ESTUDIO LAMELA
ARQUITECTOS

TRANSPORT
WORLD IN MOTION
Architecture moves the world, and the world moves by means of architecture. They are two parallel views inside an increasingly interconnected world, a world which seeks solutions to the displacement of thousands of people.

Transport architecture should offer welcoming and passenger-centric buildings in which natural light dominates and where it would be simple to find direction. From the structural base to the most miniscule detail, all must contribute to aim that the traveller feels welcome. This is because airports and stations mustn’t only be places of transit, but also of encounter and shelter.

Carlos Lamela
Estudio Lamela
Project Locations

- Selected Transport projects
- Other projects

**ECUATORIAL GUINEA**
- Malabo International Airport

**QATAR**
- Doha Light Rail Transit
- 7 Underground Stations

**SPAIN**
- Madrid-Barajas Airport T4 Terminal
- Madrid-Barajas Airport T1&T2 Refurbishment
- Lola Train Station, San Sebastiá
- South Tenerife Interchange Station, Canary Islands
- Gran-Caeca Airport Extension, Canary Islands

**POLAND**
- Warsaw Chopin Airport, Warsaw
  - 2 Warsaw Line-2 Metro Stations
- Warsaw Line-2 Metro Stations

**THE NEDERLANDS**
- Amsterdam Schiphol Airport Terminal

**MEXICO**
- Tijuana Airport Terminal New

**Other projects**

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Selected Projects

Amsterdam Schiphol Airport Terminal
Schiphol, The Netherlands
Total Area: 100,500 sqm
Coauthor: KAAN Architecten

Tijuana Airport New Terminal
Tijuana, Mexico
Total Area: 30,000 sqm
Coauthor: LAM Architects

Loiola Train Station
San Sebastián, Spain
Total Area: 15,000 sqm
Coauthor: VAUMM

Madrid-Barajas Airport T4 Terminal
Madrid, Spain
Total Area: 1,095,000 sqm
Coauthor: Richard Rogers Partnership

Madrid-Barajas Airport T1 and T2
refurbishment
Madrid, Spain
Total Area: 14,400 sqm

7 Lusail Light Rail Transit
Underground Stations
Doha, Qatar
Total Area: 27,823 sqm
Early Stages Designer: ATKINS

Warsaw Chopin Airport*
Warsaw, Poland
Total Area: 150,000 sqm

2 Warsaw Line-2 Metro Stations
Warsaw, Poland
Total Area: 17,000 sqm
Concept Design author: B.P. Metroprojekt/Andrzej M. Choldzyński

Gran Canaria Airport Extension
Gran Canaria, Spain
Total Area: 163,000 sqm

Córdoba Airport
Córdoba, Spain
Total Area: 5,800 sqm

Malabo International Airport
Malabo, Equatorial Guinea
Total Area: 46,315 sqm

South Tenerife Interchange Station
Santa Cruz de Tenerife, Spain
Total Area: 17,000 sqm
Coauthor: Estudio Marrero

* Estudio Lamela + Lamela & Asociados
Estudio Lamela, KAAN Architecten, ABT and Ineco, operating as KL AIR, is to design the large new terminal at Amsterdam Airport Schiphol. The Departures and Arrivals Hall that welcomes 14 million travellers a year will be ready in 2023. KL AIR is further supported by DGM/Arnout Meijer Studio and Planeground. The design proposal submitted to the international competition scored the most points on all criteria. The inspiration behind the design is Schiphol itself and the ethos that has shaped the airport over the past 50 years: functionality, user overview and attention to detail, all well-integrated in an atmosphere of calmness, distinction and practicality. In what could be said to define the essence of Schiphol’s DNA, space, light and wide-open views have been given priority over architectural form. The design submission defers to the airport’s sobriety and the “one terminal” concept, including transfers free of check-out and check-in and automatic baggage transfers for passengers.
Tijuana Airport New Terminal

Tijuana Airport’s new terminal is a structure formed mainly by the extended national baggage reclaim area as well as the new main hall, both giving a spatial and structural guideline to future extensions of the airport complex. The image of the building is respectful and inclusive with the current airport, likewise emphasizing the representative character of such an important public building for this singular border city.

Location: Tijuana, México
Client: GAP
Coauthor: LAM Architects
Total Area: 30,000 sqm
Estimated Completion Date: 2021

6.3M PASSENGERS PER YEAR
The project of the new trestle station in Loiola aims not only to renew a remaining urban structure but also to turn the railway infrastructure into a highly significant urban element. It is intended as a railway superstructure noticeable to the urban scale, a bridge-building where the board, unique work of engineering of Mario Guisasola, is closed through metallic arches, on which the façade is then attached and to which chains and systems of acoustic barriers are incorporated. This action grants the area with a major pedestrian permeability connecting the neighbourhoods of both sides of the railroads and establishing new areas of commercial and dotacional opportunity that contribute to the urban regeneration of the surroundings.
The project contemplates a complete refurbishment of the old terminal 1 and a new Terminal 2 (now Terminal A), and starts out from the idea of constructing a compact terminal by adding the new building onto the northwest side of Terminal 1. The structural system applied in the new terminal duplicates the spans of the structure of the existing building, maintaining the same modulation and thus achieving spatial continuity and architectural homogeneity. A new visual control tower has been included on the pier, and takes center stage. The fixed links are formal and imposing, standing out as large and powerful sculptural elements.

The project integrates the architecture and the organization of Terminal 1 with Terminal 2, modernises and enlarges the airport aprons, and forms part of the whole master plan which includes hotels, office buildings, business centers and car parks.
2 Warsaw Line-2 Metro Stations

The construction of the II underground line in Warsaw consists of 7 new stations along with ventilation shafts and tunnel works. Estudio Lamela is responsible for the project of two stations: “Swietokrzyska” which is located in the center point of the city at Swietokrzyska and Marszalkowska street and “Nowy Swiat”, which is the closest station to the Warsaw Old Town, the most touristic area. Apart from those buildings Estudio Lamela is designing three ventilation shafts which are located in between the stations.

Both stations consist of four underground levels: the check-in hall, two technical floors and the platform. “Nowy Swiat” besides is the deepest station among all going down 28 meters below ground level. The length of the stations is around 130m x 27m. On each station we can find two rows of columns.

On the first underground level there are commercial spaces located creating the vibrant urban space. On the Swietokrzyska station the connection between this level and the platform is by escalators surrounded by the glass tube which imitates the night sky.

Location: Warsaw, Poland
Client: AGP METRO POLSKA
Concept Design author: B.P. Metroprojekt/ Andrzej M. Chołdzyński
Total Area: 17,000 sqm
Completion Date: 2015
Gran Canaria Airport Extension

The project includes the redevelopment of the current Terminal building, and a sizeable enlargement thereof. The idea is to improve its functioning through three operations: firstly, expansion of ground side, using a structure which gives the building a new image and houses the new check-in hall with 36 new counters and a new departures dock. Secondly, extension to the North for the creation of a new boarding pier, which achieves a total of 15 contact positions, two of them double. And, finally, growth of the building towards the South to segregate the flow of passengers from international flights from the remaining passengers.
The project is formed of T4 Terminal Building and the T4S Satellite Building. The first consists of four parallel volumes which cover the four essential operations in a terminal: accesses, check-in, control and boarding. They are separated from each other by large atriums, which allow the entry of natural light, forming part of a global environmental strategy. The T4S connects to the T4 via a service tunnel which includes the APM. It is formed of two volumes which house the customs control. The project has 67 assisted aircraft positions: 40 for the T4 and 27 for the T4S. The whole is completed with car parking for 9000 vehicles, divided into 6 modules of 1500 spaces each.
The goal of the project is a renovation of the image of the old check-in vestibules and the transverse shopping axis in T2, in order to increase the comfort levels of passengers by improving the lighting, the surface coverings and equipment. It also pursues the creation of a new access to the shopping area from the check-in hall, including the retail counters currently located here, and the adaptation of the air-conditioning system to the new architectural solution and integration of the air diffusion into this solution. This project will not involve a variation in the flows of passengers or the functioning of the different spaces in the building compared to the current situation.

Location: Madrid, Spain
Client: AENA
Total Area: 14,400 sqm
Completion Date: 2007

Integrated in the urban development of Lusail, a new city designed for up to 450,000 inhabitants, the light rail transit system (LRT) is a first class transport network that will internally connect its 19 districts with Doha and its international airport.

Lamela Design Consultancy has been appointed to develop the detailed design of the stations, pedestrian entrances and auxiliary structures of 7 underground stations of the LRT network. The stations have two levels (first underground and platforms) and two pedestrian entrances per station, with light wells that provide light to the first underground level, as well as a number of ancillary buildings, including fire escapes, ventilation ducts and other elements that have been designed to be appropriately integrated into the overall planning of the city of Lusail.

Location: Doha, Qatar
Client: QDVC/Cundall
Early Stages Designer: ATKINS
Total Area: 27,823 sqm
Estimated Completion Date: 2018
Malabo International Airport

The architectural concept of the project involves a unitary roofing that brings together all the necessary spaces and transmits a powerful and modern image of the terminal while at the same time being flexible and permitting the required changes over the life of the project. The roof is understood as an element of little weight, tectonic, linked to the notion of “air” and the concept of flying. It is the part that gives unity to the whole, defined by large overhangs that provide an image of the building while protecting it from direct sunlight, including a central skylight to allow light into the interior of the building. The facades are presented as large panes of glass with high transparency, made possible thanks to the protection offered by the roof overhangs.
Chamartin’s New Multimodal Station

The New Multimodal Station is designed with a large-scale concept where its structural cover envelops the volume of several combined floors. This system achieves two structural orders: the first one being the main structure of the roof, of large dimensions, which accommodates the longitudinal development of access roads and platforms; and the second one being the secondary detached structure which accommodates railways, offices, and a large subsidized commercial department. The different skylights on the roof distribute light to the various interior architectural spaces, reflecting the different interior uses to the city.

Commuters of the Cercanías and Alta Velocidad trains travel side-by-side in the station which forges two stations into one unique architectural concept.
South Tenerife Interchange Station

There is debate about the need to design the Santa Cruz station for the Tren del Sur, in order for it to integrate with other means of transport and for it to provide a suitable response to the urban development in the area. Among the whole set of actions that compose the design for the creation of a new insular railway line, one must emphasise the integration of the interchanger inside the city. The interchanger, so much for its central location as for its typology, is tied to the constraints imposed by the city layout, but nevertheless it is a key element to guarantee a proper urban restructuring.

The commitment to this type of project, offers from the beginning of the works, the opportunity to think about the specific characteristics of transport inside the city, as well as the chance to propose new guidelines that would not only affect the design of the new station, but also imply the recovery and the arrangement of the urban areas.

Córdoba Airport Terminal

The new terminal building is situated to the south west of the current terminal and of the technical block. A flexible and modular building has been designed which foresees a future expansion. It is aimed for it to be a building with a clear functionality, facilitating the passenger’s orientation from the access vestibule through a visible transparency among the different spaces.

With a great horizontal component, the terminal’s image is unitary. The façade consists of a ceramic coated base on which all the door and window openings as well as all auxiliary spaces are held on. Upon said socket, is a lattice of prefabricated concrete that, while enhancing the pace of the structure, simultaneously personalises the building and allows a homogeneous response to the land side where the facilities are located, as well as to the air side where a possible future extension is foreseen.
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