

CISM CENTRE FOR INTEGRATIVE SEMICONDUCTOR MATERIALS



South and West elevations. View from Engineering East



Main entrance from east.



Building Section

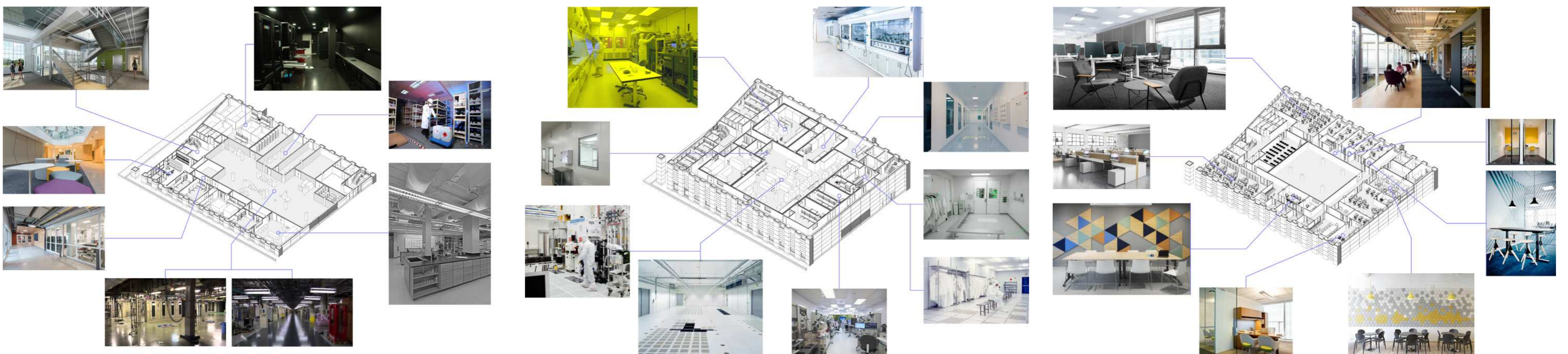
The proposed building section has been developed based on the feasibility studies undertaken during Stage 02. The principles of the design mirror similar semiconductor facilities. The main ISO labs are located in the center of the building and services from

both below and above. The supporting plant and equipment for specialist tools is located on the ground floor and access is provided through several openings in the first floor slab to the main general lab. A raised access floor above the first floor slab allows for limited

services and primarily acts as a plenum for air circulation within the labs. Above the clean rooms there is an interstitial ceiling for the majority of services to be supplied to the labs below and to allow

access to ceiling mounted fan coil units, lighting and secondary equipment such as smoke detectors and sprinkler systems. The offices located on the second floor wrap around the proposed plant space allowing

direct access from the second floor plant space the interstitial ceiling and labs below.



Ground Floor

The ground floor of the proposed building houses several non ISO laboratory spaces, the main building entrance and supporting plant, storage and workshops.

The primary personnel entrance is located to the north of the building opposite the existing ESRI entrance. Staff and visitor log in point is located within the main entrance and there is no provision for a manned reception area.

To the western side of the building several labs are located to allow external views of internal activity from the adjacent pavement and to allow direct access to the adjacent

plant room. The northernmost lab space is dedicated to the new MOCVD lab. This lab has direct access to the main plant area and external equipment access.

The opto-electronics lab is located to the south east corner of the building. This space is light sensitive and as such is isolated from the rest of the building with a lobby.

To the eastern side of the building the workshop, chemical store and chemical waste store are directly accessible from the secure fenced access leading from the existing goods yard.

First Floor

The first floor houses the ISO laboratory's and supporting labs. Primary access to the labs is located to the South west corner with a suitable changing area. The organics lab located to the south west has a separate changing facility to avoid cross contamination between labs. Ventilated passthroughs are provided between dirty and clean spaces in the organics and general labs.

Customer bays and dry lab facility's are located to the south access from the western circulation corridor. Customer bays can be operated as clean or dirty spaces. When

operating in a clean mode they are access from the main clean lab space. When operated as dirty labs they are access from the corridor and sealed from the main lab space.

Second Floor

The second floor is dedicated to offices for lab users and support personnel. Offices are current proposed in a number of configurations from single occupancy to large open plan spaces.

Additionally to the offices several meeting rooms a board room and shared kitchen are proposed. Meeting rooms have been created in different sizes and configurations to allow for maximum flexibility. The board room is expected to be used for visitors and potential building customers therefore will require a higher level of fit-out than the general meeting rooms.

The kitchen space is proposed to act as the 'heart' of the building community, as such it is sized to allow for multiple users and as the furniture layout is defined options for open seating and more private booths should be included.