

CUED INSET MASTERPLAN

As you will be aware, over the last couple of years we have been carrying out a masterplan review and consulting on a vision for our West Cambridge site. Our vision includes the creation of a world class, well connected research and development environment.

The number of Academics and Students will grow considerably over the coming years until a total of around 3,800 is reached requiring a total usable floor area of approximately 100,000m² by 2024. To accommodate the predicted rate of expansion the University of Cambridge, Department Of Engineering will re-integrate its' entire operation on the West Cambridge site in a phased development over the next 10-15 years. This will require 60,000m² of new building on West Cambridge. Buildings will be delivered in a phased manner, the first being the new Civil Engineering building, which will house Civil Engineering research groups.

This is the most significant relocation of the Department of Engineering since the 1920's. The Department is currently largely housed within the Trumpington Street Inglis and Baker Buildings (built in 1952). These existing buildings are no longer adequate and there is now a strong commitment to move the whole department to a new fully integrated precinct on the West Cambridge site.



CUED Inset Masterplan set within the context of the West Cambridge Masterplan

CUED - CIVIL ENGINEERING BUILDING

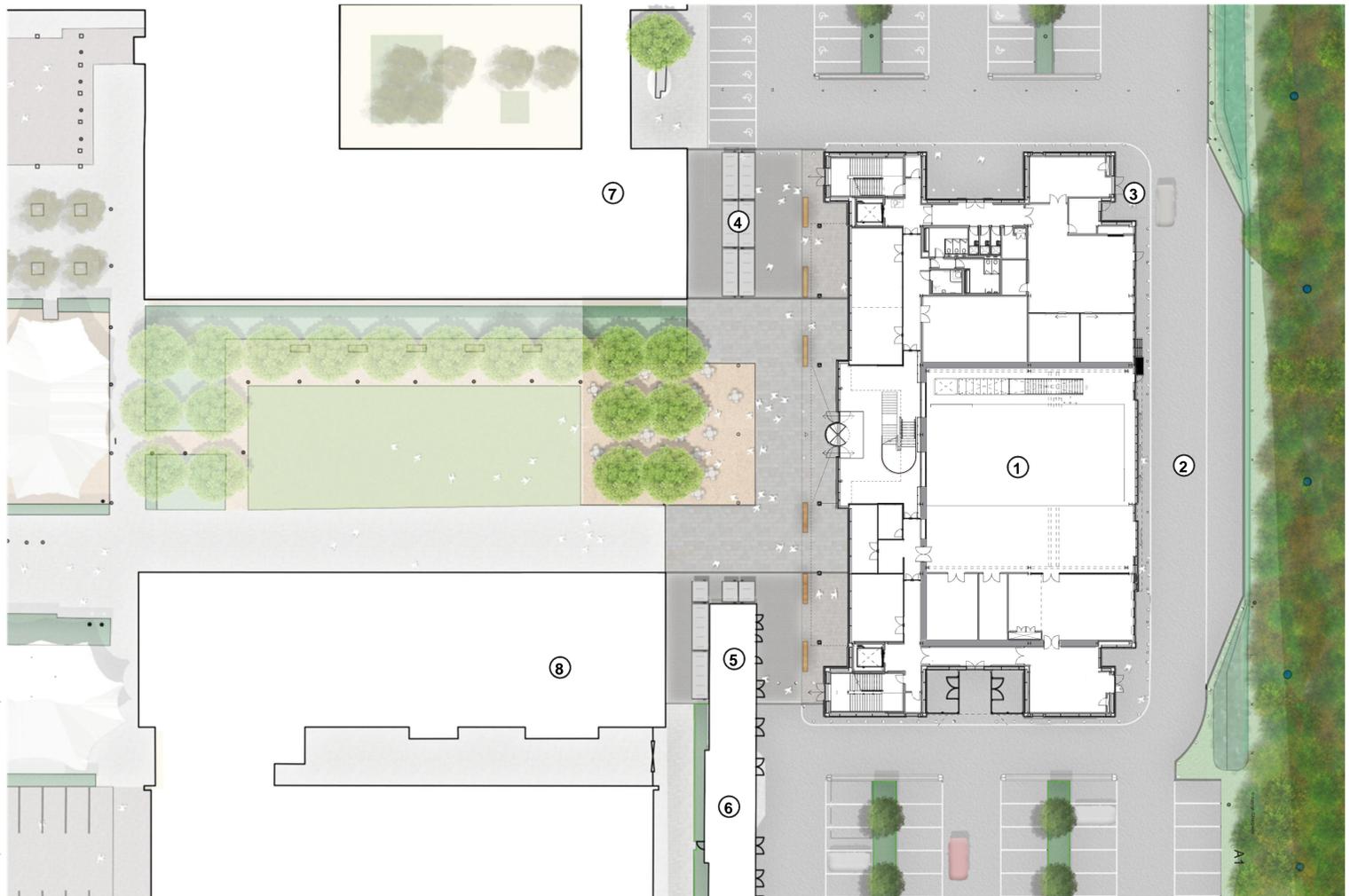
CIVIL ENGINEERING BUILDING

The first project to receive funding is the Civil Engineering Building; this is an initial step in reintegrating the engineering department into a single campus. In the Civil Engineering building staff and students will carry out experimental research into infrastructure in the built environment. This cutting edge research will have a positive impact on large scale national infrastructure projects such as bridges, tunnels and road networks.

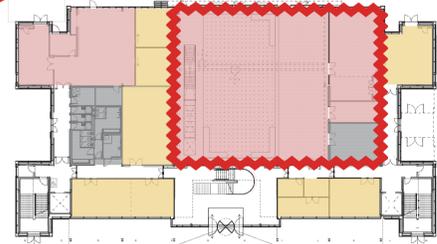
The UK Collaboration for Research in Infrastructure and Cities (UK-CRIC) is a national research programme prioritise and promote investment for infrastructure in the UK. The Centre at Cambridge will be the National Research Facility for Infrastructure Sensing (NRFIS), focusing on the application and development of advanced sensor technology in construction to promote better quality and safety, and smarter asset management.

The Civil Engineering building presents an exciting opportunity to create a purpose built Centre for world-leading research in the built environment, and incorporate some of the features of the latest innovations in infrastructure and building monitoring technology within the engineering design. The building has been designed to high environmental standards, including high noise and vibration attenuation, low energy consumption and heating delivered by ground source heat pumps.

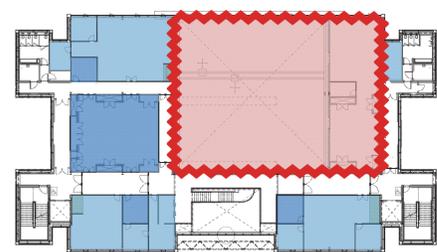
- Workshops
- Laboratories
- Offices
- Meeting, seminar and conference facilities
- Informal social and welfare spaces
- ⚡ Sound Containment "Box In Box" construction



Ground floor and landscape proposal for the Civil Engineering Building



Ground Floor Plan



First Floor Plan



Second Floor Plan



Interior View of the Main Structures Workshop

- ① Main Structures Workshop (Strong Floor)
- ② Service Road
- ③ Loading Bay
- ④ Cycle Parking
- ⑤ Bin Store
- ⑥ Amenity Store
- ⑦ Existing Roger Needham Building
- ⑧ Existing CAPE building extension

PROJECT DELIVERY TEAM

SDC Builders have been appointed to deliver the Civil Engineering Building and the associated infrastructure enabling works for the Cambridge University Engineering Department. SDC bring an experienced design team to the project, with wide ranging experience of similar schemes, particularly for the University. The team is composed of the following consultant practices:



Principal Contractor



Civil & Structural Engineers



Architects



Mechanical & Electrical Engineers

SDC will have an experienced project team on site whose primary objective is to ensure that the scheme is delivered to a high standard, safely and on time. Ensuring that stakeholders are consistently updated on the project is a critical element of this and SDC will ensure a 'No Surprises' approach is adopted when engaging with neighbours. Responsible for stakeholder management for the construction element of the Civil Engineering Building Project is Project Manager, Tom Fenner. Tom is liaising closely with Estate Management and the Civil Engineering Department's Project Manager to plan and implement the works. Tom has attended meetings with a number of the neighbouring departments and will regularly liaise with the stakeholders. Tom is the primary point of contact should there be any queries or suggestions, his role will be deputised by Site Manager David Ross. Please see below their respective contact details.

Principal Contractor Project Management Team		Estate Management Project Management Team		Civil Engineering Department Project Management	
Project Manager Stakeholder Liaison Manager	Tom Fenner Tom.fenner@sdco.co.uk 07831 165880	Infrastructure Works	Matt Allen	Dept. of Engineering Representative	Sean Butcher
Site Manager Deputy Stakeholder Liaison Manager	David Ross David.ross@sdco.co.uk 07717 300502	Main Works	Brian Williams		
		Facilities Support Manager (Car Parking)	Steve Matthews		
			steve.matthews@admin.cam.ac.uk		
			01223 760957		

A bit about SDC...

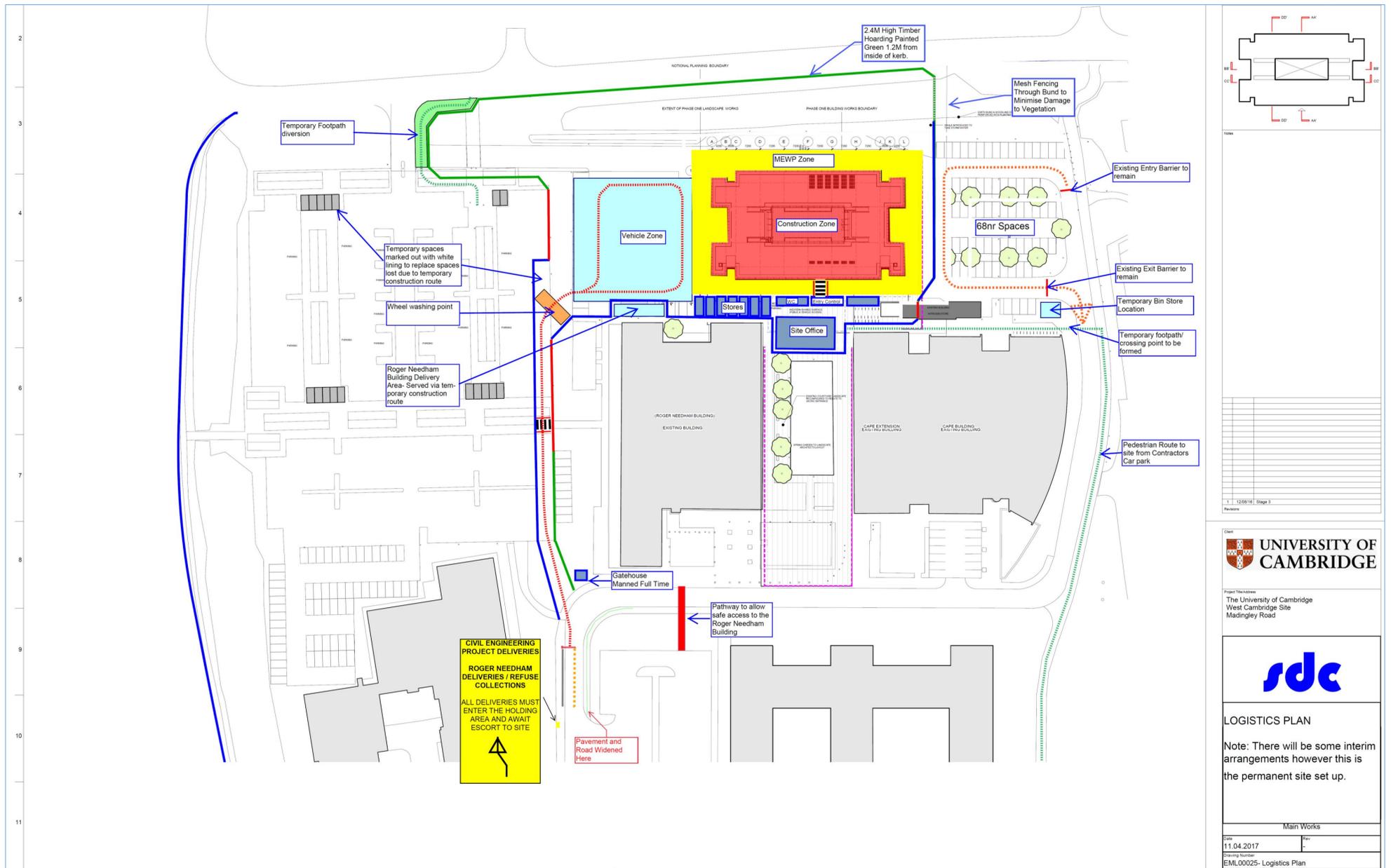
SDC is a main contractor that undertakes projects in a variety of construction sectors, including research and development, commercial, manufacturing, automotive, healthcare, and education. Offering such a diverse spectrum of service has enabled us to move with – and adapt to – changing market trends, which has resulted in controlled growth for the business. Our group of companies was established in 1972, is privately owned, and operates under the umbrella of a holding company and Employee Benefit Trust.

SDC have extensive experience of working on the West Cambridge Site, including the following projects:

Maxwell Centre Project	EEBDA Cape Building Project	Judge Business School Project
Client: Cambridge University	Client: Cambridge University	Client: Cambridge University
Location: JJ Thomson Avenue	Location: JJ Thomson Avenue	Location: Trumpington Street
Value: £16.4 Million	Value: £7.8 Million	Value: £22 Million

PROJECT DELIVERY & LOGISTICS

SDC have worked closely with Estate Management and the neighbouring stakeholders to devise a logistics plan which is visibly un-intrusive and minimises impact on neighbouring building users and equipment. There will be some interim arrangements which will be implemented, however please see below the final logistics plan which will be in place for the majority of the scheme:



PROJECT CONSTRUCTION & OUTLINE METHODOLOGY

The building is a steel frame, constructed using precast concrete planks and aluminium curtain walling with a green roof. The basement and foundations are reinforced concrete and the external landscaping is a mixture of block paving, trees and a tarmac roadway. Within the building is a post-tensioned strong floor which is situated in the main structures workshop. Additionally there are concrete, sensor, structural dynamics and façade engineering laboratories within the building, along with a number of offices and seminar rooms. Each of these spaces requires meticulous planning and stakeholder liaison to ensure the needs of the respective users are met.

The project commences on the 5th June, with a series of infrastructure enabling works to provide power, water, gas and communications supplies for the scheme and the wider masterplan. The construction of the main works will commence with the construction of a reinforced concrete basement and concrete raft slab. This will be constructed using small plant and concrete pumps. The frame and facade will be erected using a mobile crane and scissor lifts. The graphics adjacent detail the proposed methodology of works.

Civil Engineering Project

SDC's Commitment to Being a Positive Neighbour

Although SDC are aware of the potential impact of the building works on the surrounding areas, we can assure you that all necessary steps will be taken with this project to minimize any disturbance. We also consider it part of our role to proactively engage with the community we work within and contribute positively. We warmly invite any suggestions our neighbours may have about new or existing initiatives we could contribute to. In the past, we have undertaken the following for example:

- Provision of materials or labour to assist with a charitable or local project;
- Facilitation of learning days for school or college students including lecturing;
- Holding raffles to donate money to local charities.

The more interesting and personal the ideas are, the better! We welcome all suggestions and will assist wherever we can to develop any ideas. Please contact me with any ideas by email and we will be sure to contact you to discuss taking it further.

Thanks
Tom Fenner
Tom.fenner@sdco.co.uk

