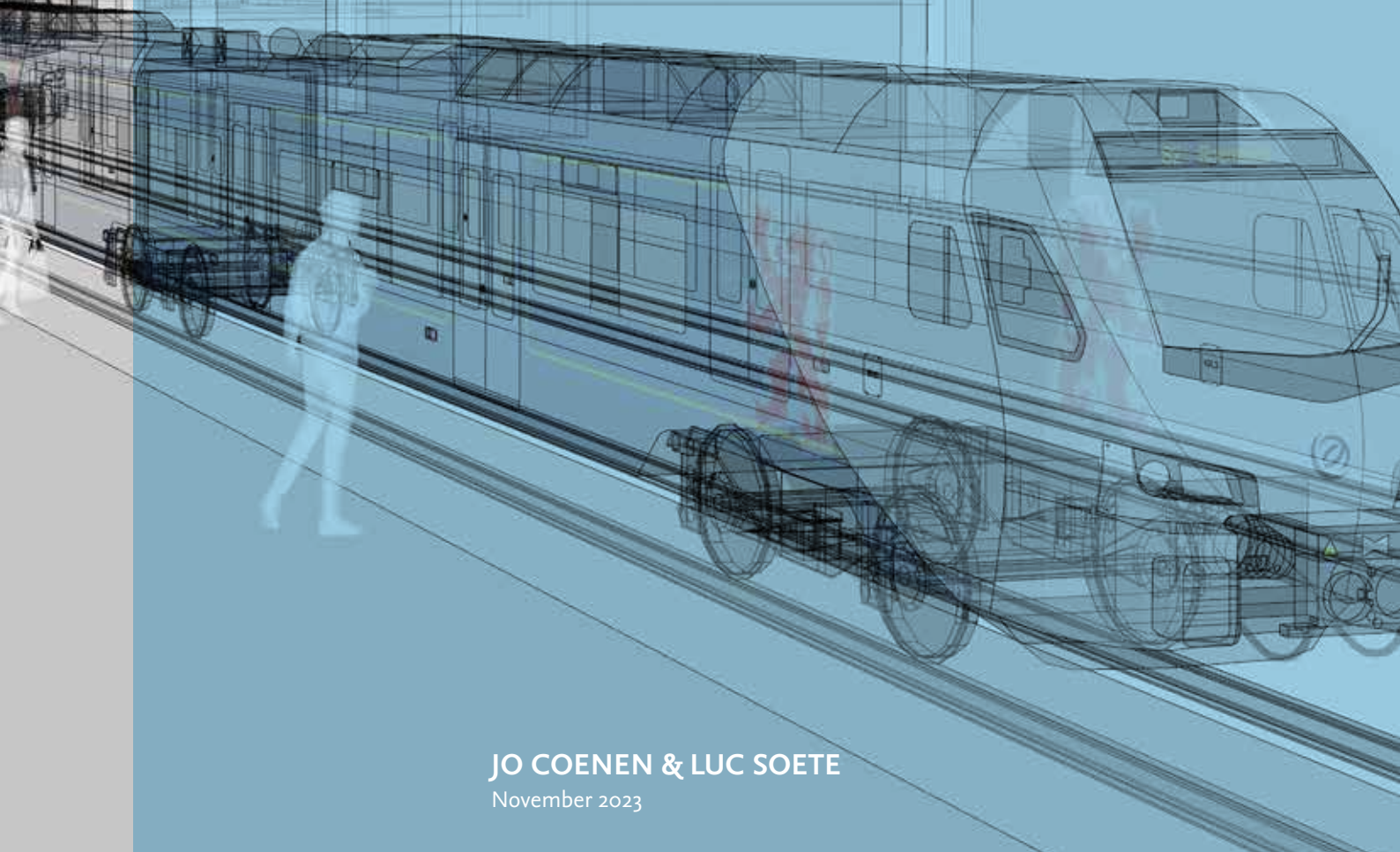


AROUND THE TRACKS

**Sustainable urban rail
integration in Maastricht**



JO COENEN & LUC SOETE
November 2023



Plaza Real in Maastricht. tekening Jo Coenen

“Over the last fifty years, the railway station’s potential as a viable contributor to the cities’ sustainable development has been unnoticed. As a result, challenges and opportunities have gone ignored. The existing practice and theory of station development reflects an insufficient comprehension of the location’s contradictory nature. In addition, railway stations have often fallen in the gap between transport and urban agendas, as well as diverging responsibilities, being overlooked by urban planners and policy makers at local, national, and European level... But recently, the literature on urban studies has shifted from the idea of the transport infrastructure as an element that produces discontinuity with the urban tissue to an infrastructure that generates places for citizens while still creating urban continuity..., which represents an improvement and a fertile ground for giving the station a role of urban connector. As a result, stations can be used to generate such public linking areas while also allowing social interactions.”

Lunardon, A, Vladimirova, D. and B. Boucsein (2023), *How railway stations can transform urban mobility and the public realm: The stakeholders’ perspective*

PREAMBULE IN DUTCH

Rond het Spoor

Precies twee jaar geleden schreven wij de Masterplanvisie **Boven het Spoor**¹. De focus in dat visiedocument was gericht op het “helen” van de spoorbreuk die de rechteroever van Maastricht verdeelt in een oostelijk en westelijk deel. Ons voorstel tot het ondertunnelen van de doorlopende sporen vanaf het Centraal Station Maastricht tot het zuidelijk gelegen station Maastricht Randwyck, droeg echter slechts in geringe mate bij aan de zogenaamde “spoorse baten” voor treinreizigers, zeker vergeleken met de omvangrijke kosten die met een ondertunneling gepaard gaan. Het bracht ons tot het schrijven van dit nieuwe voorstel: **Boven het Spoor 2.0** of beter nog een Masterplanvisie **Rond het Spoor**.

Dit nieuwe voorstel heeft een andere centrale focus: het beter gebruik maken van de aanzienlijke ruimte die op dit ogenblik in beslag genomen wordt op Maastricht’s rechteroever door de “spoordelta”. Deze zogenaamde “non-descripte” ruimte is in Maastricht zo omvangrijk door de historische ontwikkeling van spoorwegen van en naar grensstad Maastricht in de 19^{de} eeuw. Nu biedt deze historisch gegroeide ruimte echter heel concrete mogelijkheden tot oplossing van de omvangrijke woning- en kantoorbehoefte in Zuid-Limburg die niet alleen aansluit bij de recente plannen van provincie Limburg en Minister Hugo de Jonge om zich te richten op de zes Limburgse steden met een openbaar vervoersknooppunt², maar past ook goed binnen de duurzame stadsontwikkeling van openbaar vervoer. Tezelfdertijd, bouwt dit nieuwe advies op het vorige Boven het Spoor advies, nu met een scherpere focus op zowel het helen van de spoorbreuk als de realisatie van “spoorse baten”.

Gezien de internationale ambities van Maastricht en met name haar rol als internationaal knooppunt wat spoorverkeer betreft, werd dit rapport in het Engels geschreven. Het rapport bouwt voort op de talrijke commentaren die ons eerste voorstel: Boven het Spoor mocht ontvangen. Wij zijn velen: burgers van verschillende buurtplatforms, ambtenaren van de gemeente Maastricht, de wethouders John Aarts en Frans Bastiaans, ProRail amtenaren, Martijn Gesink van KODOS, Jeroen Diks van BBN, evenals Harry Reijnders, voormalig NS-bouwmeester, dank verschuldigd voor gedetailleerd commentaar op ons eerste rapport. Ook de steun van de vele bezoekers van de Boven het Spoor tentoonstelling die met steun van Wim Hupperetz, de directeur van Centre Céramique, aldaar in de zomer van 2022 georganiseerd werd, vormde een continue inspiratiebron.

Het heeft ons tot deze nieuwe visie die we als titel “**Around the Tracks**” hebben meegegeven. In dit Engelstalig rapport, beschouwen we dit ook als een case studie voor een “**sustainable urban rail integration**”.

Wij zijn Alexei Gleizer, Sada Shirafuji en Cees van Giessen veel dank verschuldigd voor hun tomeloze inzet bij de uitwerking van de vele figuren. De visie en voorstellen zoals hier omschreven vallen echter onder onze volledige eigen verantwoordelijkheid.

¹ Coenen, J. en L. Soete (2021), *Boven het Spoor: Een Masterplanvisie Stationsgebied Maastricht*, zie https://cris.maastrichtuniversity.nl/ws/portalfiles/portal/76565488/BB_masterplanspoorzona_2021_definitief2.pdf

² Zie De Limburger, *Grootschalige woningbouw bij stations van zes steden*, 9 november 2023.

From “Across the Tracks” to “Around the Tracks”

³ As Wikipedia puts it: “The place name Maastricht is an Old Dutch compound *Masa-* (> *Maas* “the Meuse river”) + Old Dutch **treiekt*, itself borrowed from Gallo-Romance **TRA(I)ECTU* cf. its Walloon name *li trek*, from Classical Latin *trajectus* (“ford, passage, place to cross a river”) with the later addition of *Maas* “Meuse” to avoid the confusion with the *-trecht* of Utrecht having exactly the same original form and etymology. The Latin name first appears in medieval documents and it is not known whether **Trajectu(s)* was Maastricht’s name during Roman times.” <https://en.wikipedia.org/wiki/Maastricht>

⁴ See Jelmer Visser, *Maastricht has the most heat stress-resistant inner city in the Netherlands*, 22 October 2022, <https://innovationorigins.com/en/maastricht-has-the-most-heat-stress-resistant-inner-city-in-the-netherlands/>

⁵ As if the title and first line of the official hymn of Maastricht also explicitly referred to the peculiar structure of the station: “*Mestreech is neet breid meh Mestreech dat is laangk*” (Maastricht is not wide, but long).

⁶ Located on the old station, known before as *Halte Heer*, created in 1861.

Much like other historic European cities, Maastricht, situated on the border between Belgium’s prominent regions, Flanders and Wallonia, and made famous following the signing of the European Treaty on the Economic and Monetary Union in 1992, is characterized by distinctive fault lines.

First and foremost, there is of course the river Meuse (“Maas” in Dutch): the river that bisects the city in half and gave “Maas-treiekt” its name³. It is the first natural fault line that has shaped the history of the city over the past 2000 years. The flow of water is swifter through Maastricht than in any other Dutch city, symbolizing as it were the dynamic pulse of city life in Maastricht. The Meuse River acts as a natural air conditioning system: —a breath of fresh air during hot weather⁴. The river has also given the city, like its upstream sister city Liège, a metropolitan charm with two separate urban parts: a left and a right bank. The area on the left bank is confined between the river and the border with Belgium. The frontier of the city, and hence also the Netherlands, was established by an earlier Treaty of Maastricht dated 1843 that stipulated that the boundary would extend to the precise range of a cannon shot fired from the city walls of Maastricht: 1,200 fathoms or 2.3 km. The right bank is not clamped and part of Southern Limburg’s “Heuvelland”. And as Maastricht citizens do have to show their uniqueness, they call the left bank the right bank and the right bank the left bank; here we stick to the official denomination: the left bank is the left bank and the right bank, the right bank...

The second, historically developed fault line is that of railroads cutting Maastricht’s right bank, into a western Wyck part squeezed between the river and the rail tracks and an eastern part linked to the rest of Southern Limburg. From an aerial perspective, the rail tracks in Maastricht resemble a river delta as if a “railroad river” coming from the mountainous southern neighbour, spreading into a “rail delta” originating from Maastricht’s Central Station and extending across the northern section of Maastricht’s right bank. As we explain below in section 1, the huge presence of rail tracks in the centre of Maastricht is not based on any such geographic or economic logic but purely the result of historical developments. The current peculiar and long Maastricht Central station⁵ was only built at its current location in 1913, as a combination of a terminal end station for rail tracks coming from the northern and eastern parts of the Netherlands and from the western part: the border Flemish region. These combined rail tracks all ended in Maastricht’s Central station. Only two rail tracks would pass through the station going south to the newly, in 1987, constructed Maastricht Randwyck station⁶, the village of Eijsden and further into the Belgian/Wallonia region.

In short, the historically grown **rail delta** represents an industrial fault line across the city of Maastricht which cuts the right bank of the city further into a more central part of which Maastricht’s Central station forms now an iconic, monumental western entrance and an eastern entrance part that is only accessible



Figure 1

via a passerelle over a large number, nine in total, of rail tracks without platforms. In terms of urban mobility, the whole eastern part of the city’s right bank is hence divided from the western part from north to south with just one tunnel, two express ring roads bridges: one in the north, one in the south; and two secured railway crossings for cars, bikes and pedestrians. In doing so, the railroads and rail tracks within Maastricht’s urban city centre not only bisect the city but also signify a substantial physical occupation of urban space on Maastricht’s right bank, amounting to approximately 10 hectares, as depicted in Figure 1.

The third fault line, now non-existent, further eastward on Maastricht’s right bank and running parallel to the rail track, was represented by the N2 highway, cutting across the city from North to South.

Here under pressure of growing congestion and the particularly unhealthy environment along the highway for both children in schools and more broadly residents in neighbouring houses, policy action was taken. In 2016, the N2 motorway became upgraded into a full-fledged motorway with a 2,3 km long, two-layer tunnel. It allowed for a doubling in the number of vehicles crossing the city, now underground, and as windfall benefit, it freed up the area on top of the tunnel “pasting” both sides of the city and becoming a very popular, new walking and biking green road – the “Groene Loper” – increasing dramatically the quality of housing and schooling in that area.

In 2021, we presented a city plan vision for Maastricht Central station called “**Across the Tracks**” (Boven het Spoor) which proposed a partial tunnelling of the two rail tracks transiting Maastricht Central station (now the rail tracks on platforms 4, 5 and 6) southwards from Maastricht Central Station to Maastricht Randwyck station. Drawing inspiration from the successful tunneling of the N2 motorway, our primary objective was nevertheless distinct – focusing on enhancing and streamlining rail mobility, a crucial goal for densely populated areas such as the Dutch Randstad or the Southern Limburg region. In addition, as the corona crisis made clear, governments can through further investments in public transport, reduce the incentive to use cars and induce employees who are in a position to do so, to work more from home at a distance. As a result, such investments will also contribute to make the economic transition towards a green, inclusive development, as prescribed in the so-called European Green Deal, a success story. In essence, so we thought, our vision to seamlessly connect the eastern and western parts of the city, currently divided by rail tracks, would resonate with the aspirations of the European Green Deal at the local level⁷.

Our proposal was analysed by the Dutch rail infrastructure company ProRail⁸ and, while considered technically feasible, was estimated as being too expensive – with total costs estimated at some €1.4 billion – compared to the very limited, if non existing advantages for rail travellers. While one can argue with ProRail about the exact size of the cost estimates, we prefer to develop in response to the ProRail assessment, a new, alternative proposal focusing more on the under-utilized **rail delta** space in the centre of the city while trying at the same time to realize in a more significant fashion “railway” benefits for travellers and commuters arriving and/or leaving Maastricht, as well as transit passengers.

In doing so, we hope to provide an interesting pilot case of a successful **sustainable urban rail integration** in a mid-sized, historical European city. Consequently, we start

⁷ See amongst others Schwaag-Serger, Soete and Stierna (2023), *The Square: putting place-based innovation policy for sustainability at the center of policymaking*, <https://s3platform.jrc.ec.europa.eu/en/w/the-square-putting-place-based-innovation-policy-for-sustainability-at-the-centre-of-policymaking>

⁸ See ProRail (2023), *Toets haalbaarheid Boven het Spoor: ABC studie Masterplanvisie Stationsgebied Maastricht*, 3 juli 2023

⁹ See in particular the workshops organized by the European Institute of Innovation and Technology (EIT) Urban Mobility and reported on in Lunardon, A, Vladimirova, D. and B. Boucsein (2023), “How railway stations can transform urban mobility and the public realm: The stakeholders’ perspective”, *Journal of Urban Mobility*, Vol.3, December, <https://doi.org/10.1016/j.urbmob.2023.100047>



in section 1 with a historical overview of the emergence of railroads in Maastricht. As will become obvious, to understand the current, large physical seizure of space by railroads and rail tracks in the centre of a city like Maastricht, history matters. It also explains, as we argue in section 2, that a more radical, urban rail integration process than the one we originally had proposed in the report **Across the Tracks**, should now be considered, putting the underutilized rail tracks to use for the sustainable urban development of Maastricht’s right bank, integrating both the western and eastern sides from the north to the south. This new vision fits also the broader discussion taking place in Europe as to how stations can become a booster for cities’ sustainable development⁹. In section 3, we describe in more detail the proposed structure of the proposed underground Maastricht Central station. Again, we took inspiration from other cases such as the two-layer underground railway station of the city of Delft. In section 4, we discuss the various possibilities of an urban integration of the rail space around Maastricht Central station. In section 5 we describe in more detail the southern and now also northern underground rail track structure that we have in mind. In section 6, the stepwise technical implementation of this large infrastructural project is explained in more detail, in response to some of the critical comments made by ProRail as to its feasibility. Finally in section 7, we present a first overview of the various redevelopment and housing possibilities and a first estimate of both costs and benefits. We conclude with some broader reflections on the urban integration of such large infrastructural projects.

SECTION 1

History matters: on the origins of Maastricht’s “rail delta” ¹⁰

The story of how Maastricht’s station moved places over the last two centuries: gradually moving southwards – one could say upstream from the perspective of the current **rail delta** – is one of how rail developments in the Netherlands, and in Maastricht in particular, lagged behind compared to developments in the city’s two neighbouring countries: Belgium and Germany. Maastricht became connected with both the Belgian (Hasselt and Liège) and German (Aachen) railway infrastructure before it became connected to the Dutch railway network. The development in Southern Limburg of railways and freight transport in this later phase was intricately tied to that of the mines and coal transport.

Belgium had already established an extensive railway network driven by the impossibility for Belgian river vessels, following the break with the Netherlands in 1830, to use the Dutch waterways any longer which were essential for the port of Antwerp, now cut off from the German hinterland. It was therefore no surprise that it was a predominantly foreign (German) company, the Aachen-Maastrichtsche Spoorweg-Maatschappij (AM) which received the first Southern Limburg railway concession in 1846. The aim was to create a connection between Antwerp and the German industrial area by constructing a Maastricht - Aachen railroad line via Sempelveld.

Since Maastricht was a fortified city with a strong military presence, something which had proven its value following the Belgian independence war, it was an absolute given that the city walls of Maastricht would not be breached. So, the railway station was projected outside the city limits on the right bank of the Maas to the northeast of the Wyck district: the Wijckerveld. Actually, the location was strongly contested by some of the local, industrial entrepreneurs who had pleaded to place the station on the left bank, near the Boschstraat. It culminated in a personal fight between Petrus Regout who owned companies within Maastricht’s fortifications and Winand Clermont who owned land in Wyck on which he later started the Céramique pottery factory.

For the AM company, the huge costs of constructing a rail track through Southern Limburg because of the significant height differences combined with the company’s limited financial resources, meant that the concession application had to be renewed several times before construction eventually started. Consequently, the construction of the first Maastricht station only started in 1852. Plans included a railway port on the Maas behind the station. The first train to Aachen ran on October 20, 1853, and the station was completed a year later. In the same year 1853, the Belgian government granted the same AM company the concession for the construction of a railway line between Hasselt and Maastricht. The AM inaugurated the railroad in October 1856, simultaneously taking over the operation of the Hasselt-Landen railway line from the Belgian state railways. As both railway lines terminated in two separate terminal stations in Hasselt, AM built a connection between both lines in 1856.

¹⁰ In 1864, several private Belgian railway companies started working together under the name Chemins de fer Grand Central Belge. In 1867, the GCB also took over the operation of the Landen – Maastricht – Aachen railway line, providing a short direct train connection between Antwerp and Aachen. However, in the following years the railway company constructed also the so-called “Iron Rhine” lining Antwerp to the German Ruhr area and preferred the new connection via Weert and Roermond. In addition, through the new Iron Rhine connection, freight trains no longer had to stop in Maastricht.

Around the construction of the line to Hasselt, a discussion arose again about the location of the terminal station in Maastricht of the new railway line coming from Hasselt, given the fact that the railway line from Hasselt ran much closer to Maastricht's city centre on the left bank and that a bridge over the Meuse was expensive. So, a new second station was built on the left bank: Maastricht Boschpoort.

The first Maastricht station built by the AM company with trains coming from Aachen had only just opened, but it quickly appeared that it was located in a rather inconvenient place. So, the station was moved and expanded, a few hundred meters further south, just east of the Wyck district, from where now the new rail line to Hasselt could also be laid in a large arc north around Maastricht's city walls. So, construction of a railway bridge over the Maas did start in 1854 and on October 1, 1856, the Maastricht - Hasselt line with some transshipment options at the Zuid-Willemsvaart, was opened with both a new Boschpoort Station on the left bank and a station on the right bank. Unfortunately, because the expected transit traffic was not forthcoming, the AM company, like many other railway companies at that time, found itself in dire financial straits and as a result, the Boschpoort station was closed 5 years after its construction. Local industry, again led by Regout, advocated the construction of a freight yard that extended from Boschpoort station to the city centre which was finalized much later in 1903.

¹¹ In 1864, several private Belgian railway companies started working together under the name Chemins de fer Grand Central Belge (GCB). In 1867, the GCB also took over the operation of the Landen – Maastricht – Aachen railway line, providing a short direct train connection between Antwerp and Aachen. However, in the following years the railway company constructed also the so-called "Iron Rhine" lining Antwerp to the German Ruhr area and preferred the new connection via Weert and Roermond. Through the new Iron Rhine connection, freight trains no longer had to stop in Maastricht.

In 1861, the Liège-Maastricht Railway Company opened a railway line to the south. It required the railway yard at Wyck to be expanded further to the south. The operation was now overseen by Grand Central Belge (GCB), which utilized the same station in Maastricht as AM. However, the AM continued to struggle with its financial viability and was taken over in 1867 by the Société Anonyme de Chemins de fer d'Anvers à Rotterdam (AR), which in turn fell under the management of GCB. The takeover gave GCB management now the entire route from Antwerp to Aachen, as well as the rail route from Maastricht to Liège¹¹. With the arrival of GCB, passenger transport was increased to five trains per day to Aachen and four to Hasselt. Freight transport was concentrated around Boschpoort station and the railway port on the Meuse.

It was only in 1860 that Dutch politicians started to recognize the importance of good rail connections. So in 1865, the first Limburg northern Venlo - Maastricht state line E, operated by the State Railways Exploitation Company (de Staats Spoorwegen) was constructed. The municipality was tasked to build the station, and another, new, second station southeast of the existing one was completed a year later, on the eastern side of the existing ones. In a state of desperation, Petrus Regout, bought large plots of land in Wyck where he established companies such as Mosa and Sphinx. Once again, history repeated itself as the station appeared particularly poorly positioned, situated to the east "behind" the existing tracks to the south. As a result, the Maastricht - Aachen and Maastricht - Liège railway lines did not directly connect to this new Maastricht - Venlo railway line. Passengers who wanted to switch from one railway line to another had to transfer to the other station.

Finally in 1898, the operation of all railways in Limburg was taken over by the Staats Spoorwegen. This led to the construction of one Maastricht station making a direct transfer between Maastricht - Aachen and Maastricht - Eindhoven possible. The new Maastricht station was also the first station in the 20th century that was



designed not only as a terminal station, but also as a station for through train traffic. The current Maastricht Central train station is a design by architect G.W. van Heukelom who also designed the Schin op Geul station. Maastricht station was officially opened on October 18, 1915¹².

¹² <http://www.postvalkenburg.nl/stations.htm>

In short, the rail delta on Maastricht's right bank, marked by a substantial number of rail tracks north of the station that narrows to just two tracks south of the station, is the outcome of the intricate history surrounding the construction of end stations for railway lines. Subsequently, these locations were found to be less than optimal for the easy interconnectivity of rail transport. It led to a gradual movement southwards once the city walls were dismantled to a centrally located station with a huge diversity of outgoing rail tracks north of the station and one railway going south: the current rail delta with the iconic Maastricht Central station located in the centre of Maastricht's right bank.

Urban rail integration: activating “non-descript” rail space

For most large cities, the location of railway stations in the centre of the city, presents today a unique opportunity for sustainable urban development. Particularly for higher education establishments, but also for offices of (large) companies, for public institutions such as courts, involving each a lot of mobility, the proximity nearby a centrally located station represents an opportunity for the more intensive use of public transport of its employees, students, and clients.

In the case of Maastricht, being a provincial capital with a regional courthouse, a couple of headquarters of large companies and, serving as a higher education city with both a university and a high school along with large numbers of foreign students and education facilities in neighbouring cities such as Heerlen and Sittard, the proximity to Maastricht Central station represents a huge, underutilized opportunity. Interestingly, the locational advantages of the more recently built Maastricht Randwyck station¹³, were quickly realized both for university students and for patients and staff from the nearby MUMC+. One of the main reasons for Maastricht’s Central station having failed to use up to now this opportunity, is the large amount of physical space taken by the widespread rail track delta in the midst of the city’s centre: in total some 10 hectares. At the same time, and as we highlighted in our earlier **Across the Tracks** report, the narrower, much smaller, double rail track barrier to the south of Maastricht Central station, prevents any further integration of the new, popular so-called “Groene Loper” as green mobility track for bikes and pedestrians towards the western parts of Maastricht’s right bank and in particular allowing for quick and easy connectivity with the Céramique and Wyck city areas.

An alternative allocation of the space seized by the large number of rail tracks at Maastricht’s Central Station and the rail delta north of the station corresponds from this perspective to a much-needed new phase of sustainable urban development of Wyck and more broadly speaking Maastricht’s right bank. Given the shortages of space for new housing, there are, also in Maastricht, major trade-offs emerging between citizens’ desire for more green space in and around old and newly constructed buildings and housing associations and building firms’ economic inclination to exploit available building space to the maximum. The result is often reflected in fights and disagreements between the building plans of real estate companies trying to satisfy the local government’s rules and regulations concerning housing space and local citizens who feel that the existing quality of living in the relatively small urban centre of the city of Maastricht, is being undermined.

The availability of a large, what we would call here, “non-descript” rail area in the vicinity of the Central Station provides from this perspective a unique opportunity for a new sustainable urban development process in Maastricht’s city

¹³ Again with hindsight constructed too much in the northern direction. A more southward location would allow for a direct connection to the MUMC+ and the FHML of the UM.



Figure 2

centre on the right bank. Leaving it as it currently is: an underutilized parking space for rail carriages appears under the present circumstances of dramatic housing needs in the Netherlands, irresponsible. Furthermore, in the context of the need for better access to public transport to Maastricht's urban city centre, such a large physical presence of underutilized rail tracks, as shown in Figure 2, can no longer be justified.

Hence, our new more radical *Sustainable Urban Rail Integration* proposal.

For ProRail, an alternative use of this extensive, non-descript space of rail tracks, will of course not be a priority. On the contrary, their interest will be to maintain a large parking space for rail carriages to serve both their clients: the NS and Arriva rail operators. The historically grown “rail delta” in Maastricht has even become a local competitive advantage for both the maintenance and the cleaning of rail carriages even if those as in the case of the NS S-trains (stopping trains) are not in service in Maastricht but only 80 kilometres further north in Weert. From this perspective, ProRail was not really in a position to give an overall objective assessment of the costs and benefits of the rail space needed and used in Maastricht. Their policy will logically consist of trying to maintain at any costs the available huge existing rail track space. The use of such space for other, more needed housing and offices facilities in an immediate vicinity of a central station such as Maastricht Central Station is not in their interest. Furthermore, compared to the many other priority bottlenecks in rail infrastructure in the Netherlands, where contrary to Maastricht significant “railway” benefits could be realized, our original proposal made in *Across the Tracks* for an underground rail station and underground rail connection could not be a priority to ProRail. Indeed, most of the benefits relate to the further urban development of the area around Maastricht station and what we have called the “healing” of the rail barrier between the eastern and western parts of Maastricht's right bank: all benefits which would mainly accrue to the city and the various Maastricht neighbourhoods around the station: from Wyck to Wyckerpoort, Céramique, Heugermerveld, even Scharn.

However, ProRail also pointed in its criticism of our *Across the Tracks* proposal¹⁴ to a number of specific shortcomings: “there is... no provision for product steps that will attract more travellers”. If we had identified more explicitly future rail use possibilities “benefits for passengers and therefore social benefits for rail transport could also be identified.” We agree with ProRail that in our original *Across the Tracks* proposal, we didn't consider possible future benefits for rail transport. We started from the assumption that the existing rail infrastructure did not prevent the further development of such benefits but that this would rather depend on the willingness of the various train operators at Maastricht Central Station – the Dutch operator NS, the regional operator Arriva and the Belgian operator NMBS (SNCB) – to make more use of the already existing cross-border rail infrastructure¹⁵. There is, we assumed, nothing infrastructural that prevents NS, Arriva or NMBS/SNCB from establishing faster, Intercity train connections between e.g. Maastricht and Brussels. However, each of these operators would have different considerations/priorities as to whether, or not to offer such a service, with the number of potential travellers being the most relevant variable. Given the relatively limited size of the city of Maastricht (120 thousand inhabitants), it is likely, as we thought that the focus for both Arriva (part of DB) and NMBS/SNCB will be on providing transportation to the surrounding (foreign) larger cities such as Aachen/Cologne and Liège/Brussels. Just as for the NS it is the connection with the Randstad/Eindhoven that has absolute priority.

But, as suggested by ProRail, one can also consider an alternative vision of future rail infrastructure development in an urban setting: one that prioritizes the realization of maximum rail commuter benefits with particular attention to the ease of train connectivity within Maastricht Central station. It is also this additional focus on rail commuter benefits which has led us to present this more radical proposal for a fully operational international underground station, ending now also the terminal train function of Maastricht Central station and freeing the large number of Intercity rail tracks coming from the north on platforms 1, 2 and 3 and currently used by the NS. By doing so, it offers now the prospect of a more sustainable mobility future for both local, national and international rail travellers in Southern Limburg.

¹⁴ See ProRail (2023), Toets haalbaarheid Boven het Spoor: ABC studie Masterplanvisie Stationsgebied Maastricht, 3 juli 2023

¹⁵ Such as the new Arriva three-country train connection between Aachen(D)-Maastricht(NL)-Liège(B), which should in principle be operational at the end of 2023 or later in 2024.

SECTION 3

Towards an international, underground Maastricht Central Station

The proposed international underground Maastricht Central station retains its essential features by bringing platforms 4, 5, and 6 underground. However, it now expands this concept by adding a fourth rail track (we call it here track 7) and constructing the underground station as a two-level facility, similar to the underground station design in Delft.

With its four train platforms, this offers now the possibility of having *all* trains depart and arrive underground. This means that Maastricht Central Station will no longer serve as a terminal train station and will, like most other train cities, have northern and southern entrances supported on both sides by east-west connecting bridges. This redesign maximizes both the “rail” and social benefits for travellers.

A cross section of the proposed two-level underground station with its four tracks and platform island is illustrated in Figure 3a.

As illustrated in Figures 3a and 3b, the two-level Maastricht Central underground station now has four tracks each with a platform length of 350 meters, but with only one island platform. In the Figure, track 7 has no platform and is specifically aimed at freight trains but could also be converted into a fourth track with a platform. The latter possibility is illustrated in Figure 3b¹⁶.

¹⁶ The further expansion of the underground station to two platforms with four rail tracks as in the case of Delft station is another possibility not further discussed here. For the moment we focus as alternative as illustrated in Figure 3b on one island platform for tracks 5 and 6 with the two tracks 4 and 7 each having a separate platform.

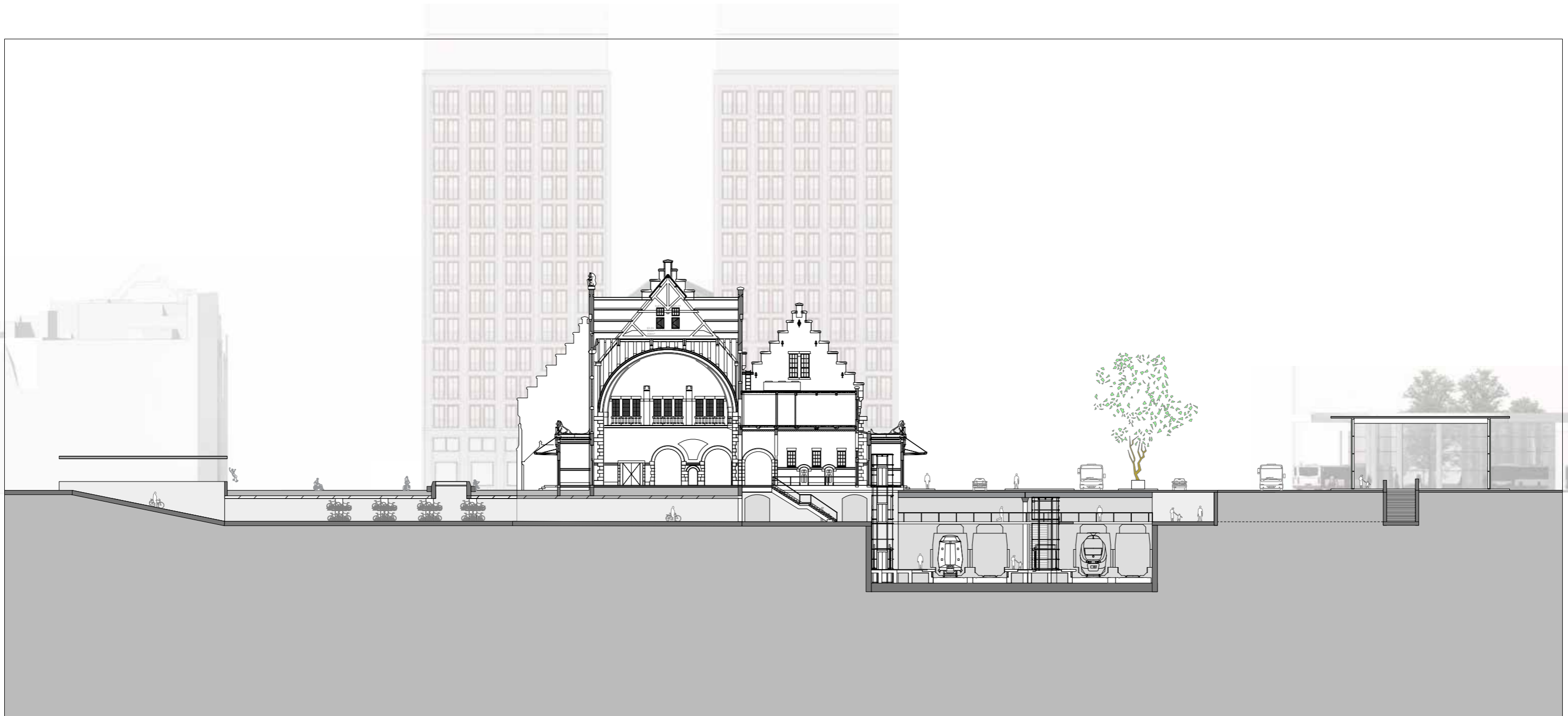


Figure 3a

As illustrated in Figure 4, the underground station now features also a new southern entrance on both the eastern and western sides and is connected on the southern entrance side with a first and two-level car and bike parking lot. The Akerstraat tunnel – better known as the Scharner tunnel – which will disappear is now reused in an optimal way providing the ingredients for both the new eastern and western southern entrances to the underground station. A separate simulation video¹⁷ showcases the appearance of the station underground with its two levels and illustrates accessibility from both the current northern/central station entrance and the proposed new southern entrance.

Doing so as illustrated in Figure 5, Maastricht's Central underground station has the potential to evolve into an international mobility hub. The two-level car/bike parking is shown at the bottom right.

Figure 5 illustrates both the **current and possible future use** of each of the four tracks.

- On track 4a: the current use of the Arriva Stopping train towards Roermond and on track 4b: the Arriva Stopping train towards Maastricht Randwyck. In the new plan this offers now the additional possibility for the arrival of an international Intercity coming from Liège/Brussels and going to Amsterdam/Eindhoven.
- On track 5a the current use of the Arriva Intercity towards Heerlen/Aachen and on track 5b the NMBS Stopping train towards Liège/Hasselt. In the new plan this offers the additional possibility for the international Intercity coming from Amsterdam/Eindhoven and going to Liège/Brussels and the international Intercity coming from Aachen and going to Liège.
- On track 6a the current use of the Arriva Stopping train towards Heerlen/Kerkrade and on track 6b the Arriva Stopping train towards Maastricht Randwyck. In the new plan the additional possibility for the international Intercity going to Aachen and coming from Liège.
- Finally, the new track 7 is reserved for passing freight trains and the track therefore has no platform. It is, however, also possible to consider using track 7 also for passenger transport and adding a platform, as illustrated in Figure 3b: an option which is left open here.

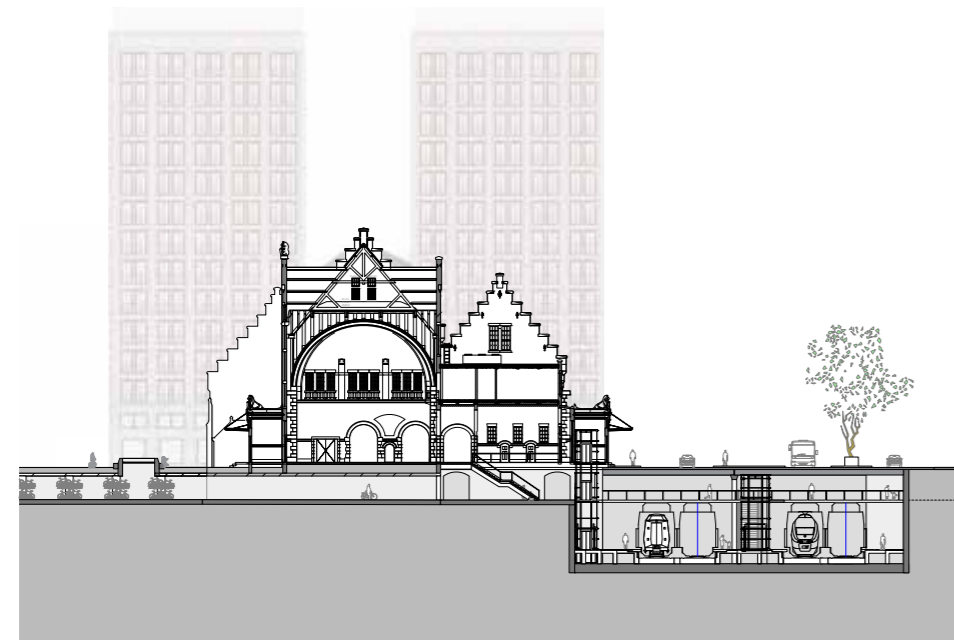


Figure 3b

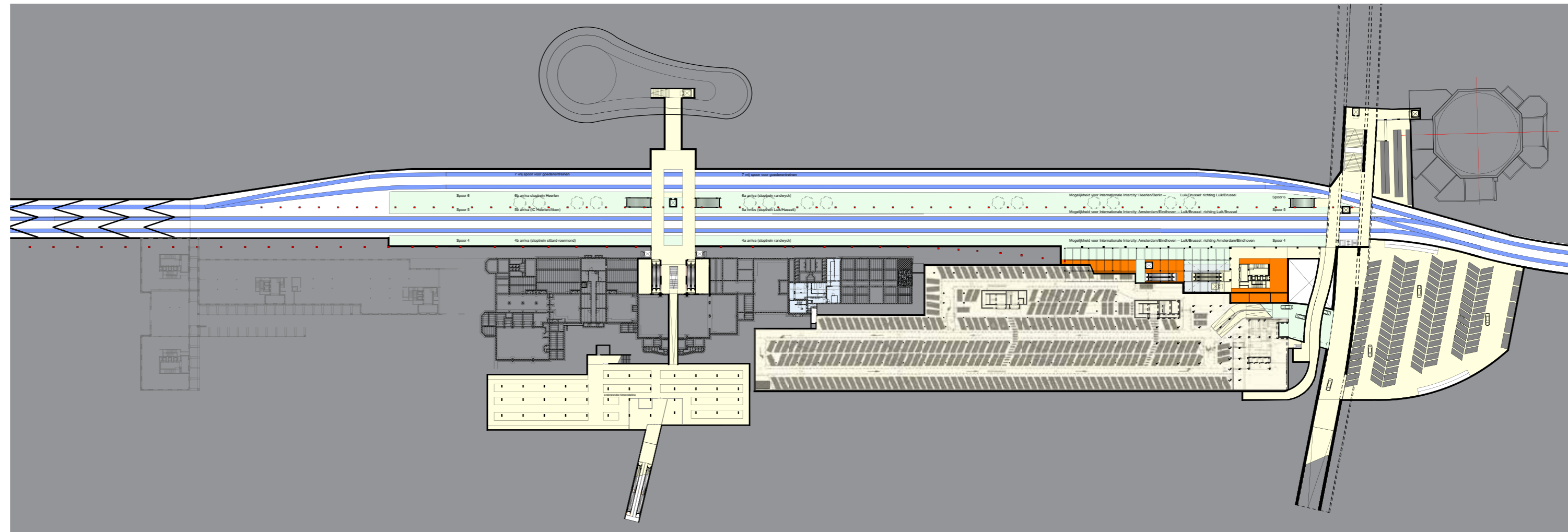


Figure 4, level -1

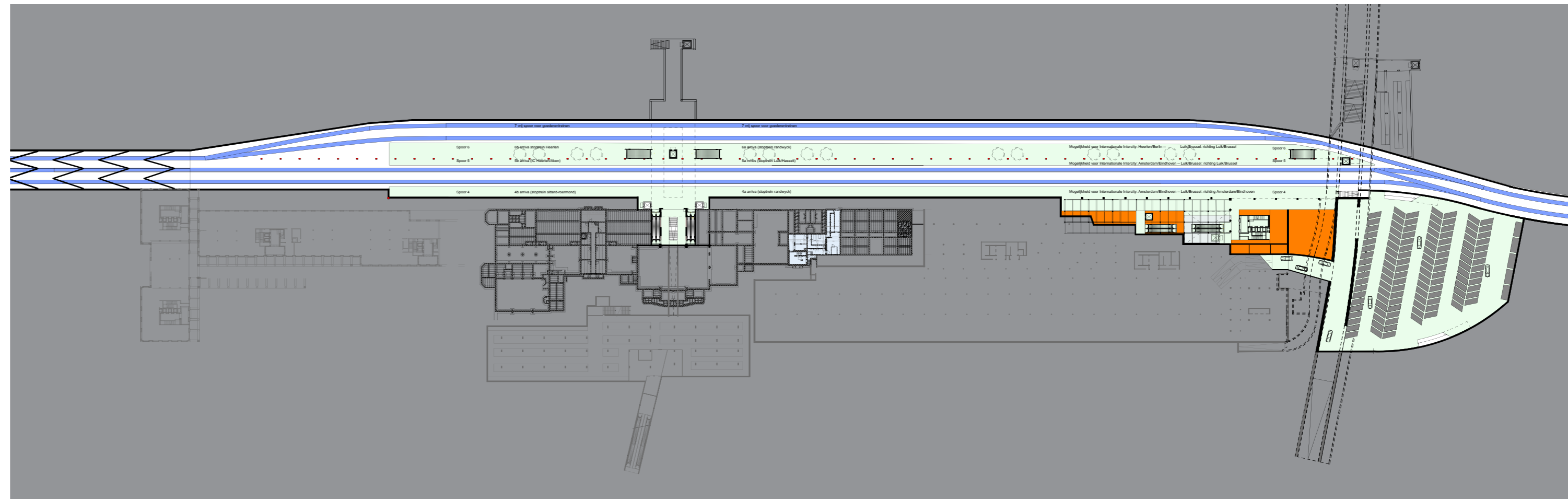
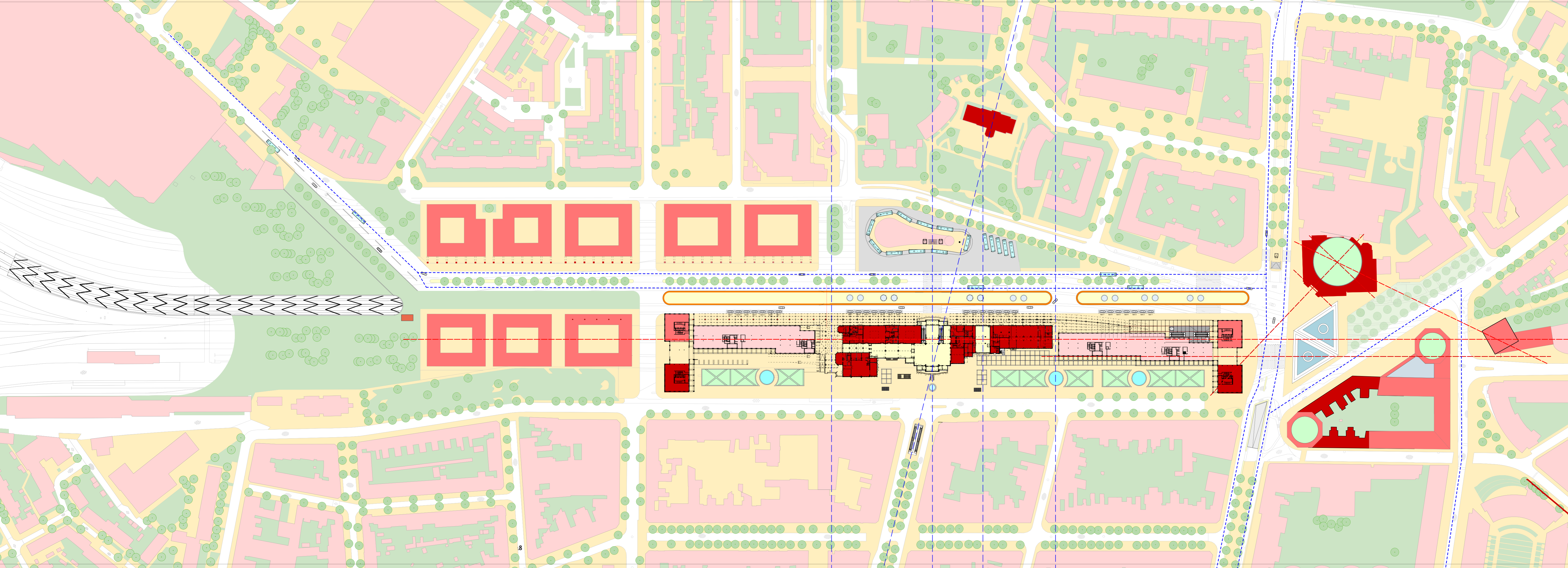
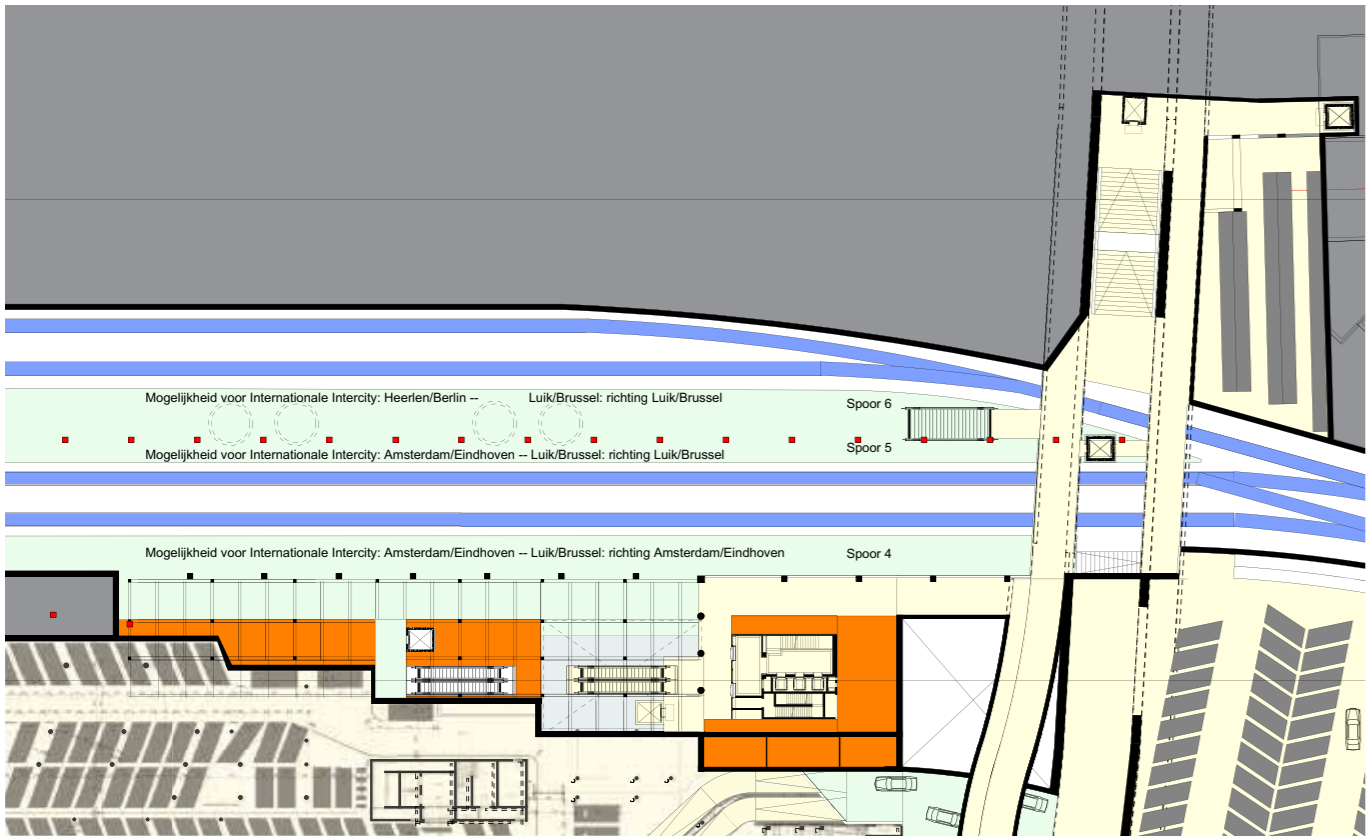
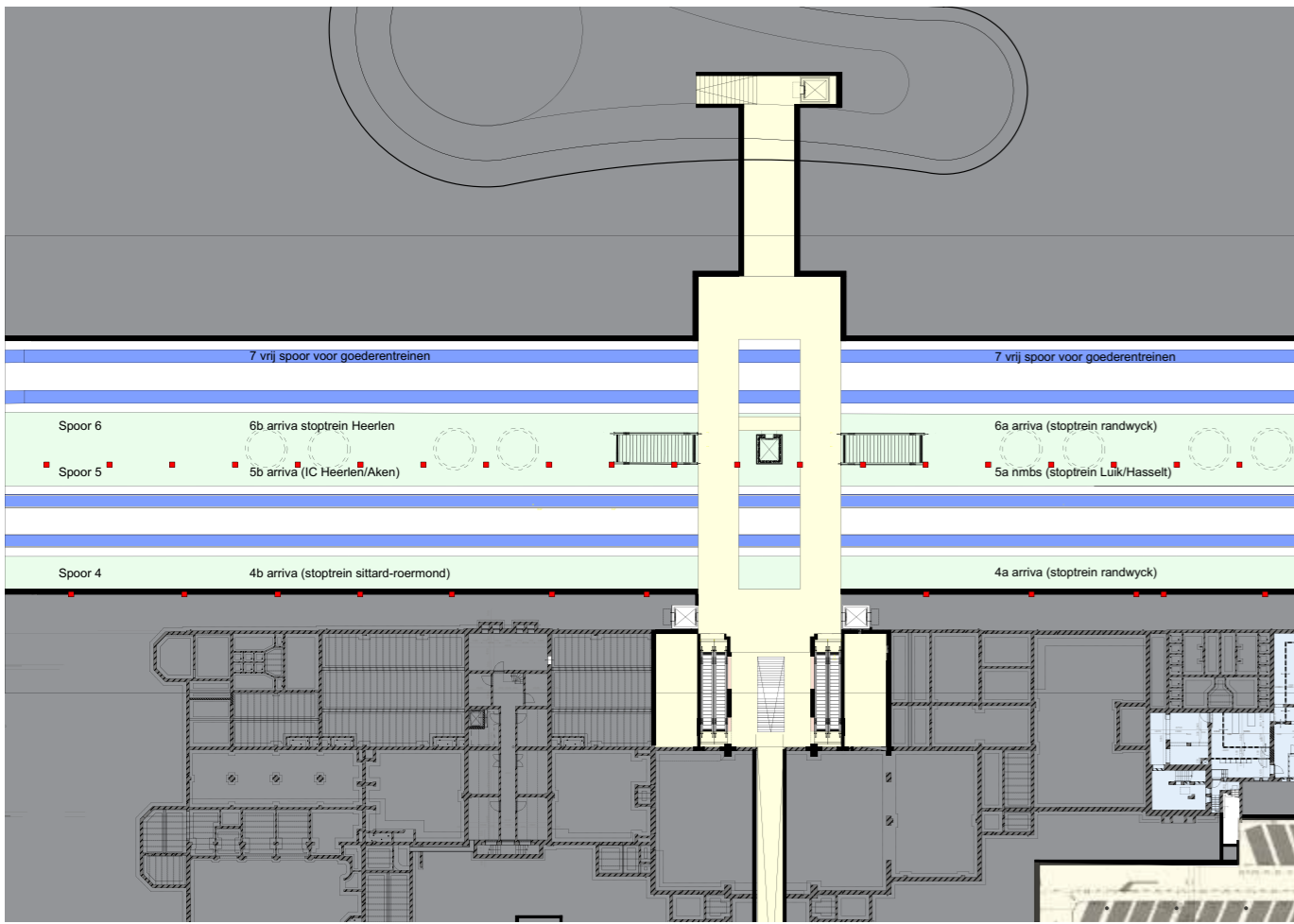


Figure 5, level -2





Details of Figure 4

<< Figure 6



SECTION 4

Maximizing urban value out of the “non-descript” rail space around Maastricht Central station

Bringing the three tracks coming from the northern and eastern part of the station underground, allows one to create substantial new value out of the large area on the eastern side of the station occupied by the current rail tracks and perrons. However, and as illustrated in Figure 6, the new proposal presented here includes now also the freeing of the additional “non-descript” space currently occupied by the rail perrons 1, 2 and 3. It offers the possibility, as illustrated in Figure 6, to develop north of the station a mirror extension of what exists on the southern part of Maastricht Central station including two new high “Colonel buildings”.

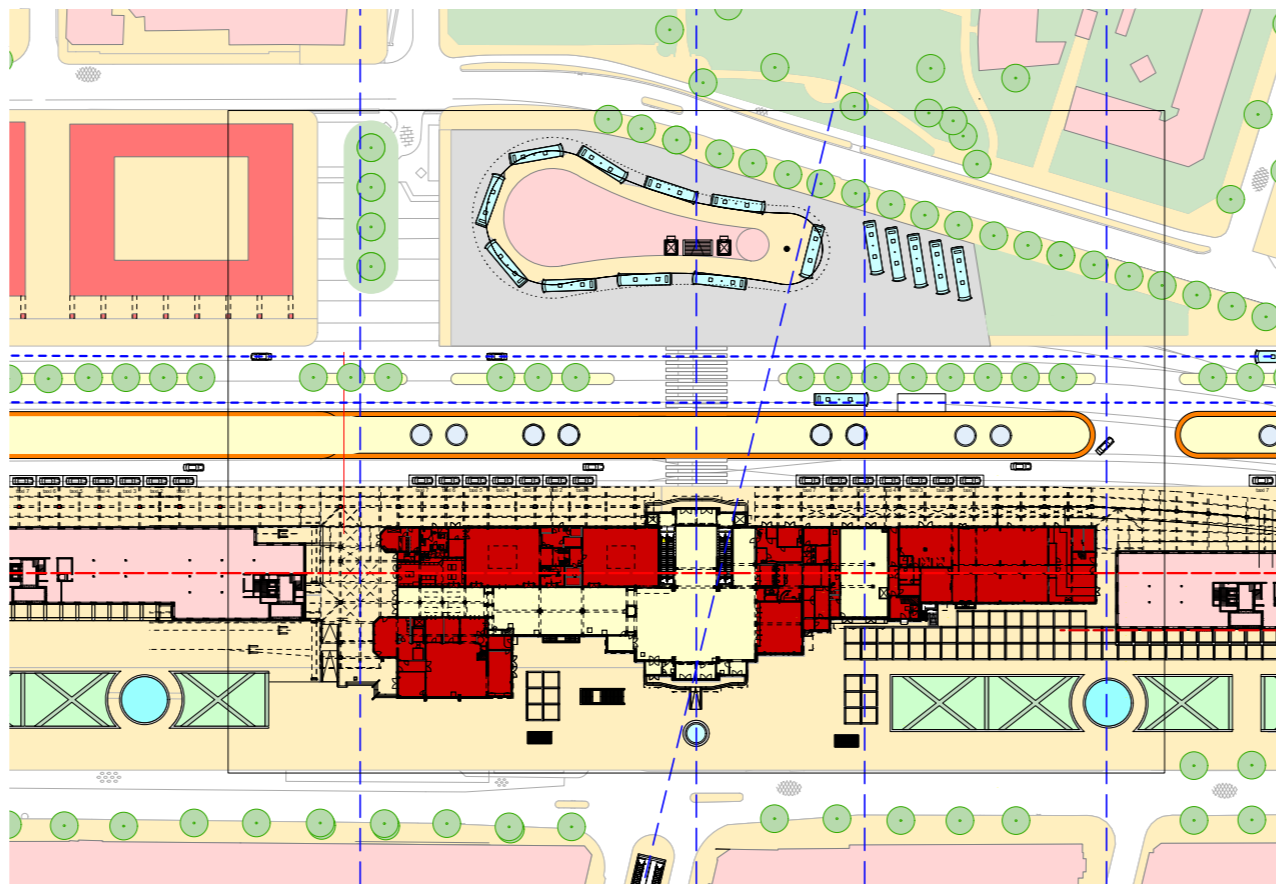


Figure 7



Figure 8

At the same time, and as illustrated in Figure 7 and 8, the western central entrance of the station can also be mirrored to the east side, giving the central hall of the station now two identical faces, reinforcing the iconic image of Maastricht Central station in the middle of the city’s right bank.

This new double symmetry (north-south and east-west) provides a particularly welcome balance in the way the station connects the eastern and western parts of Maastricht. In the axis of the hall, new (escalators) stairs and lifts are used to provide clear access to the underground station at the location of the current stairs to the Passerelle, and thanks to the two-layer underground structure, a direct passage through the hall is now created to the eastern side of the station and to the southern new entry part. The monumental character of the station remains intact, but the southern part now offers the possibility for two new entries at the level of the Koepelkerk and at the level of the Colonel building.

On the eastern side of the station – in place of the current 9 rail tracks under the Passerelle – a bus station and a kiss & ride area is planned which will provide direct connections to both the east and west sides of Maastricht. Between the new bus station and the station hall, a wide zebra zone will connect to a long traffic island that provides above-ground accesses to the underground tracks. These crossing traffic flows form now a logistical link between the east-west connection of Maastricht and a new road: the “Allee” which runs now parallel to the Station complex on the eastern side of the station. This new road will be built above the underground platforms (4, 5 and 6/7) and continue on the north side using the space freed by the currently “non-descript” rail tracks ground, connecting this “Allee” to the Meerssenerweg. With the vast space now available, approximately 26,400 m², the proposal suggests completing this new Allee with six residential buildings, providing a comprehensive urban space integration of Wyckerpoort. At the intersection of the Thorbeckeplantsoen and the Meerssenerweg, a green axis will be constructed also offering a view on the Lourdes Church. Doing so, the remaining part of the Meerssenerweg will become part of the district and renamed a destination traffic route.

On the western side of the station and the current, central entrance of the station, the Stationsstraat will now finally be in a position to fully fulfil its role as

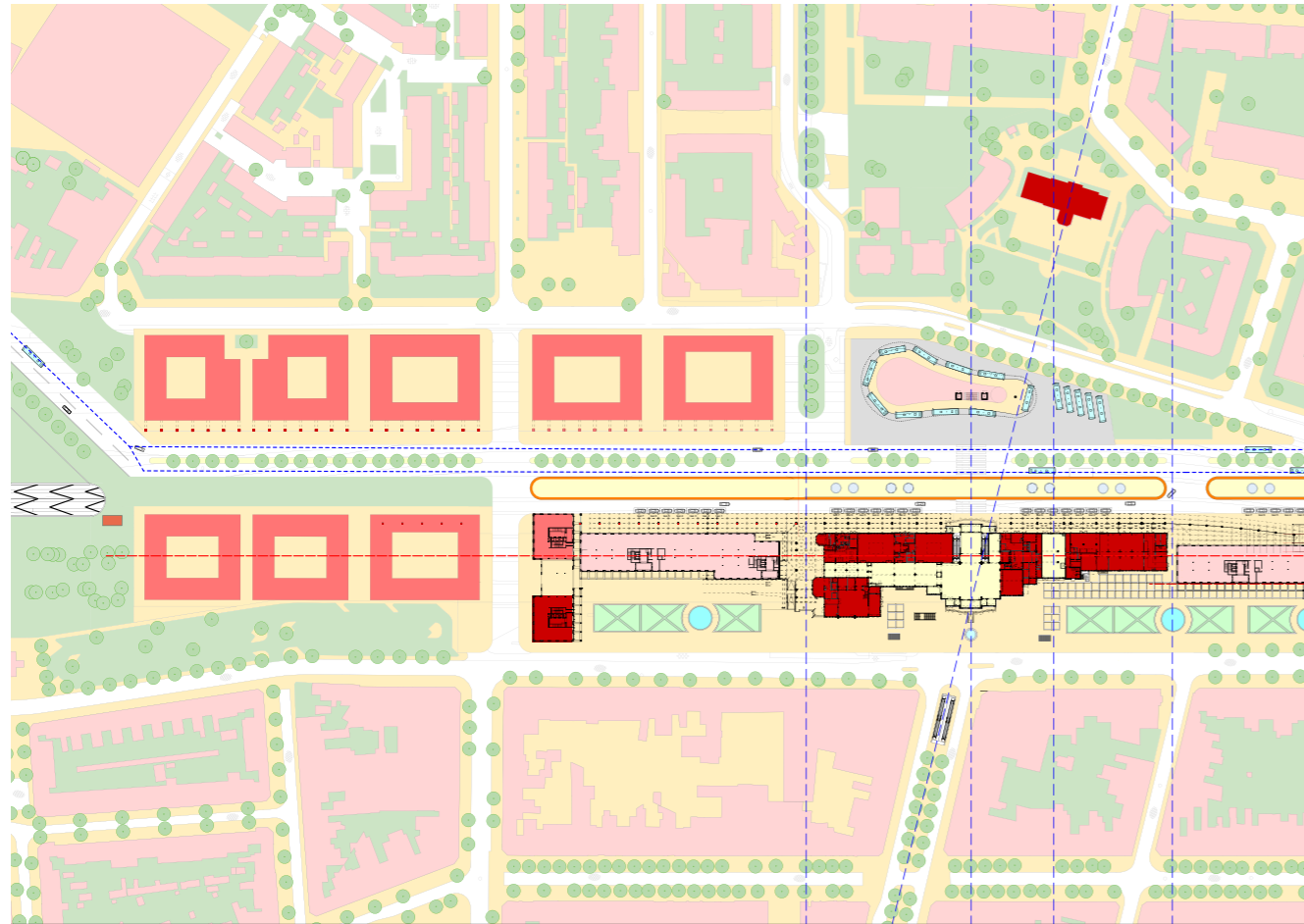


Figure 9

a local “Ramblas” in conjunction with the redevelopment of the Stationsplein as public urban space with an associated local “Plaza Real” as symbolic carrier. The current arcades south of the Central station can now be mirrored in the northern direction of the Central station using part of the space of the current bus station as well as the space freed by the no longer used rail tracks on perron 1. As in the case of the eastern side of the station, a number of residential blocks can now also be built on the remaining space freed by the no longer existing rail tracks on perrons 1, 2 and 3.

The focus on freeing as much “non-descript” rail track space as possible on both the eastern and northern side of Maastricht’s rail delta allows for the realisation of a maximum of non-descript rail space for urban development, as illustrated in Figure 9. We leave provisionally the option for train carriages being maintained and cleaned at their present location further northwest of the station.



Undertunneling the rail track south and north of Maastricht Central station

In the new **Around the Tracks** proposal, we foresee a much shorter tunnels for the four rail tracks on perrons 4, 5 and 6/7 leaving Maastricht Central station in both the southern and northern directions, as illustrated in Figure 10.

In the southern direction from the station, illustrated in Figure 11, the four rail tracks will be combined into two tracks whereby the underground tunnel will be limited to a distance of 150 meters. The 150-meter distance is necessary to facilitate the passage of the current rail tracks underground at the existing car and pedestrian railway crossing known as the “Duitse Poort”. Doing so, with trains now underground, the car and pedestrian rail crossing can now disappear as we had also originally envisaged in our original **Across the Tracks** proposal. However, a large part of the existing Akerstraattunnel (the so-called Scharner tunnel) will now be reused as southern entrance from both an eastern and western direction to the Central station, using the current slopes of the tunnel to construct entries for a new two-level car and bike parking space.

Just after the “Duitse poort”, we propose to allow for the two underground train tracks to have already an upward slope of 2% following the current route of the existing rail tracks. The length of this upward slope will be limited though to 240 meters so that the two rail tracks will ultimately emerge partly above ground in a semi-sunken position, allowing for an “over-capping” of the partly (approximately 2 to 3 meters) above the ground two rail tracks. This concrete over-capping will shield both the sight and the sound of passing trains from its surrounding environment. It will remain horizontal for the whole of the rail track till the Kennedysingel, as shown in orange in Figure 11.

Over this entire section, this half-sunken, over-capped rail track will be further embellished with small trees, plants, flowers and water parties, with on top a green biking and walking road, allowing pedestrian and cyclists to travel from the current Groene Loper to the station. Doing so, the current Bloemenweg/Ariënstraat railway crossing for cars and bikes will also disappear and replaced by an elevated crossing over the 2/3 meter “concrete hill” of the half underground rail tracks. A “bike and pedestrian only” link will be created at the end of the now elevated “Groene Loper” so that both pedestrians and cyclists can easily travel over the covered tracks towards the station. At the same time, cars and bikes will still be able to cross now over the “concrete hill” and continue along their road to the Ariënstraat/Bloemenweg, or under the Kennedysingel along the Endepolsdomein, as drawn in Figure 12.

A second, now open and shorter slope follows after the Kennedysingel, and brings the double railroad tracks back to ground level towards Maastricht Randwyck Station. It will only be 200 meters long as shown in green in Figure 10.

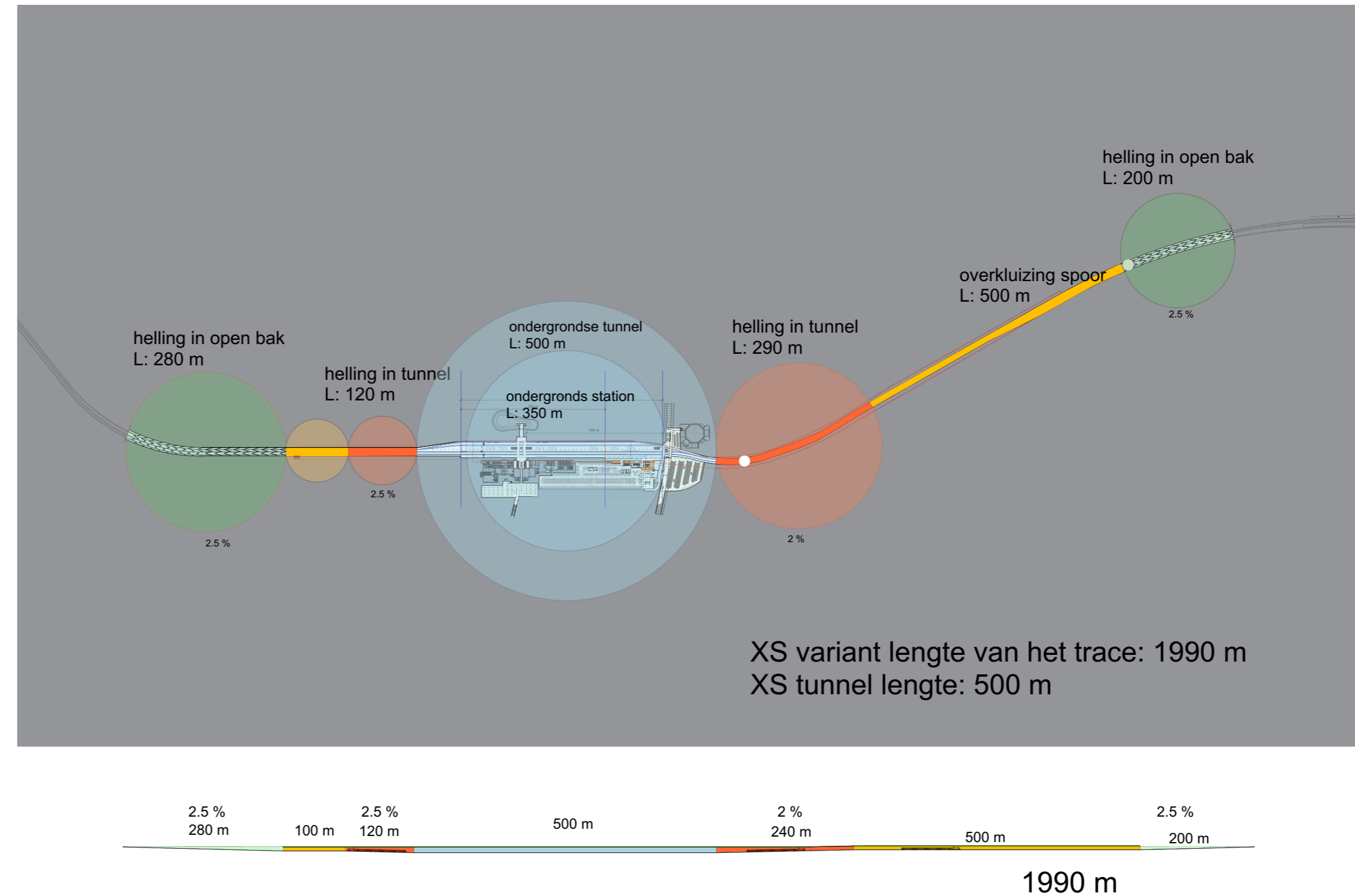


Figure 10

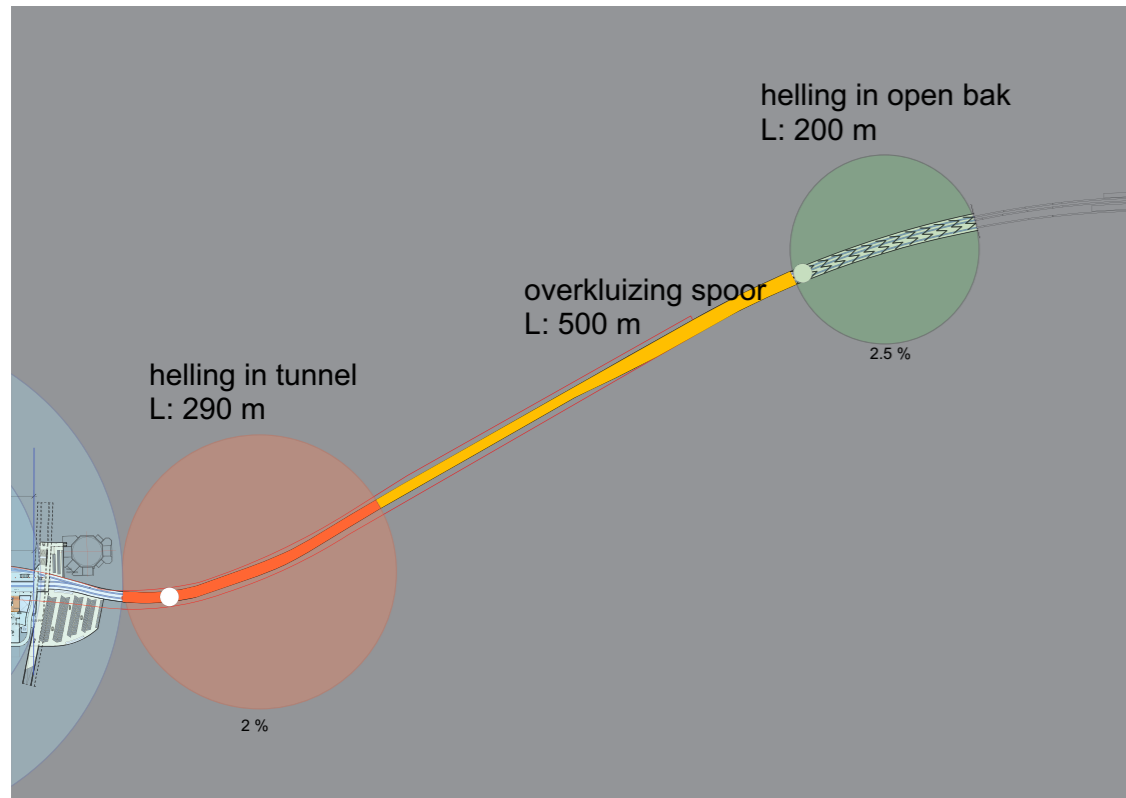


Figure 11



Figure 12. tekening Jo Coenen

In the northern direction from the station, the four rail tracks narrowing to three remain for some 150 meters underground, so as to enable above ground a northern east west connection for cars and buses reaching the new bus station at the eastern side of the station. Afterwards, a normal, upward slope of the three rail tracks is foreseen for 450 meters.

SECTION 6

A step wise implementation of this sustainable urban rail integration proposal: an overview

Another critique of ProRail on the original **Above the Tracks** proposal was related to the huge construction costs and the major disturbances the proposed underground station in Maastricht would create in local, available rail public transport. Obviously, large infrastructural projects, as the one proposed here, are likely to involve significant disruptions over a long period. However, as illustrated in this more technical section, there are also possibilities to avoid parts of these disruptions by carefully planning the works in a stage fashioned way.

Ultimately, the aim of the operation is to reduce above ground all transport movements bringing to life the urban ground level around Maastricht's Central station. The link between station and "Groene Loper" has not been functioning properly following the realization of the A2. The purpose of the **Around the Tracks** proposal is to heal such discontinuities and allow the urban fabric of the surrounding parts of Maastricht Central station to grow together and become further densified.

To make this possible we suggest a stepwise approach consisting of 9 steps or phases. We start from the current situation as illustrated in Figure 13.

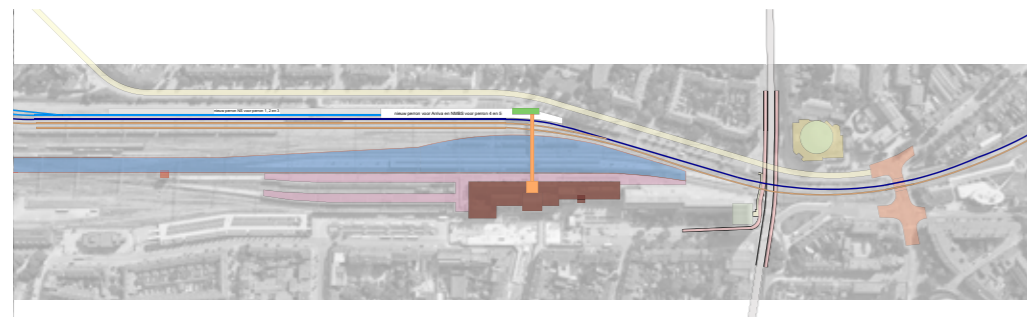


Figure 13



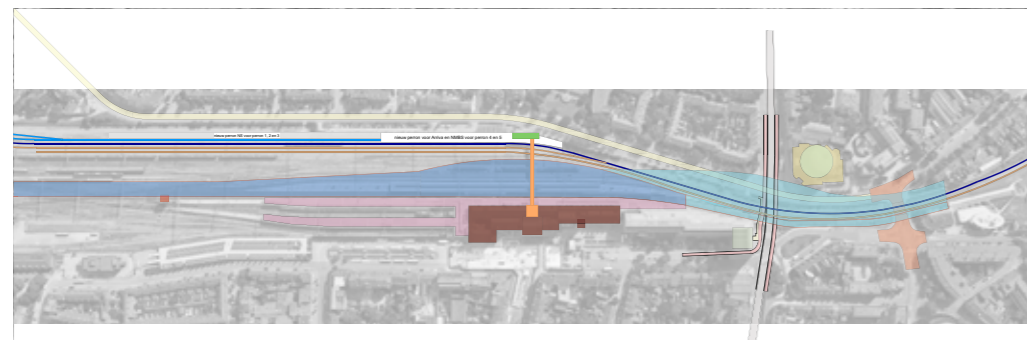
Phase 1

In PHASE 1, an alternative route close to the eastern border of the marshalling yard on existing tracks and parallel to the current Meersenerweg will be created for all train movements using currently platforms 4, 5 and 6. A provisional new platform will be constructed for these trains at the foot of the current, green entrance building on the eastern side of the station which will be accessible from the station via the existing footbridge (the Passerelle) and directly from the road on the east side.



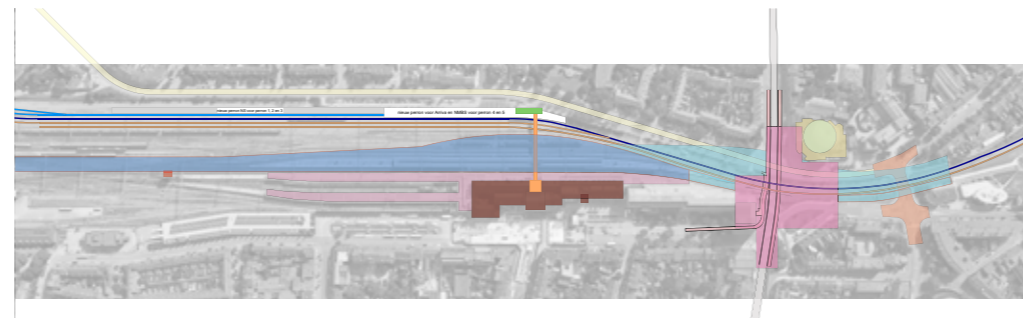
Phase 2

While through train traffic is not being affected, a 10 meter deep hole measuring 30 by approximately 150 meters will be dug at the rear of the current so-called “Seinhuis Post T” on Platform 4 up to, and including the southern corner of the current station building. The soil will be stored further away to be dumped in phase 4 in the eastern and western tunnel mouth of the Scharner tunnel, which will be still functioning in this second phase. This phase will be timewise the longest but will only represent additional discomfort to transit passengers. All train connections from and to Maastricht can be continued.



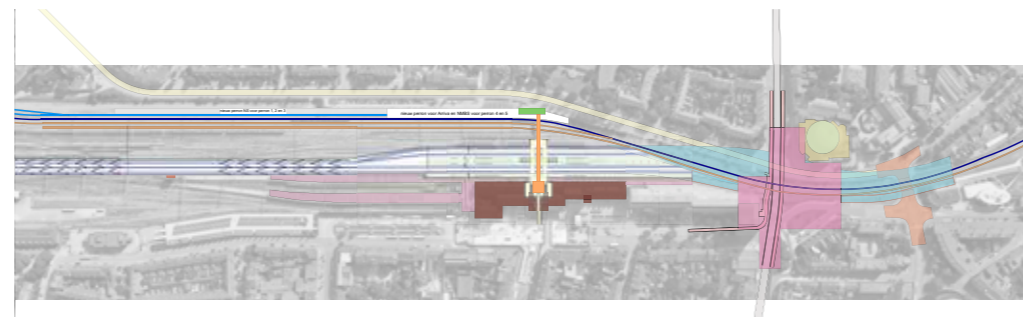
Phase 3

The four track 200-meter-long tunnel entrance on the northern side and the underground southern track from the Colonel building to the “Duitse poort” followed by a hinged tunnel will now involve the shutting down of train traffic from Maastricht Central station to Maastricht Randwyck station. The latter will be replaced by bus connections.



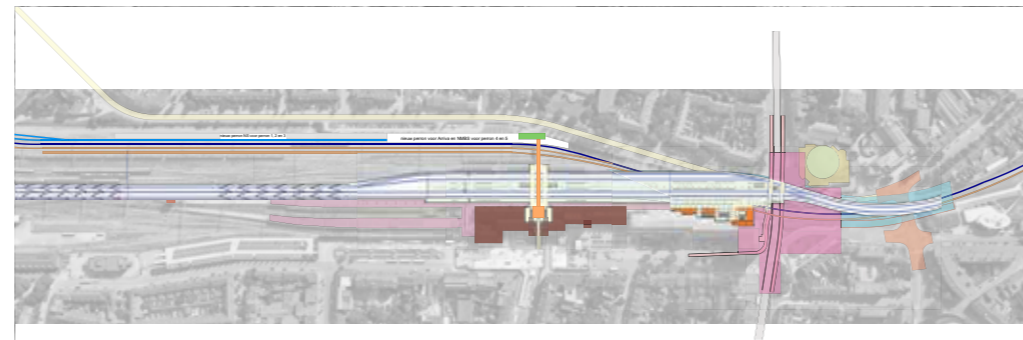
Phase 4

After closing the Scharner tunnel, a 40-meter-wide connecting hole will be drilled, both ascending tunnel mouths will be demolished and the stored soil from phases 2 and 3 will be dumped on site and planted with trees.



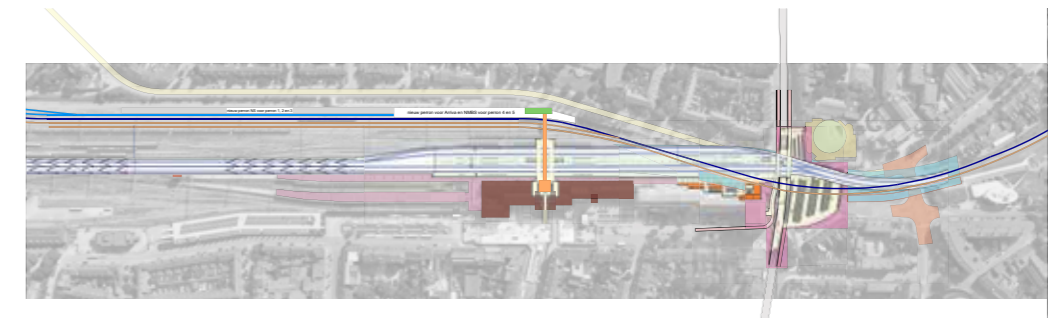
Phase 5

The northern tunnel mouth and underground platform system are now finalized and additional facilities, access for pedestrians, cyclists and new parking spaces are being built on either side of the existing Scharner tunnel.



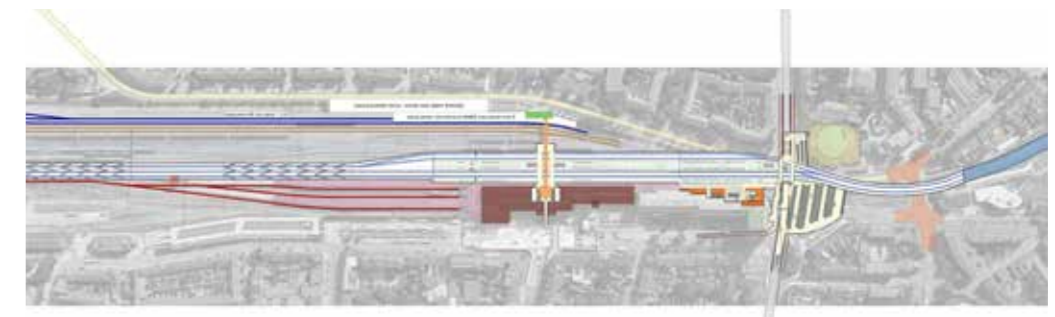
Phase 6

After completion of the northern part, the southern underground platform system with a new entrance next to the Colonel and the Koepelkerk will be realized to gradually accommodate regional train traffic from ARRIVA and NMBS/SNCB north and south in the new tunnel route.



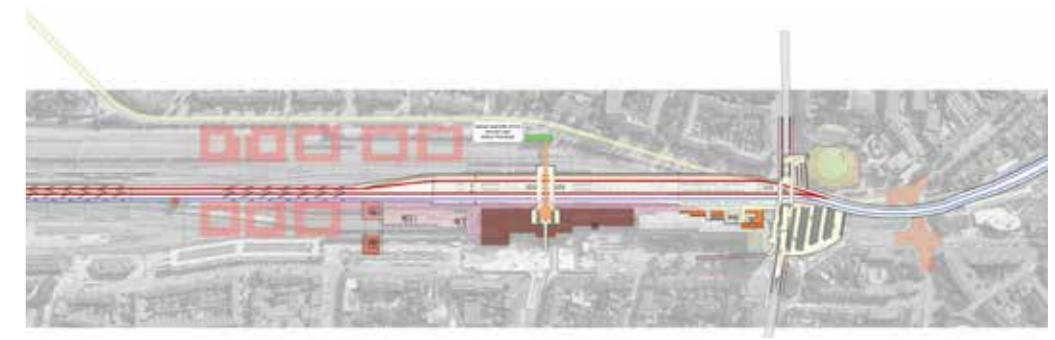
Phase 7

The new parking garage will be completed with a connection to the current Q-park garage and bicycle shed, the two-layer underground station with its 350 meter platform opened for rail traffic and the 4-lane wide avenue will be laid out as an extension of the Meersenerweg and the new Koepelkerk square.



Phase 8

The remaining half-underground over-capped rail track stretch from the Duitse Poort to the railway level crossing at the Bloemenweg/Ariënstraat will now be over-capped so as to shield both sight and sound of passing trains. Over this entire section, this half-sunken, over-capped rail track will be embellished with small trees, plants, flowers and water parties: a 200-meter-long park-like vaulted park will emerge above the over-capped semi-sunken rail track.



Phase 9

With many additional buildings north of the station and the new bus station, the urban rail integration operation will be completed with the removal of the rail platforms on perrons 1, 2 and 3. The new urban landscape north of the station will be completed with new, both housing and office buildings. Many options are open. One could e.g. double the southern Colonel towers now also to the north of the station but also consider the building of additional residential blocks that enrich the urban climate around the station.



¹⁸ Principles used for the cost estimate are as follows: all amounts are exclusive of VAT; unit prices at October 2022 price level; unit prices used are derived from various projects in which Kodos is currently involved (including “extension of the North-South Line to Schiphol and Hoofddorp”; “Guisweg Zaanstad”; “High-Frequency Rail Program”); the accessible deck is derived from the Utrecht Central Station area (in which Kodos is not involved); train security has not been budgeted separately but is part of the item “To be further detailed”; probabilistic estimates: in infrastructure it is common to make a probabilistic estimate and then also report the P-85 value. The P-85 value is the value at which the risk of exceedance is limited to a maximum of 15%. This is likely to be considerably higher given the high real investment costs but has not been done here. An estimate of 4% for the possible shift is nevertheless included.

¹⁹ The tunnel is now in total 1990 meter compared to the 2350 meter in the original proposal and includes now from North to South as in Figure 10: a 280 m slope in open track (green circle 3-track); a 100 m flat route (yellow 3-track); a 120 m slope in tunnel (orange 4-track); a 75 m flat route in front of station (light blue 4-track); a 350 m station (light blue 4-track); a 75 m just behind the station (light blue 4-track); a 290 m slope in tunnel (orange 2-track); a 500 m semi-submerged tunnel to be covered (yellow 2-track); and finally a 200 m slope in open track (green 2-track).

²⁰ Including a total risk reserve of € 248 million excluding VAT.

SECTION 7

A first estimation of the costs

It remains difficult to provide a clear estimate of all costs involved in carrying out such a major infrastructural project. ProRail made some rough estimates of our initial proposal **Across the Tracks**. Unfortunately, little detailed information was provided on how they arrived at their total estimate of €1.4 billion, which was more than twice the more detailed figures which KODOS Advice had calculated at our request.

With respect to this new **Around the Tracks** proposal, we again asked KODOS Advice for a detailed cost calculation. At the same time, we asked BBN van Oosterhoff to give us also an estimate of possible direct benefits as in the case of new opportunities for residential and office housing. In this new proposal, the alternative use of the large amount of non-descript rail space is likely to result in substantial real estate benefits.

Table 1 provides a summary of the new calculations made by KODOS. The more recent estimates of KODOS¹⁸ are higher compared to the earlier estimates they made for the initial proposal **Across the Tracks**.

Thus, the lower costs associated with the now shorter tunnel and the proposed “over-capping” of the rail tracks¹⁹ are offset by substantially higher costs for the two-level underground station with four tracks and the development of two-level, additional parking options. In total, as indicated in Table 1, KODOS Advies arrives now at a higher total cost figure of some €762 million²⁰, half the ProRail estimate of €1.4 billion but still a substantial amount. These costs remain nevertheless high, certainly compared to the cheap alternative currently discussed in the Maastricht city council of replacing the Passerelle, closing the two rail crossings and construct a bike and pedestrian crossing north of the station, estimated at a mere €100 million.

However, these costs must now be compared with more significant rail commuting advantages and more substantial real estate development opportunities with significant new building volumes being created. A first estimate of BBN arrives at a net cash result of €65 million, for an area of some 91,250 m² with total residential or office housing of some 109,250 m² whereby the additional homes provide €11,974,000 in additional land value.

Furthermore, the improvement in the quality of the surrounding living area will be substantial. There are now also major opportunities for improved mobility for buses and more generally speaking, public transport with the possibility to extend the Maartenslaan from the western side to the eastern side connecting it to the new Allee.

The narrowing of the tunnel on the northside of the underground station will also have an effect at ground level transforming the shunting yard into a park zone extending to the Maartenslaan extension. With the help of a number of new switches on the north side, a substantial part of the marshalling yard remains available and unobstructed access to the washing area can be guaranteed.

Boven het spoor Maastricht XS-variant (Noordzijde tracé 3-sporig)

Opdrachtgever Agora B.V. / Jo Coenen
Opgesteld door Kodos, 26 september 2023

Omschrijving	Tunnel	Eenheid	Directe kosten	Tunnel		Reële investering
				Investatorkosten	Risicoreservering	
open bak 3-sporig (groen)	280	m1	€ 15.454.356	€ 38.659.623	€ 8.659.565	€ 47.319.188
100% van deelgebied 1 en 2 ontruimen 100% van tijdelijk spoor - bij XS vervallen 100% van tijdelijk spoor verwijderen - bij XS vervallen						
tunnel 3-sporig (geel)	100	m1	€ 10.914.413	€ 27.302.794	€ 6.115.691	€ 33.418.485
tunnel 2x 2-sporig (oranje)	120	m1	€ 17.063.060	€ 42.683.856	€ 9.560.973	€ 52.244.829
tunnel 2x 2-sporig (licht blauw)	75	m1	€ 10.664.413	€ 26.677.410	€ 5.975.608	€ 32.653.018
Station Maastricht 2 x 15 m, 10 m diep (licht blauw)	350	m1	€ 115.097.696	€ 287.920.999	€ 64.492.885	€ 352.413.884
Herinrichten stationsplein/ Meerssener- en Schamerweg - bij XS vervallen						
tunnel 2x 2-sporig (licht blauw)	75	m1	€ 10.664.413	€ 26.677.410	€ 5.975.608	€ 32.653.018
tunnel 2-sporig (oranje)	290	m1	€ 20.617.865	€ 51.576.325	€ 11.552.843	€ 63.129.168
tunnel 2-sporig halfverdiept (geel)	500	m1	€ 30.485.543	€ 76.260.674	€ 17.082.015	€ 93.342.690
Spoor verwijderen / herinrichting als PM						
open bak 2-sporig (groen)	200	m1	€ 7.199.217	€ 18.009.099	€ 4.033.949	€ 22.043.048
Algemene spoorse werkzaamheden						
Totaal	1.990	m1	€ 238.160.974	€ 595.768.190	€ 133.449.138	€ 729.217.328
Prijspeil oktober '22			€ 123.063.279			Prijspeil okt '22
Subtotaal reële investering tunnel			1.640			€ 729.217.328
Subtotaal reële investering overig			75038,58462			€ 33.113.790
TOTAAL GENERAAL						€ 762.331.118
Prijspeil oktober '21						Prijspeil okt '21
Subtotaal reële investering tunnel						€ 635.526.723
Subtotaal reële investering overig						€ 26.683.819
TOTAAL GENERAAL						€ 662.210.543

Table 1

So overall, the economic, societal and environmental benefits of this more radical proposal will be substantial and considerably higher than in the case of the earlier proposal. It is impossible at this stage to make an overall estimate of all societal benefits of our **Around the Tracks** proposal. As a general rule of thumb, we refer to a recent study of the Central Planning Office (CPB) which estimated total benefits of the two-layer underground railway station in Delft at two fifths of total costs²¹. It would imply that total net costs of our new proposal **Around the Tracks** would ultimately amount to some €460 million. At the same time, the move of the shunting yard elsewhere will of course involve additional costs, estimated by Prorail²² to amount to €100 million.

²¹ Van Ruijven, K. and J. Tijn (2019), De leefbaarheidseffecten van Spoorzone Delft, CPB notitie oktober 2019, zie <https://www.cpb.nl/sites/default/files/omnidownload/cpb-notitie-28okt2019-de-leefbaarheidseffecten-van-Spoorzone-Delft.pdf>

²² See ProRail (2023), Toets haalbaarheid Boven het Spoor: ABC studie Masterplanvisie Stationsgebied Maastricht, 3 juli 2023



CONCLUSIONS

Urban rail integration

The new proposal presented here was inspired by ProRail's criticism on the original **Across the Tracks** as well as various other comments we received over the last year on our original proposal from experts, interested citizens, and the municipality of Maastricht. We are particularly grateful to all of them and hope that this new proposal **Around the Tracks** will provide an answer to these criticisms. Apart from responding to new, both residential and office, housing opportunities in the direct vicinity of Maastricht's Central station, through an alternative use of the voluminous, historically grown "rail delta" in the centre of Maastricht's right bank, our new proposal also aims to better accommodate the future functionality of public transport, including both rail and bus services in Maastricht.

As Bishop puts it: "Railways, like other modern communication and transportation systems, pose a theoretical dilemma. Do they alienate or destroy a sense of place...or enable new connections to be made?"²³. The now radically, redesigned underground Maastricht Central station is expected to evolve into a more effective international rail junction. At the same time and despite the different approach with the new focus on housing shortages, the fundamental aspect of the original contribution as detailed in our original **Across the Tracks** proposal remains intact: the removal of the rail barrier between the eastern and western parts of Maastricht.

²³ Bishop, P. (2002). Gathering the Land: The Alice Springs to Darwin Rail Corridor. *Environment and Planning D: Society and Space*, 20(3), 295-317. <https://doi.org/10.1068/d329>

In the coming months we will further present and discuss this new "urban rail integration" proposal with colleagues and experts, with citizens in Maastricht, but also more widely in Europe as an example of urban rail integration essential for a sustainable mobility transformation of medium sized cities. Up to now, large cities have taken the lead in implementing European Green Deal goals such as decarbonization, renewable energy transformation and circular economy. A smaller city such as Maastricht can add to this "large city" lead in sustainable development by focusing on what is specific, one could say unique, to its own urban development potential: in this case, the large availability of so-called non-descript rail space in the centre of the city offering a unique opportunity for a sustainable urban rail integration. The variety of urban places in Europe offers different insights into the different ways in which sustainability and climate-neutral urban and regional planning can be achieved. Sustainable development requires policy makers in both Europe and the US to recognize the importance of bottom-up initiatives and implementation²⁴. Naturally, the extensive urban development operations associated with transformations such as the one proposed here, will take time and can therefore, as described above in section 6, only be carried out gradually in a step-by-step fashion.

We hope that this new proposal **Around the Tracks** will further grow into a participation project. One which can further build on the support of citizens living in Maastricht and the surrounding area. In our previous **Across the Tracks** publication, we concluded by pointing out that our drawings could not compete with the beautiful frescoes from *L'Allegoria ed Effetti del Buono e del Cattivo Governo* (the Allegory of Good and Bad Government) by Ambrogio Lorenzetti in the Palazzo Pubblico of Siena²⁵. We then hoped, and continue to hope today, that the fresco (reprinted below) of the consequences of good governance in the city of Siena will evoke the same image of good governance... now in the city of Maastricht.

²⁴ See Schwaag Serger, S., Soete, L. and Stierna, J (Eds.) *The Square: Putting place-based innovation policy for sustainability at the centre of policy making*, Publications Office of the European Union, Luxembourg, 2023, ISBN 978-92-76-59369-0, JRC131244.

²⁵ "The city described here, Siena in the 14th century with its characteristic buildings, testifies to wisdom, courage, justice and prudence. The buildings look well maintained and nobles go on horseback in beautiful clothing. Craftsmen are hard at work, merchants offer their products, farmers bring their goods to the market on donkeys and girls dance in the streets. The dance suggests a unity that is indispensable for living together peacefully. There is peace and harmony." *Allegory of good and bad government* - Wikipedia



Allegory of good and bad government



Jo Coenen (Heerlen, 30 September 1949) grew up in South Limburg, The Netherlands and attended secondary school (Bernardinus College) in Heerlen. He graduated as an architect from Eindhoven University of Technology in 1975, after which he became a lecturer at the architecture faculty of the same university. From 1977 he studied briefly with Luigi Snozzi in Locarno and James Stirling in Düsseldorf. From 1979 onwards he also worked for the architectural firm of Aldo van Eyck & Theo Bosch in Amsterdam. That same year he opened the first branch of his own architectural

firm in Eindhoven. Coenen managed to build a reputation in the Netherlands through his urban designs, including for the Vaillantlaan in The Hague, the KNSM island in Amsterdam and the Céramique site and the Maas Market project in Maastricht. Other larger projects include the Netherlands Architecture Institute (now: Het Nieuwe Instituut) in the Museum Park in Rotterdam (1988–1993), the Smalle Haven area in Eindhoven (including the Vestedatoren, 2000–2006) and the Innovatoren in Venlo (2009–2011). Coenen's office (Jo Coenen Architects and Urbanists or JCAU) was one of the two architectural firms (the other firm was Network Oriented Architects, or NOAHH) of the (second) design of the Amare educational and cultural complex at the Haagse Spui (2015–2021).

Coenen was a lecturer at the academies of architecture in Tilburg and Maastricht and the technical universities of Karlsruhe, Aachen, Lausanne, Eindhoven and Delft. In 1987, he was appointed Ordentlicher Professor Gebäudelehre und Entwerfen at Karlsruhe University of Technology, of which he has been an honorary professor since 1995. In 2001, in the Netherlands, he was appointed Professor of Public Building in the department of architecture at Delft University of Technology. Between 2000 and 2004 Coenen was Chief Government Architect of the Netherlands (*Rijksbouwmeester*). In 1995 he won the BNA Kubus award. He is honorary member of the Association of German Architects (BDA). Since 2019 he is involved in the academic field at Politecnico Milano. As a mark of recognition and appreciation, Coenen was granted an honorary doctorate by the Open University of the Netherlands in 2007 and was elected to an Honorary Fellowship of The American Institute of Architects in 2009.

In 2014 he was appointed 'Ridder in de Orde van de Nederlandse Leeuw'.
https://nl.wikipedia.org/wiki/Jo_Coenen



Luc Soete (Sint-Jans Molenbeek, 15 September 1950) grew up in Brussels and attended secondary school (Heilig-Hart College) in Ganshoren, Belgium. He graduated as an economist from Ghent University in 1972, after which he became a researcher at the Economics department of the University of Antwerp (UFSIA). In 1978, he obtained his PhD in Economics at the University of Sussex after which he joined the Institute of Development

Studies and the Science Policy Research Unit (SPRU), both of the University of Sussex in 1979. He joined the Rijksuniversiteit Limburg, now Maastricht University, in 1986, where he founded the Maastricht Economic Research Institute on Innovation and Technology (MERIT). In 2005 MERIT merged with the UNU Institute for New Technologies (UNU-INTECH), which had been founded in 1990 to become UNU-MERIT. In 2010 he was appointed dean of the Maastricht Graduate School of Governance (MGSoG) which became integrated in UNU-MERIT. As of September 2012, Soete served as Rector Magnificus of Maastricht University from 2012 to 2016.

Currently, Soete is emeritus Professor of Maastricht University and Dean of the Brussels School of Governance of the Free University of Brussels. He is a member of the Royal Netherlands Academy of Arts and Sciences (KNAW) since 2010 and vice-president of the supervisory board of the Technical University of Delft. He is also a member of the Economic and Societal Impact of Research (ESIR) expert group for the European Commission (EC), co-chair of the Scientific Committee of the EC's Joint Research Centre's Partnerships for Regional Innovation, a member of the Advisory Board of the University of Sussex Business School and of the Advisory Board of the UNU Institute on Comparative Regional Integration Studies (UNU-CRIS) in Bruges, Belgium.

Luc Soete received the Belgian Commander of the Order of the Crown in 2006, an honorary doctorate from Ghent University in 2010, Liège University in 2014 and Sussex University in 2016.

https://nl.wikipedia.org/wiki/Luc_Soete

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