Application Number	14/1691/COND12	Agenda Item	
<b>Date Received</b>	4th August 2016	Officer	Tony
	-		Collins
Target Date	29th September 2016		
Ward	Queen Ediths		
Site	Land South Of Robinson	Way West C	of The Forvie
	Site Robinson Way Cam	oridge	
Proposal	Condition 12 - External M	laterials (Plo	t 8)
Applicant	University of Cambridge and Cambridge Medipark		
	Limited		

SUMMARY	The condition discharge request accords with the Development Plan for the following reason:
	☐ Although the proposed COR-TEN steel is different in appearance to the bronze panels previously suggested for this building, the material would achieve a similar strong visual accent for this prominent building, and also relate well through its earthy tone to the surrounding landscape.
RECOMMENDATION	APPROVAL

#### 1.0 SITE DESCRIPTION/AREA CONTEXT

1.1 The application concerns Project Bellatrix, the research building on Plot 8 of the Cambridge Biomedical Campus. Plot 8 lies in the south-west corner of the Phase 1 area of the Biomedical Campus, east of the railway line, west of Francis Crick Avenue, and north of the Addenbrooke's Road bridge.

#### 2.0 THE PROPOSAL

2.1 The application seeks to discharge Condition 12 of the amended outline permission 14/1691/S73 with respect to the building approved on Plot 8 under reserved matters permission 16/0653/REM.

- 2.2 Condition 12 requires that no development of a building shall take place until sample panels of the materials to be used in the construction of its external surfaces have been submitted to and approved in writing by the Local Planning Authority. It also requires that the panels shall show the proposed combination of external materials to be used, and that the development shall be constructed in accordance with the approved samples.
- 2.3 The application proposes the following suite of materials:

Main B	Building
1	pre-weathered COR-TEN steel
2	mirror frit low iron glazing
3	white frit glazing in 20%, 45%, 70% and 100% patterns
4	polycarbonate cladding to roof plant enclosure
5	polyester powder-coated (PPC) louvres to flue screen
6	precast reconstituted stone cladding
7	PPC finish to ground floor metalwork
Outbuildings and Ground Surfaces	
8	car park barrier
9	cycle store mesh
10	brown roof
11	paving setts
12	macadam
13	compacted gravel

2.4 This application is brought to Committee under Part A1(k) of the scheme of delegation, because in the view of officers, special considerations apply to this request to discharge a condition:

☐ The building is in a very prominent position on the edge of
the city, highly visible from both road and rail approaches,
☐ Previous discussions about the building at both Quality Panel
and Planning Committee have been informed by specific
references to pre-patinated bronze cladding in the Design
and Access Statement and the application drawings,

	for cladding is significantly different from the pre-patinated bronze sheet.
2.5	Following initial comments from the urban design team, the applicants have submitted additional material as follows:
	<ul> <li>□ Façade materiality document including specification and photographic evidence of existing buildings clad in CORTEN, and specification for polycarbonate sheet for plant enclosure</li> <li>□ Larger sample of COR-TEN steel</li> <li>□ Sample of cycle storage area mesh</li> <li>□ Paving materials and street furniture drawings</li> <li>□ Specification for gravel paving</li> <li>□ Specification for block paving</li> <li>□ Specification for slab paving</li> <li>□ Specification for kerbs and edging</li> </ul>

2.6 The façade materiality document indicates that glazing originally proposed as mirror-frit glass will be changed to white-frit glass.

# 3.0 SITE HISTORY (key applications only)

Reference	Description	Outcome
06/0796/OUT	Up to 215,000sqm floorspace comprising clinical research and treatment, clinical in-patient treatment, biomedical and biotech research and development, higher education, sui generis medical research institute uses, and related support activities.	Approved with conditions
14/1691/S73	S73 Application to vary condition 63 of 06/0796/OUT relating to highway works.	Approved with conditions
16/0653/REM	Reserved matters consent, pursuant to outline approval 06/0796/OUT for a 9,033sqm (Gross External Area excluding	Approved with conditions

plant) Biotech and Biomedical Research and Development building.

**4.0 PUBLICITY:** Not applicable to condition discharge requests.

### 5.0 POLICY

- 5.1 See Appendix 1 for full details of Central Government Guidance, Cambridge Local Plan 2006 policies, Supplementary Planning Documents and Material Considerations.
- 5.2 Relevant Development Plan policies

PLAN	POLICY NUMBER
Cambridge Local Plan 2006	al 3/1 3/2 3/4 3/7 3/12

5.3 Relevant Central Government Guidance, Supplementary Planning Documents and Material Considerations

Central Government Guidance	National Planning Policy Framework March 2012  National Planning Policy Framework – Planning Practice Guidance March 2014
Supplementary Planning Guidance	Sustainable Design and Construction (May 2007)
Material Considerations	Cambridge Landscape and Character Assessment (2003 Cambridgeshire Quality Charter for Growth (2008) Southern Fringe Area Development Framework (2006)

#### 6.0 CONSULTATIONS

## **Urban Design and Conservation Team**

First advice (01.09.2016)

- 6.1 Acceptable: white frit glass, flue screen louvres, cycle store mesh, brown roof, reconstituted stone cladding, PPC ground floor metalwork
- 6.2 More details required: paving materials, car park barrier, polycarbonate for plant enclosure
- 6.3 Not supported: COR-TEN (contrary to the approved drawings and will create a different aesthetic), mirror frit glass (too reflective).
- 6.4 The above responses are a summary of the comments that have been received. Full details of the consultation responses can be inspected on the application file.
  - Second advice (04.10.2016)
- 6.5 COR-TEN: Having reviewed the sample in various light conditions and with the specification of 'preweathered', the change from the bronze finish is considered acceptable in design terms. Whilst there will be some variation of the colouration of the panels, these will become more uniform over time and because the pre-weathered finish has been specified, will not be the typical brighter orange of Corten seen on other buildings. Good detailing will be needed to ensure that the different facades weather evenly.
- 6.6 Other materials: all details acceptable

#### 7.0 ASSESSMENT

7.1 Following the consultation response and my inspection of the site and the surroundings, I consider that the main issue is the appearance of the weathering steel (COR-TEN), particularly whether it is appropriate for this building and its context, the reliability with which its eventual appearance can be predicted, and any potential problems or side-effects. There are relatively minor issues about the other materials.

#### **COR-TEN steel**

7.2	COR-TEN differs in several ways from the pre-patinated bronze sheet referenced in the Design and Access statement and bay study drawings in the reserved matters application. It is:
	<ul> <li>Entirely matt in appearance, with no reflectivity, whereas the bronze sheet has a degree of reflectivity,</li> <li>A pitted, textured surface, in contrast to the generally smooth appearance, with limited texture, of the bronze sheet,</li> <li>A material whose coloration is created by oxidation of the steel surface, which creates a 'rusty' appearance, initially very bright orange, but gradually darkening thereafter. The bronze sheet cladding referenced in the reserved matters application, by contrast, has a more reddish-brown, coppery colouring.</li> </ul>

- 7.3 The COR-TEN steel proposed is a pre-weathered version, in which the corrosion expected from the open air in three months is artificially induced in controlled conditions before delivery to site. This results in a surface which has already passed through the brightest orange phase to a darker orange appearance. The applicants also propose to accelerate the weathering process after installation.
- 7.4 The main potential disadvantages of weathering steel are:
  - a) If water is allowed to accumulate at points on the surface, they will weather more rapidly.
  - b) Specialised welding is necessary to ensure the weld-points weather at the same rate as the main surface.
  - c) Corrosion may not stabilise the surface properly in humid tropical or very salty environments, allowing corrosion to continue indefinitely.
  - d) Weathering can produce rust staining on surfaces immediately below the steel.
  - e) The weathering rate is slower in rural environments because of the lack of pollutants.
- 7.5 The design of this building is such that water will not accumulate anywhere on the COR-TEN surfaces, which are entirely vertical, and do not have lips or sills (point (a) above). Proper installation should ensure that the fixing does not create

- problems (point (b) above). Concerns about tropical or maritime environments clearly do not apply in this case (point(c) above).
- 7.6 There are only limited locations on this building where reconstituted stone would be located below the COR-TEN. It is proposed that all the reconstituted stone would have an antistain coating which would resist rust, and be washable. It is also proposed that a 1m-wide gravel strip be located on all ground surfaces immediately below the COR-TEN. This could be raked or replaced at the end of the weathering process, which would avoid the issue highlighted in point (d) above.
- 7.7 It is likely, in my view, that despite its edge-of-city location, the air around the Bellatrix building will be sufficiently polluted to ensure a normal weathering rate. Given that the submission proposes both pre-weathered steel, and accelerated weathering after installation, it is unlikely in my view, that unduly slow weathering as highlighted in point (e) above will be a problem here.
- 7.8 I have examined the larger COR-TEN sample in strong sunlight and in shade. I have also examined the photographic evidence of existing buildings on which COR-TEN has been used. I have also taken advice from the urban design team. I am confident that the material will weather in a reasonably even manner, and acquire within a relatively short time from its installation a broadly uniform dark-brown colouration, which will be bold, in a manner suited to this 'gateway' site, without being garish. There will be some variation in patination because of the orientation of the fins and the differing impact of wind, water and sunlight on the various surfaces. In my view, however, the photographic evidence suggests that these variations are likely to become increasingly subtle with time, and that if there is any initial 'streakiness', it will be guite short-lived. In my view, the rough, non-reflective surface of the COR-TEN is appropriate for this edge-of-city location where it will be viewed in a welllandscaped setting.
- 7.9 In my opinion the proposal to use COR-TEN steel is compliant with Cambridge Local Plan (2006) policies 3/1, 3/2, 3/4, and 3/12.

#### Other materials

7.10 The urban design team initially raised concerns about mirror-frit glass and the polycarbonate sheet proposed for enclosing the roof plant, as well as seeking further details about paving materials and the car park barrier. The applicants have now agreed not to use mirror-frit glass, replacing it with white-frit, and have provided acceptable details of paving materials and the car park barrier. Having consulted the urban design officer, I am satisfied that the proposed polycarbonate sheeting is sufficiently robust, and resistant to mould, fungi, mildew and vermin. In my view, the suite of other materials is acceptable, and in accordance with Cambridge Local Plan (2006) policies 3/1, 3/2, 3/4, and 3/12.

#### 8.0 RECOMMENDATION

#### **APPROVE**

#### 1. Materials

No development of a building shall take place until sample panels of the materials to be used in the construction of its external surfaces has been submitted to and approved in writing by the Local Planning Authority. The panels shall show the proposed combination of external materials to be used. The development shall be constructed in accordance with the approved samples.

Reason: To ensure that the appearance of the external surfaces is appropriate (Cambridge Local Plan 2006 policies 3/4, 3/7 and 3/12).