Design resultant:

Industrial design: the conception and planning of products for multiple reproduction, using instrumental factors such as engineering, technology, materials and aesthetics to create machine reproducible solutions to balance all needs and desires within technical and social constraints. This is the essence of industrial design as defined by Fiell 2000, pg 6.

An example of the above statement is car design. A result of creative conception and physical restraints, having an end result that performs a basic transportational means. All cars are different in appearance due to multiple social, economic, environmental, physical and financial criteria. These restrictions are found in all spheres of design resolution.

The design centre uses these informants discussed throughout the project of industrial design in its formulation and realisation.

Herewith follows the instrumental thrusts leading to the end product, an architecture that fulfils the requirements for an industrial design centre within an urban landscape:

- Urban response
- Industrial design response

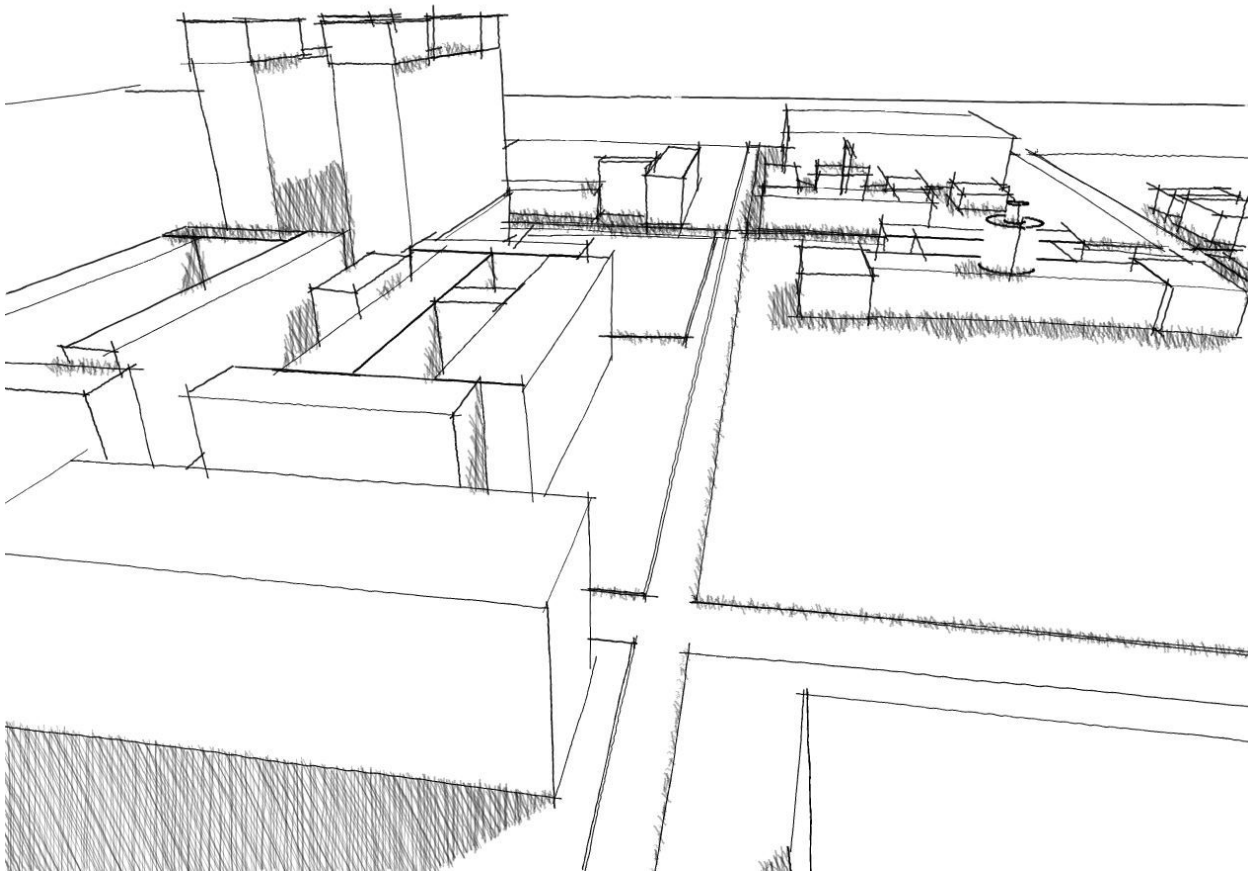

Fig 1. The urban room view towards west

1. Urban response:

In the absence of any built form in the south-western corner of the City Hall precinct, the design centre attempts to resolve key urban issues:

The stately frame is interrupted where a lack off built form exists. The design centre addresses this issue by following the frame line on the southern side of City Hall, using it as a build-to line. Continuing the line through to Bosman Street allows a boundary line to create an urban corner to be designed according to the line generated.

Architecturally this makes urban sense, by creating a spatial divide that defines the boundary between verticality and horizons. Creating the build-to line allows the building to fit into the precinct without neglecting the importance of the entire precinct composition, refer to Figure 2.

On an activity level, the centre provides activities for most of the day. Being primarily a design school means that the space will be activated during the day by students and visitors as they move about inside and out the building. The housing component allows night activity and passive surveillance.

Students and visitors become active participators within the building space and the urban landscape wherein the centre is located, refer to Figure 1.

The overarching success lies in the fact that the centre appropriately uses the under-utilised space and addresses key urban issues while respecting the precinct structure.

A dialogue is formed between the centre and the fire brigade across Bosman Street where the urban corner of the centre mirrors the form-follows-function approach used by the fire brigade building. On ground level, the centre opens into the public realm by offering an open internal courtyard that generates a continuous flow of movement and energy between the centre and the gardens of City Hall, thus enhancing the urban landscape of the precinct.

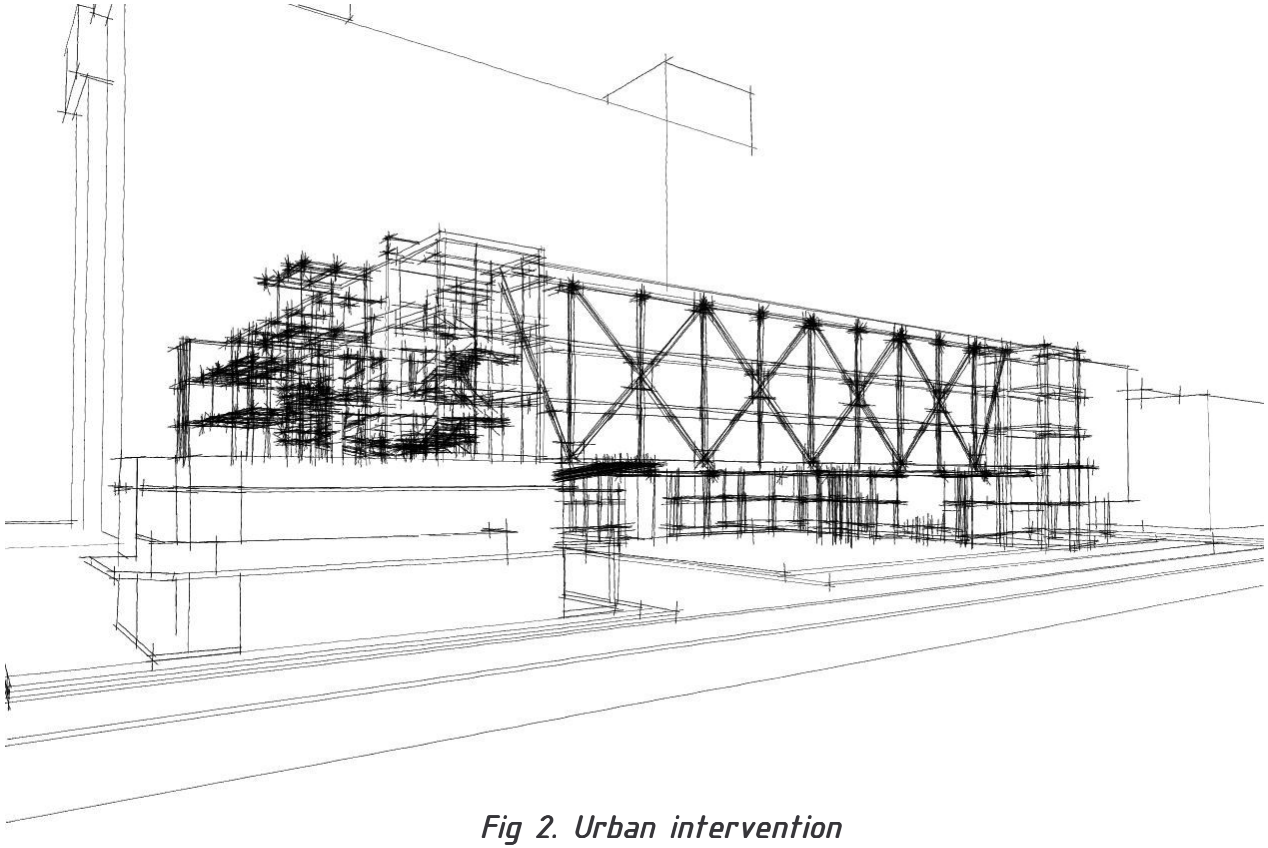

Fig 2. Urban intervention

2. Industrial design approach:

A centre to understand industrial design:

Point of departure: to understand the art of making mass-producible artefacts with the influence of design

Intentionally, the building relates to mass production and rapid manufacture and construction. This means that certain construction elements and components can be pre-manufactured in a factory with the result of transporting the ready-to-be-installed components to site where these can be erected in short periods of time. This process allows certain components to be manufactured while slower construction continues un-interrupted on site.

The main steel structural bridge is the result of the above-mentioned objective. While the concrete super-structure is created, the steel members of the bridge can be manufacture off-site and ready when the super-structure is completed. While being architecturally designed to appear raw and robust, the structure is refined to be functional and exposes the way in which structures can be assembled in simplicity.

Furthermore, this objective of pre-made components is illustrated in the exposition pod structures. Here, the structures illustrate the simplicity of mountability and possibility for recycling. The structures attach to the concrete super-structure with relative ease and more pod structures can be added when required, or, taken away. Mass production of components, made possible with simple detailing, means that these structures are an off-the-shelf kind of construction similar to tables or chairs.

The above-mentioned structures illustrate a small component of industrial design that can be used in the approach to designing a building.

Space has been created using two basic constraints, urban design and industrial design. The final product is an expression of how architecture can fit into an urban room with its resolution being driven by a different discipline in design (Figure 3).

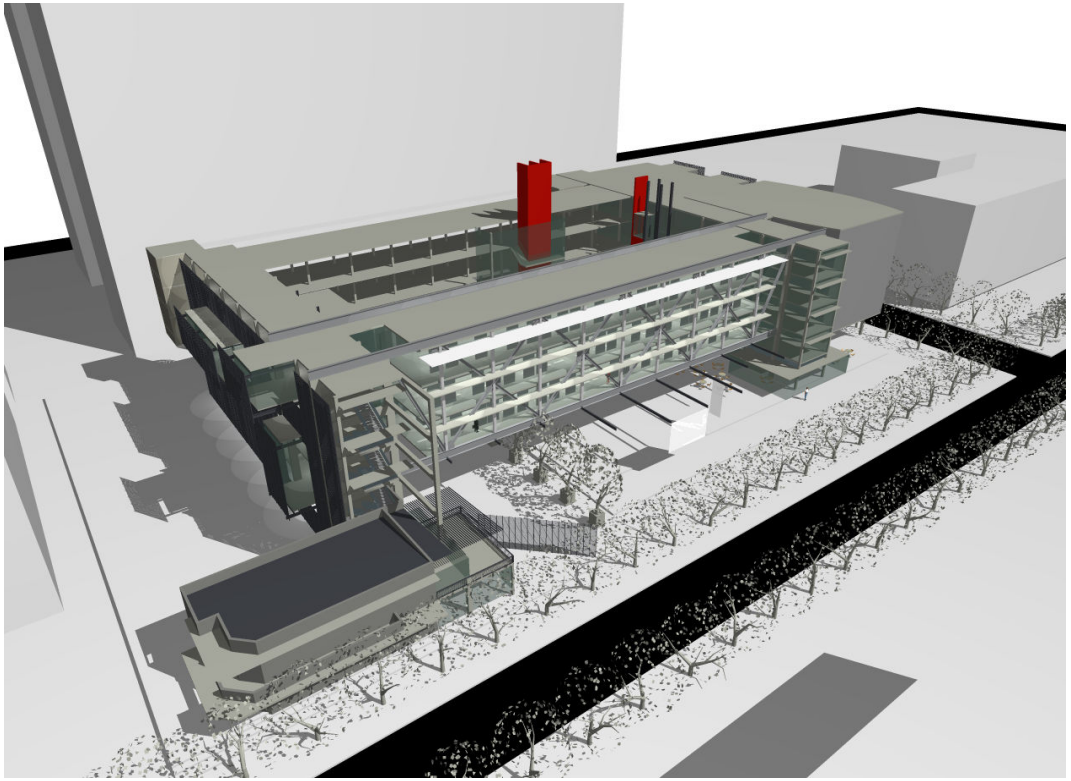

Fig 3. The final product.