APPLICATION NO:
F/2002/8100

LOCATION:
School Of Plant Science, Box Number221 University Of Reading , Reading.

APPLICANT:
The University Of Reading C/O Richard Parker Amec Group Ltd

PROPOSAL:
Proposed new entrance foyer and rooftop plan to Bioscience Building and rooftop plant to Food Studies building.

EARLIEST DATE FOR DECISION: **23/01/2003**

APPLICATION WILL HAVE EXPIRED ON:
13/02/2003

CASE OFFICER: **Angela Odell**

WOKINGHAM DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACTS

Notification of Approval of Permission

The University Of Reading
C/O Richard Parker, Amec Group Ltd
Timothy's Bridge Road
STRATFORD ON AVON
Warwicks
CU37 9NJ

Application Number: F/2002/8100

Parish:	**EARLEY**
Location:	**School Of Plant Science, Box Number 221, University Of Reading, Reading**
Proposal:	**Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies Building.**

The Wokingham District Council in pursuance of their powers under the above Acts and Regulations hereby **Approve Permission** for carrying out the above development in accordance with the application and the accompanying plans submitted to the Council subject to compliance with the following conditions, the reasons for which are specified hereunder.

Condition
1. The development hereby permitted shall be begun before the expiration of five years from the date of this permission.

Condition
2. All the materials to be used in the elevations of the proposed development shall be as stated on the application form and approved drawings and shall not be varied without the prior written permission of the Local Planning Authority.

Condition
3. All plant, machinery and equipment (including fans, ducting and external openings) to be used by reason of the granting of this permission shall be so installed, maintained and operated so as to prevent the transmission of noise and vibration beyond the boundary of any residential premises within the vicinity of the site to which the application refers. Development shall not begin until a scheme of noise attenuation measures has been submitted to and approved in writing by the Local Planning Authority.

Reason
1. In pursuance of Section 91(1) of the Town and Country Planning Act 1990.

Reason
2. To ensure that the external appearance of the building is satisfactory.

Reason
3. To safeguard the residential amenity of nearby dwellings.

Informative
1. You are advised, in compliance with The Town and Country Planning (General Development Procedure) (England) (Amendment) Order 2000, that the following policies and/or proposals in the development plan are relevant to this decision:

Berkshire Structure Plan Policies EN1, EN7
Loddon Area Local Plan Policies LBE1, LBE2, LBE19, PWE17
Deposit Draft Wokingham District Local Plan Policies WBE1, WHE9, WEM5

T. G Watson

Trevor Watson
Development Control Manager
Date: 04/02/2003

Notice checked by: _____

If this notice grants permission to proceed with the proposal the applicant is reminded that it relates to planning permission only and does not constitute approval under any other legislation including Building Regulations.

Tel. 0118 974 6445 (Direct Line)
E-mail: Angela.Odell@wokingham.gov.uk
Date. 8 July, 2003
My ref. AO/F/2002/8100
Your ref. 37482/planning/mech

AMEC Group Ltd
Timothy's Bridge Road
Stratford upon Avon
WARWICKSHIRE
Cv37 9NJ

Environmental Services Department
Planning Services
P.O. Box 157
Shute End, Wokingham
Berkshire RG40 1WR
Tel: (0118) 974 6000
Fax: (0118) 974 6484
Minicom No: (0118) 977 8909
DX: 33506 – Wokingham

Dear Mr Burt

PLANNING APPLICATION F/2002/8100
PROPOSED NEW ENTRANCE FOYER AND ROOFTOP PLANT TO BIOSCIENCE BUILDING AND ROOFTOP PLANT TO FOOD STUDIES BUILDING AT UNIVERSITY OF READING – CONDITION 3

Thank you for your letter of 19 May and enclosed information. I confirm the information provided satisfies the requirements of condition 3 of the above permission.

I trust the above is clear, but meanwhile if you wish to discuss the matter further please contact me.

Yours sincerely

AO.

MRS A ODELL
Planning Officer

Angela Odell

From: John Mullaney
Sent: 07 July 2003 14:04
To: Angela Odell
Subject: Proposed new entrance foyer and rooftop plant to Reading University Bioscience Building F/2002/8100

I would recommend that condition 3 of F/2002/8100 is discharged.

John Mullaney
Principal Environmental Health Officer
Environmental Protection and Housing
Wokingham District Council
Tel. 0118 974 6766
Fax. 0118 974 6401
john.mullaney@wokingham.gov.uk
www.wokingham.gov.uk

Date: 23 May 2003

To: Case Officer

We have received Details to Comply with Conditions for the following planning application:

Application Number: F/2002/8100

Location: School Of Plant Science, Box Number221 University Of Reading, , , Reading.

Proposal: Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building.

Applicant: The University Of Reading C/O Richard Parker, Amec Group Ltd.

Case Officer: Angela Odell

The new plans show the following: Noise attenuation measures to comply with condition 3.

Comments are required by 02/06/2003.

Should you have any queries regarding this application please contact the case officer Angela Odell on (0118) 974 6445.

(RING ONE)

REVISED PLANS | ADDITIONAL PLANS | MINOR AMENDMENTS | DETAILS TO COMPLY WITH CONDITIONS

App. No. F/2002/8100 Date Rec. 20.5.01.

Location: School of Plant Sciences, Whiteknights Park, Reading University.

Parish: Earley

Applicant: University of Reading.

Description of attached plans: Condition 3 - Noise attenuation measures.

Drawing No's:

CONSULTEES

Copies of plans will automatically be sent to Woodley Library, Part 1 Reg., Parish Council, Ward Councillors and the Case Officer unless specified.

Please tick which of the following you wish consulted.

Landscape & Trees	
Urb. Design & Conservation	
Highways	
Dinton Pastures	
Environmental Health J. Mullaney.	✓

OTHER INTERNAL / EXTERNAL CONSULTEES
(EXCLUDING NEIGHBOURS)

A full set of plans will be sent to all consultees unless particular drawings No's are specified in the spaces above.

NEIGHBOURS:

Date for Responses 10 days

FURTHER ACTION

Re-advertise App. Y / N (Delete as required)

Redate Application Y / N From:

New Site Notice Y / N

Revised Proposal Description:

CASE OFFICER AO

Consultations Sent by Admin. on 23.05.01

Yellow - Case Officer Copy
Green - Part One Copy

1970/0102

(RING ONE)

REVISED PLANS | ADDITIONAL PLANS | MINOR AMENDMENTS | DETAILS TO COMPLY WITH CONDITIONS

App. No. F/...01/8100 Date Rec. 20.5.01.

Location: School of Plant Sciences, Wolfson Laughton Bldg, Reading University

Parish: Caversham

Applicant: University of Reading.

Description of attached plans: Condition 3 - Noise attenuation measures.

Drawing No's:

CONSULTEES

Copies of plans will automatically be sent to Woodley Library, Part 1 Reg., Parish Council, Ward Councillors and the Case Officer unless specified.

Please tick which of the following you wish consulted.

Landscape & Trees	
Urb. Design & Conservation	
Highways	
Dinton Pastures	
Environmental Health – F Mallows.	✓

OTHER INTERNAL / EXTERNAL CONSULTEES
(EXCLUDING NEIGHBOURS)

A full set of plans will be sent to all consultees unless particular drawings No's are specified in the spaces above.

NEIGHBOURS:

Date for Responses

FURTHER ACTION

Re-advertise App. Y / N (Delete as required)

Redate Application Y / N From:

New Site Notice Y / N

Revised Proposal Description:

CASE OFFICER

Consultations Sent by Admin. on 23.05.01

Yellow - Case Officer Copy
Green - Part One Copy

19 May 2003

Ref 37482/planning/mech

Angela Odell
Planning Officer
Planning Services
Wokingham District Council
Shute End
Wokingham
Berks
PO Box 157
RG40 1WR

Filename
37482planningletteraccoustics
Direct tel 01789 208329
Direct fax +44 (0)1789 413663
Email gavin.burt@amec.com

69203

PLANNING SERVICES	
POL	TLS
DC 140	
APP	
CS	
20 MAY 2003	
COPIES TO	

Dear Angela

RE: PLANNING APPLICATION F/202/8100 READING UNIVERSITY – BIOCENTRE PROJECT

Further to my colleague, David Downing's letter of 22nd January 2003, please find enclosed technical information relating to the roof top mechanical HVAC plant proposed for the above project.

As agreed between David and your Environmental Health Officer, Mr John Mullaney, in lieu of calculations to predict exact site boundary noise levels, I enclose technical information on the selection of units and their acoustic properties. The purpose is to demonstrate our attempts to ensure no increase in the site boundary noise levels occurs, as a result of installation of the plant.

I trust this meets with your requirements.

Yours sincerely

Gavin Burt
Senior Mech. Services Engineer

cc. David Downing - AMEC
Catherine Hardcastle - Reading University

AMEC Group Limited
Timothy's Bridge Road
Stratford upon Avon
Warwickshire CV37 9NJ
United Kingdom
Tel +44 (0)1789 204288
Fax +44 (0)1789 299135

Registered office
Sandiway House
Hartford Northwich
Cheshire CW8 2YA
Registered in England no. 4612748

www.amec.com

Ref 37482

Internal circulation: Writer, K Lowe

Angela Odell
Planning Officer,
Planning Services,
Wokingham District Council,
Shute End,
Wokingham,
Berkshire,
PO Box 157
RG40 1WR

22nd January 2003

Dear Angela,

RE: PLANNING APPLICATION F/202/8100 READING UNIVERSITY - BIOCENTRE PROJECT

Further to your letter 17.01.03 regarding noise generation from the proposed new development we can confirm the following:
The proposed new roof top plant consists of air handling units and fume cupboard extract fans, which are similar in nature to the type of plant already existing on the two buildings. We can confirm that noise generated by this new plant will be no greater than the existing plant by the careful selection of units, the examination of their acoustic properties and where necessary the use of appropriate sound attenuating devices.
This should ensure that there is no increase in noise levels at the site boundaries.
We have already spoken to your Environmental Health Officer John Mullaney regarding the above statement and he accepts that this would meet the condition regarding noise transmission contained in your letter.

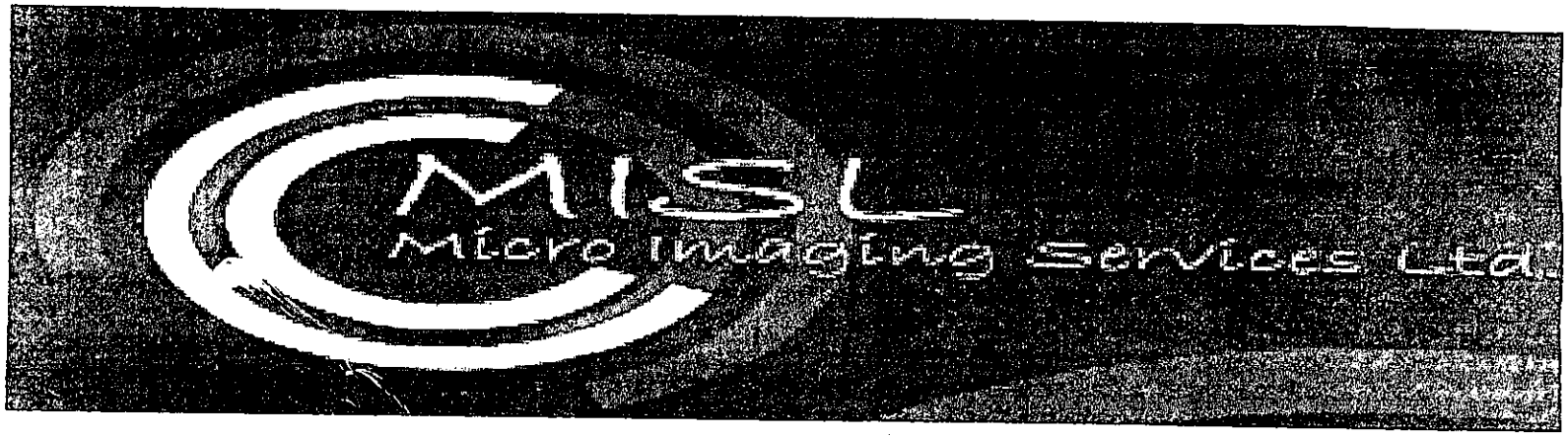
We trust this meets you requirements and will prevent any delay to the planning application.
Please reply by return if you require any further information/clarification regarding this issue.

Yours sincerely,

David Downing

cc. Catherine Hardcastle – Reading University

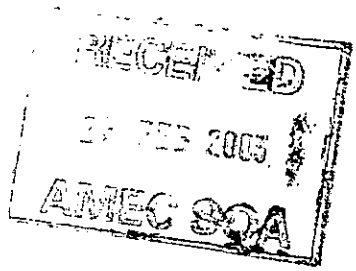
THE FOLLOWING SCANNED IMAGES ARE DOCUMENTS OF BAD QUALITY OR ARE PHOTOCOPIES.



FOR THIS REASON THEY MAY APPEAR UNREADABLE ON SCREEN

01564775918

Required date :
Follow up date :
Expiry Date :
Probability % :
Price Code :
Specification :
Tender Date :
Order Date :



Company : AMEC I&P
Contact : PHIL KEELEY
Address : TIMOTHY BRIDGE RD
Address : STRATFORD UPON AVON
Town : WARWICKSHIRE
Post Code :
Telephone No. : 01789 204288
Fax No. :
Email :
Quote Reference :
Quote Date : 24/02/2003
Project : UNIVERSITY OF READING FUME CUP
Signed By : _____

Ref	Stock Reference No.	Description	Price £	Qty	%	%	Total £
		FUME HANDLING FANS					
		FEF1>8					
		FEF9 DUTY TO BE DESIGNED					
		ROOF MOUNTED					
		SINGLE PHASE DIRECT DRIVE					
		FHU250 FUME HANDLING FAN	850.09	8	10.0		6120.65
		FHU250WCO WEATHER COWL	55.55	8	10.0		399.96
		THE TOTAL PRICE SHOWN IS					
		OUR TRADE PRICE					
		REQUOTE DUCTING BY OTHERS					

Discount £	724.51
Total £	6520.61
Tax @ 17.5% £	1141.11
Grand Total	7661.71

Vent-Axia Ltd
Fleming Way
Crawley
RH10 2NN
Tel: (01293) 526062
Fax: (01293) 612140

All sales are made only upon the terms of the Company's Conditions of Sale
Vent-Axia reserves the right to alter specifications without notice
All details correct at time of production of program
Copyright Vent-Axia Limited 1992 - 2003

The First Name in Ventilation

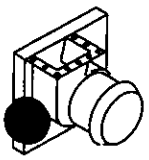
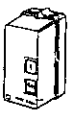
A Group Companies Company

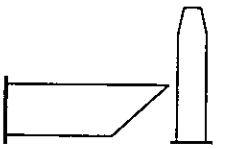
CENTRIFUGAL FUME HANDLING UNITS PERFORMANCE GUIDE

m³/s at Pa

Stock Ref. No.	Motor	r.p.m	FID	50	100	150	200	250	312	375	438	Motor kW	S.C Amps	F.L.C. Amps	Breakout dBA @ 3m
FHU200 FAN	1 phase	1400	0.265	0.236	0.198	0.123	-	-	-	-	-	0.18	7.0	1.37	45
FHU250 FAN	1 phase	1400	0.456	0.423	0.385	0.348	0.301	0.230	-	-	-	0.25	10.0	1.9	48
FHU315 FAN	1 phase	1400	0.898	0.870	0.827	0.785	0.733	0.672	0.592	0.494	0.324	0.75	25.0	5.0	55
FHU315 415V	3 phase	1400	0.898	0.870	0.827	0.785	0.733	0.672	0.592	0.494	0.324	0.75	9.5	2.1	55

ACCESSORIES


Stock Ref. No.	D.O.L. Starter & Coil Stock Ref. No.	Motor Weather Cowl Stock Ref. No.	Flexible Connection Stock Ref. No.	Flanged Bend Stock Ref. No.	Transformation Duct Sq. to Circ. Stock Ref. No.	Horizontal Discharge Stock Ref. No.	Vertical Discharge Stock Ref. No.	Plant Room Bracket Stock Ref. No.	Set of Mounting Feet & AV's Stock Ref. No.
FHU200FAN	103 11 240 + 103 12 018	FHU200WCO	FHU200CFC	FHU200FLB	FHU200TRD	FHU200HDS	FHU200VDS	FHU200PRB	AVM220
FHU250FAN	103 11 240 + 103 12 027	FHU250WCO	FHU250CFC	FHU250FLB	FHU250TRD	FHU250HDS	FHU250VDS	FHU250PRB	AVM220
FHU315FAN	103 11 240 + 103 12 070	FHU315WCO	FHU315CFC	FHU315FLB	FHU315TRD	FHU315HDS	FHU315VDS	FHU315PRB	AVM220
FHU315415V	103 11 415 + 103 12 027	FHU315WCO	FHU315CFC	FHU315FLB	FHU315TRD	FHU315HDS	FHU315VDS	FHU315PRB	AVM220

SOUND DATA

Sound Power Level Spectra db (ref 10^{-12}) Watts

Diameter	63	125	250	500	1K	2K	4K	8K
FHU200	75	70	62	57	55	53	49	46
FHU250	79	75	68	63	62	59	56	51
FHU315	86	82	75	70	69	66	63	58

Electrical Supply: Single phase motors are wound for 220-240V/50Hz/1ph AC supply and 3 phase motors are wound for 380-415V/50Hz/3ph AC supply.

NB. Motors must have overload protection and 3 phase motors should also have single phasing prevention.

Maximum ambient temperature 50°C

See Page 408 for Centrifugal Fume Handling Units Wiring Diagrams

Tel. 0118 974 6445 (Direct Line)
E-mail: Angela.Odell@wokingham.gov.uk
Date. 22 November, 2002
My ref. AO/Earley.p.d./pre-app.

Amec Capital Projects Ltd
Timothy's Bridge Road
Stratford upon Avon
CV37 9NJ

Environmental Services Department
Planning Services
P.O. Box 157
Shute End, Wokingham
Berkshire RG40 1WR
Tel: (0118) 974 6000
Fax: (0118) 974 6484
Minicom No: (0118) 977 8909
DX: 33506 – Wokingham

Dear Mr Parker

BIO CENTRE, READING UNIVERSITY, WHITEKNIGHTS CAMPUS

Thank you for your letter of 21 November and enclosed drawings. I advise you that planning permission will be required for the proposed plant on the roof.

I advise you that planning permission will not be required to change the first floor windows.

The advice above contained within this letter (regarding permitted development) represents an officer's opinion only and does not represent a formal determination under either Section 191 or 192 of the Town and Country Planning Act 1990 (or any Act or Order revoking or re-enacting that Order with or without modification). Should you require a formal determination an application can be made on forms available from this office.

I trust the above is clear, but if you wish to discuss the matter further, please contact me.

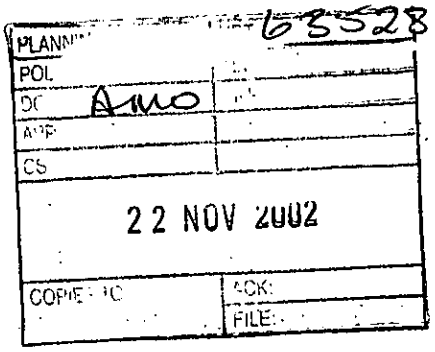
Yours sincerely

AO

Angela Odell
Planning Officer

Copy: R. Mc Menamin (reading University), D. Downing, Writer, Main File. (LETTER ONLY)





21 November 2002

Angela Odell
Wokingham District Council
PO Box 157
Shute End
Wokingham
Berkshire RG40 1WR

Direct tel 01789 204288
Direct fax 01789 413667
Email richard.parker@amec.com

Dear Angela

Re: 37482 Reading University, Bio Centre

Thank you for your response to my letter of 8th November. In reply to your request for details of the existing first floor glazing please find enclosed drawing 37482-IDA-1510.

With regard plant on the roof I have included drawings 37482-IDA-0202 & 1500 to show the indicative size and height of the plant. I have also enclosed photographs, which show that the Bio Centre is significantly lower than its surrounding buildings therefore any roof top plant will not be intrusive.

It is also our intention to mount a small amount of rooftop plant onto the FMSU building as shown on drawing 37482-IDA-0305, the AHU and condenser units will be about 1.8m high. The FMSU building already has rooftop plant rooms of about 5m high therefore these additions will be insignificant, please see enclosed photographs.

Can you please confirm that the first floor glazing will not require planning permission and whether the roof top plant needs to be part of the application. Can you also confirm the fee in connection with the planning application.

Should you have any queries please do not hesitate to contact me.

Yours sincerely

Richard Parker

AMEC Capital Projects Limited
Timothy's Bridge Road
Stratford upon Avon
Warwickshire CV37 9NJ
United Kingdom
Tel +44 (0)1789 204288
Fax +44 (0)1789 299135

Registered office
Sandiway House
Hartford Northwich
Cheshire CW8 2YA
Registered in England no. 2804109

www.amec.com

WORK SHEET FOR : Angela Odell

Application Number : F/2002/8100

Applicant : The University Of Reading C/O Richard Parker, Amec Group Ltd.

Location : School Of Plant Science, Box Number221 University Of Reading, , , Reading.

Proposal : Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building.

Site Notice Displayed ? :

YES	NO	DATE

Date of Neighbour Notifications : .....

Date of Site Visit : 7.1.03

Date Registered : 19/12/2002

Earliest Date for Decision : 23/01/2003

Latest Consultation Date/Site Notice Expiry Date : 23/01/2003

This application will have expired on: 13/02/2003. You need to make a decision 1 day prior to this date for this application to count as determined in less than 8 weeks.

Consultation Responses : Conservation Officer: No objection as considers the additional plant now proposed would not be visually unacceptable in the context of the existing design. New entrance would provide an element of variation of design and be an enhancement.

- Highway officer: No objection.
- Environmental Health Officer: No objection on receipt of additional information subject to a condition covering protection of residential properties from noise.
- Reading B.C. No objection subject to a noise protection condition.

Planning Issues :

Application Number: F/2002/8100

Appraisal :

Recomendation : Approval: ☑ **Refusal:** ☐
(tick appropriate box)

F/2002/8100 – Appraisal

Proposal
Involves 2 buildings.

1. Dept. of food studies: Additional plant on roof comprising 3 plant installations each 1.8m. high and the following sizes: 0.7m. x 2.5m., 13m. x 1m. and 3.5m. x 1.2m. and 3 extracts also 1.8m. high.
2. *Plant science building:* Glazed entrance projection 5.58m. wide and 3.8m. deep on west elevation. Also additional plant on roof, comprising 4 installations, including 4 extracts 2.9m. high.

Effect on the character and appearance of the area
The whole campus is a Historic Park. Site is within designated area of 'Employment :University of Reading' on proposals map for WDLP where policy WEM5 applies for the University's own development. These policies encourage development for the University where appropriate, subject to assessment of a list of environmental impact criteria.

The plant science and food studies buildings are grouped with other existing research/teaching buildings, and can only be glimpsed from outside the site in winter through the trees, and are screened in summer.

Dept. of food studies: Additional plant on roof: As proposed plant installations would be no higher than the existing plant rooms and smaller in size, consider effect acceptable in existing context of research/teaching buildings, some of which already have plant on their roofs.

Plant science building: Additional plant on roof: Existing plant room is 4.2m. high. Consider effect of additional plant on roof acceptable in existing context of research/teaching buildings. Consider proposed glazed entrance acceptable, and Conservation Officer considers it would be an enhancement.

Potential noise nuisance
Environmental Health officer now satisfied and raises no objection subject to a condition protecting residential properties from potential nuisance.

Recommendation: conditional approval

Application Number F/2002/8100
Conditions/Reasons for Refusal

No	Std Con	Std Reas	Non Std Conditions / Reasons for Refusal
1	C001	R001	
			All the materials to be used in the elevations of the proposed development shall be as stated on the application form and approved drawings and shall not be varied without the prior written permission of the LPA. / R012.
	2.		All plant, machinery and equipment (including fans, ducting and external openings) to be used by reason of the granting of this permission shall be so installed, maintained and operated so as to prevent the transmission of noise and vibration beyond the boundary of any residential premises within the vicinity of the site to which the application refers. Development shall not begin until a scheme of noise attenuation measures has been submitted to and approved in writing by the local Planning Authority. **Reason** - To safeguard the residential amenity of ~~the adjacent~~ nearby dwellings.

RECORD OF SITE VISIT

SITE ADDRESS: School Of Plant Science, Box Number221 University Of Reading Reading.

APPLICATION NUMBER: F/2002/8100

OFFICER: Angela Odell

DATE OF SITE VISIT: 7.1.03

1 SITE/STATUTORY NOTICE DISPLAYED ? \

2. DESCRIPTION OF SURROUNDINGS University teaching / research buildings

3. DESCRIPTION OF SITE/BUILDING Plant science building is 2 storeys with flat roof. Food studies bldg is 3+ storeys with some planted flat roof.

4. RELATIONSHIP TO ADJOINING PROPERTIES Other teaching / research Univ. bldgs

5. SITE CONSTRAINTS

TREES NA.

ACCESS/PARKING in groups over around buildings.

LEVELS Nearly flat, but land falls slightly to N.

BOUNDARY TREATMENT —

OTHERS

Angela Odell

From: John Mullaney
Sent: 28 January 2003 12:39
To: Angela Odell
Subject: F/2002/8100 READING UNIVERSITY NEW ROOFTOP PLANT

I am satisfied from the conversation I have had with their agent and the letter that they have provided that there should be no problem with noise at residential properties.

John Mullaney
Senior Environmental Health Officer
Environmental Protection and Housing
Wokingham District Council
Tel. 0118 974 6766
Fax. 0118 974 6401
john.mullaney@wokingham.gov.uk
www.wokingham.gov.uk

Reading BOROUGH COUNCIL

Tony Lear
Director of Environment

Civic Centre, Reading, RG1 7TD
☎ 0118 939 0900
DX 40124 Reading (Castle Street)
Fax: 0118 958 9770
Minicom ☎ 0118 939 0700
Email: Andrew.Chugg@reading.gov.uk
Our Ref: 03/00004/WOKADJ
Your Ref: F/2002/8100

Direct: ☎ 0118 939 0412

6545
PLANNING SERVICES
POL
DC AO
APP
CS
28 JAN 2003
COPIES TO
FILE

FAO Ms. Angela Odell
Wokingham Unitary Authority
Environmental Services Department
Planning Services
P.O. Box 157
Shute End
Wokingham
RG40 1WR

24th January 2003

Your contact is: Andrew Chugg, Planning and Transport

Dear Ms. Odell,

RE: PROPOSED NEW ENTRANCE FOYER AND ROOFTOP PLANT TO BIOSCIENCE BUILDING AND ROOFTOP PLANT TO FOOD STUDIES BUILDING.
WOKINGHAM APPLICATION NO: F/2002/8100

I refer to the above planning application upon which you have requested this Council's comments.

I would advise that this Council has no objections to this proposal, however, the following condition is requested should approval be granted to this scheme:

- Prior to commencement of development, the applicant shall provide predicted noise levels associated with the approved rooftop plant to the satisfaction of Reading Borough Council. Reason: in order prevent excessive noise affecting the amenity of adjacent residential properties within the Reading Borough.

I hope this is of assistance but should you require clarification of any of the above then please contact me on the number given.

Yours sincerely,

Andrew Chugg
(Senior Planning Officer, RBC)

Beacon Council 2001-2002 Town Centre Regeneration

amec

PLANNING 65263
PO
DC AO
AP
CC
23 JAN 2003
COPIES TO

22nd January 2003

Angela Odell
Planning Officer, Planning Services
Wokingham District Council
Shute End
Wokingham
P. O. Box 157
RG40 1WR

Direct tel 01789 204288
Direct fax 01789 299135
Email david.downing@amec.com

Dear Angela

Re: 37482 - BioCentre Project – Reading University
Planning Application F/202/8100

Further to your letter 17.01.03 regarding noise generation from the proposed new development we can confirm the following:

The proposed new roof top plant consists of air handling units and fume cupboard extract fans, which are similar in nature to the type of plant already existing on the two buildings. We can confirm that noise generated by this new plant will be no greater than the existing plant by the careful selection of units, the examination of their acoustic properties and where necessary the use of appropriate sound attenuating devices. This should ensure that there is no increase in noise levels at the site boundaries.

We have already spoken to your Environmental Health Officer John Mullaney regarding the above statement and he accepts that this would meet the condition regarding noise transmission contained in your letter.

We trust this meets you requirements and will prevent any delay to the planning application. Please reply by return if you require any further information/clarification regarding this issue.

Yours sincerely,

David Downing

David Downing

cc. Catherine Hardcastle – Reading University

AMEC Capital Projects Limited
Timothy's Bridge Road
Stratford upon Avon
Warwickshire CV37 9NJ
United Kingdom
Tel +44 (0)1789 204288
Fax +44 (0)1789 299135

Registered office
Sandiway House
Hartford Northwich
Cheshire CW8 2YA
Registered in England no. 2804109

www.amec.com

Memo

To: Angela Odell

From: Conrad Moore

Date: 20/01/03

Re: **Policy Comments upon F/2002/8100**

Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies Building.

Design Policies
Policy WBE1 of the *Consolidated Modified Wokingham District Local Plan* will apply and this expects a high quality of design. A factor to ensure is that the foyer should be designed to allow greater accessibility. You will need to consult the Conservation Architect on the design issues in a locally important historic parkland with listed buildings.

Economic Development and Employment Policies
Policy WEM5 of the *Consolidated Modified Wokingham District Local Plan* relates specifically to Reading University. You will need to ensure that criteria A-D are complied with. Policy WEM6 will not apply to this proposal.

Nature Conservation & Landscape Policies
The reference of the Wildlife Heritage Site is SU77 F03 whose habitat is Lake/Park/ Woodland. The proposal will need to be considered against the requirements of Policy WNC4. Please note that the Local Plan Inspector recommended a change to the boundaries of this following evidence at the Local Plan Inquiry. The plan proposal map has been modified in the *Consolidated Modified Wokingham District Local Plan*. This application should not affect this, but detailed comments from Andy Glencross should be sought. I do not envisage a conflict given existing siting and use of the building.

Policy WHE9 of the *Consolidated Modified Wokingham District Local Plan* no longer applies to Parks and Gardens of County significance. However this does not negate the need for appropriate landscape and planting schemes in accordance with Policy WLL7 to reflect local character. Berkshire Structure Plan Policy C9 should also be considered in this context. Landscaping should not be an afterthought to any consent, and landscape views should be sought.

Highways
You will need to consider this against the Local Transport Plan. Consideration will also need to take account of the latest PPG13. The Highways Team will comment on these aspects, including Highway Safety (Policy WT7) and Parking Provision (Policy WT6). These issues are also reflected in the Berkshire Structure Plan policies T1, T4, T7 and LD5.

Conclusions
I consider the proposals are broadly acceptable (subject to specific consultee responses) and could be supported. The design appears acceptable in the context of the existing comparatively modern building with rooftop plant and strong vertical and horizontal emphasises.

Angela Odell

From: Chugg, Andrew [Andrew.Chugg@reading.gov.uk]
Sent: 24 January 2003 18:01
To: 'angela.odell@wokingham.gov.uk'
Subject: Reading University (F/2002/8100)

Dear Ms. Odell,

RE: PROPOSED NEW ENTRANCE FOYER AND ROOFTOP PLANT TO BIOSCIENCE BUILDING AND ROOFTOP PLANT TO FOOD STUDIES BUILDING. WOKINGHAM APPLICATION NO: F/2002/8100

I refer to the above planning application upon which you have requested this Council's comments.

I would advise that this Council has no objections to this proposal, however, the following condition is requested should approval be granted to this scheme:

'Prior to commencement of development, the applicant shall provide predicted noise levels associated with the approved rooftop plant to the satisfaction of Reading Borough Council. Reason: in order prevent excessive noise affecting the amenity of adjacent residential properties within the Reading Borough'.

I hope this is of assistance but should you require clarification of any of the above then please contact me on the number given.

Yours sincerely,

Andrew Chugg
(Senior Planning Officer, RBC)

THE GARDEN HISTORY SOCIETY

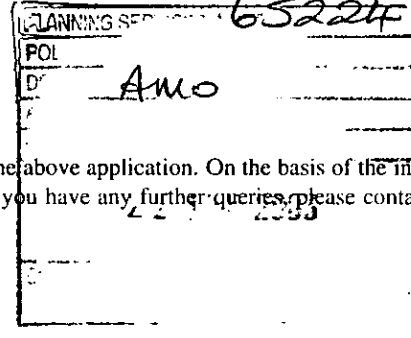
from:
70 Cowcross Street
London EC1M 6EJ
Telephone: 020 7608 2409
Fax: 020 7490 2974
E-mail: gardenhistorysociety@compuserve.com

Date: 18-i-2003

Dear Sir/Madam.

Your Ref: F/2002/8100

Our Ref: 02/0694

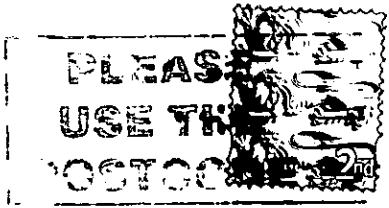


Thank you for consulting the Society on the above application. On the basis of the information received we do not wish to comment. However, if you have any further queries, please contact us on the above number.

Yours sincerely,

Conservation Officer

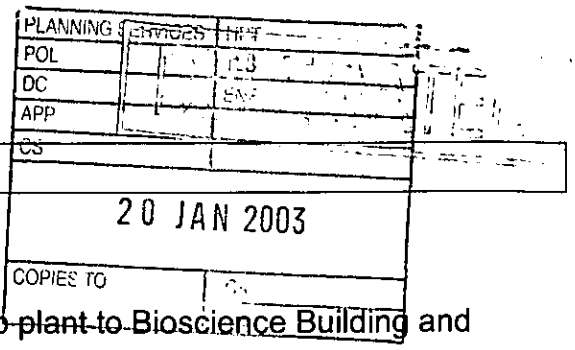




Angela Odell,
Development Control Officer,
Wokingham District Council,
Planning Services,
PO Box 157,
WOKINGHAM, RG40 1WR.

FROM: Angela Odell

DATE: 30 December 2002



EARLEY TOWN CONSULTATION SHEET

Application Number: F/2002/8100

Proposal: Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building..

Site Address: School Of Plant Science, Box Number221 University Of Reading, , , Reading.

Applicant: The University Of Reading C/O Richard Parker, Amec Group Ltd.

Your observations are required in respect of this application **by 23/01/2003** .

NO OBJECTION

SIGNED: _____ DATE: 16 JAN 2003

Clerk To Earley Parish/Town Council.

Tel. 0118 974 6445 (Direct Line)
E-mail: Angela.Odell@wokingham.gov.uk
Date. 17 January, 2003
My ref. AO/F/8100

Amec Capital Projects Ltd
Timothy's Bridge Road
Stratford-upon-Avon
CV37 9NJ

Environmental Services Department
Planning Services
P.O. Box 157
Shute End, Wokingham
Berkshire RG40 1WR
Tel: (0118) 974 6000
Fax: (0118) 974 6484
Minicom No: (0118) 977 8909
DX: 33506 – Wokingham

Dear Mr Parker

PLANNING APPLICATION F/2002/8100
PROPOSED ERECTION OF NEW ENTRANCE FOYER AND ROOFTOP PLANT TO BIOSCIENCE BUILDING AND ROOFTOP PLANT TO FOOD STUDIES BUILDING AT SCHOOL OF PLANT SCIENCE, UNIVERSITY OF READING, WHITEKNIGHTS, EARLEY

I refer to the above application. Our Environmental Health officer, John Mullaney, is concerned that there has been no consideration of noise impact of the proposal on the community. Please advise what measures have been taken when selecting plant and the measures that will be taken at the design and installation stage to minimise noise transmission to nearby residential properties, e.g. by appropriate enclosure.
If permission is to be granted he recommends the following condition:

All plant, machinery and equipment (including fans, ducting and external openings) to be used by reason of the granting of this permission shall be so installed, maintained and operated so as to prevent the transmission of noise and vibration beyond the boundary of any residential premises within the vicinity of the site to which the application refers. Development shall not begin until a scheme of noise attenuation measures has been submitted to and approved in writing by the Local Planning Authority.

It is important that the additional information submitted to me within two weeks, i.e. by 31 January, to ensure that the application is not determined on the basis of the current unsatisfactory submission. Should you have any difficulty in meeting this deadline or should you wish to discuss the revised plans please contact either John Mullaney on 0118 974 6395 or me immediately.

Yours sincerely
AO
MRS A ODELL
Planning Officer

cc: John Mullaney

WOKINGHAM DISTRICT COUNCIL

MEMORANDUM

To: Angela Odell
Development Control

Your Ref: F/2002/8100

From: John Mullaney
Environmental Health

My Ref: 4181

Date: 17/01/03

PROPOSED PROPOSED NEW ENTRANCE FOYER AND ROOFTOP PLANT TO BIOSCIENCE BUILDING AND ROOFTOP PLANT TO FOOD STUDIES BUILDING

UNIVERSITY OF READING

There has been no consideration of noise impact of the proposal on the community. I would seek some reassurance that noise has been considered when selecting plant and that measures will be taken at the design and installation stage to minimise noise transmission to nearby residential properties.

I have no environmental health objections to this proposal with the imposition of the following condition, to ensure noise from the plant does not cause a nuisance to neighbouring properties:-

1. All plant, machinery and equipment (including fans, ducting and external openings) to be used by reason of the granting of this permission shall be so installed, maintained and operated so as to prevent the transmission of noise and vibration beyond the boundary of any residential premises within the vicinity of the site to which the application refers. Development shall not begin until a scheme of noise attenuation measures has been submitted to and approved in writing by the local Planning Authority.
   Reason - To safeguard the residential amenity of the adjacent dwellings.

John Mullaney

J R MULLANEY
SENIOR ENVIRONMENTAL HEALTH OFFICER
ENVIRONMENTAL PROTECTION & HOUSING

Please see part I for plans

To:
Harold Sanders
Urban Design And Conservation Officer
Re: Historic Park/Garden

From: Angela Odell

Date: 30 December 2002 02 JAN 2003

Application Number: F/2002/8100

Proposal: Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building..

Site Address:
School Of Plant Science, Box Number221 University Of Reading, , , Reading. Earley

Applicant:
The University Of Reading C/O Richard Parker, Amec Group Ltd.

Your observations are required in respect of this application within **7 days** of the above date.

THE BIOSCIENCE AND FOOD STUDIES BUILDINGS ARE BOTH LOCATED WITHIN THE EASTERN UNIVERSITY CAMPUS. BUT EDGING THE WILDERNESS, A WILDLIFE HERITAGE SITE.

THE BUILDINGS ARE CONTEMPORARY WITH VISUALLY STRONG BANDING OF HORIZONTAL GLAZING AND INFILL UPSTANDS OF CONCRETE / BRICK / RENDERING.

THE ROOFTOPS INCORPORATE THE SERVICES AND THEREFORE I DO NOT CONSIDER THE ADDITIONAL PLANT NOW PROPOSED TO BE VISUALLY UNACCEPTABLE IN THE CONTEXT OF THE EXISTING DESIGN.

THE NEW ENTRANCE WILL PROVIDE AN ELEMENT OF VARIATION AND DESIGN QUALITY TO ENHANCE THIS EDGE OF THE BUILDING.

I SUPPORT THE PROPOSALS; A DESIGN STATEMENT TO SUPPLEMENT THE INFORMATION SUBMITTED WOULD BE HELPFUL.

Harold Sanders 09.01.03.

HIGHWAYS CONSULTATION SHEET

From: Angela Odell **Date:** 30 December 2002

Application Number: F/2002/8100

Proposal: Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building.

Parish: EARLEY TOWN

Site Address:
School Of Plant Science, Box Number221 University Of Reading, , , Reading.

Applicant:
The University Of Reading C/O Richard Parker, Amec Group Ltd.

Your observations are required in respect of this application within **7 days** of the above date.

✓ below as applicable;

1) ☐ Recommend refusal for the reason(s) **stated below**;
2) ☐ Recommend approval but with condition(s) & reason(s) **stated below**;
3) ☑ Recommend approval with **no** condition(s) or reason(s).

Site visit carried out: ☐ **No** ☐ **Yes - Date & Time:** _____

Signed: _____ **Print name:** AK 9/1/03.

AO

1792

I have today displayed the site notice(s) in a prominent position on the land/ buildings to which the application number . F/2002/8100 relates.

Address of site School of Plant Science

Box No. 221 University of Reading

Signed [signature]

Estate Services

Date 14/1/03

PLANNING SERVICES

15 JAN 2003

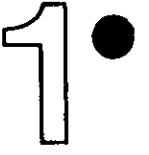
COPIES TO

Postage will be paid by licensee

Do not affix Postage Stamps if posted in Gt. Britian, Channel Islands, N Ireland or the Isle of Man

Business reply service
License no. RG147

Planning Services
Environmental Services Department
Wokingham District Council
Council Offices
Shute End
Wokingham
Berkshire RG40 1BR



PRE - APPS ATTACHED

Application Number : F/2002/8100	**Map No : 51**
Case Officer : AO	**Site Area : 0.84**
Valid Date : 19 DEC 2002	**Received Date: 29/11/2002**

Level : Delegated Application

Description : Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies Building

Location : School Of Plant Science, Box Number221 University Of Reading, , , Reading.

Parish : EA **Ward : RED**

Applicant : The University Of Reading C/O Richard Parker, Amec Group Ltd.

Fee Required: £220 **Fee Received: £220** (1)

Additional: ..... **or Refund: .....**

Enforcement Section to be notified ☐ (tick if required)

Additional information required for validation;

REASON	NOTES	DATE REQ	DATE RECD
LOCATION PLANS	Red line does not incl access, parking or area of proposed extension!	10/12	✓ 19 DEC 2002
BLOCK PLANS	None – need to show pos. of proposals		
FORMS UNSIGNED			
S.66 MISSING/INCORRECT/ UNSIGNED			
ELEVATION PLANS	Plant: There are roof plans for both buildings showing positions of proposed plant but we also need elevations.	10/12	✓ 19 DEC 2002
FLOOR PLANS	Entrance Foyer: North elevation does not show full side elevation of new entrance (need to see side door)	10/12	✓ 19 DEC 2002
NO SCALE OR SCALE IS IMPERIAL			
ENCROACHMENT LETTER REQUIRED			
OTHER	Only 4 copies of each drawing supplied	10/12	19 DEC 2002

Is the site in a Conservation Area: ☐ Yes ☐ No If "Yes" which one _____

Is the site a Listed Building: ☐ Yes ☐ No

Is a Statutory Advertisement required: ☐ Yes ☐ No

INTERNAL CONSULTATIONS

Building Control

Heritage (Harold Sanders) ✓ Historic Park/Garden ✓

Landscape

Trees

Environmental Health ✓

Housing

Leisure & Cultural Services

Public Rights of Way Officer

Property

Policy & Plans ✓ Historic Park/Garden ✓ — Conrad Moore ✓

Joint Strategic Planning Unit

Archaeological Officer (BABTIE)

Education

Social Services

Highways ✓

Access Officer ✓

EXTERNAL CONSULTATIONS

Adjacent DPA : Reading B.C. ✓

Adjacent Parish : _____

SEB

British Gas

Oil pipeline

Transco

Environment Agency

Railtrack

Police Arch Officer

HERITAGE BODIES

Victorian Society
The Georgian Group
Ancient Monuments Society
Council for British Arch
RCHME
NRPB (Telecommunications)
Sport England
Society for Proct' of Ancient Bldgs
English Heritage
Garden History Society ✓ — Historic Park/Garden ✓

OTHERS

.....

.....

.....

.....

.....

.....

NEIGHBOURS

..... ✓

S/N Sufficient .....

.....

2x pre-apps attached.

**********FILE COPY**********

Tel: (0118) 974 6445

Date: 30 December 2002

My ref: F/2002/8100

WOKINGHAM UNITARY
Aiming for Excellence

Councillor A Spratling
18 Moor Copse Close
Earley
RG6 7NA

Environmental Services Department
Planning Services
P.O. Box 157
Shute End, Wokingham
Berkshire RG40 1WR
Tel: (0118) 974 6000
Fax: (0118) 974 6484
Minicom No: (0118) 974 6991
DX: 33506 – Wokingham

Dear Councillor

Application Number: F/2002/8100
School Of Plant Science, Box Number221 University Of Reading, , , Reading.
Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building.

I write to let you know that the above mentioned application has been received.

At this stage a recommendation has not yet been made. This form should only be returned if it is likely that you might wish for the application to be listed for consideration by the Development Control Committee. This form must be received no later than 28 days from the date of this letter.

If you have concerns about the proposals it may be possible for these to be addressed during the consideration of the application. In these circumstances it would be helpful if you could discuss these with the case officer **Angela Odell** on **(0118) 974 6445** in the first instance.

Yours sincerely
Trevor Watson
Development Control Manager

LISTING FORM
Case officer: **Angela Odell** Application Number: **F/2002/8100**
School Of Plant Science, Box Number221 University Of Reading, , , Reading.
Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building.
I wish this application to be listed should the officers recommendation be for: GRANT/REFUSAL and my reasons are:

_____

_____

Should the officers recommendation be in accordance with my views I am happy for the application to be determined under delegated powers. YES/NO

Signed: _____ Date: _____

Councillor A Spratling

**********FILE COPY**********

**********FILE COPY**********

Tel: (0118) 974 6445

Date: 30 December 2002

My ref: F/2002/8100

WOKINGHAM UNITARY
Aiming for Excellence

Councillor F Rolls
14 Tiptree Close
Earley
RG6 4HS

Environmental Services Department
Planning Services
P.O. Box 157
Shute End, Wokingham
Berkshire RG40 1WR
Tel: (0118) 974 6000
Fax: (0118) 974 6484
Minicom No: (0118) 974 6991
DX: 33506 – Wokingham

Dear Councillor

Application Number: F/2002/8100
School Of Plant Science, Box Number221 University Of Reading, , , Reading.
Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building.

I write to let you know that the above mentioned application has been received.

At this stage a recommendation has not yet been made. This form should only be returned if it is likely that you might wish for the application to be listed for consideration by the Development Control Committee. This form must be received no later than 28 days from the date of this letter.

If you have concerns about the proposals it may be possible for these to be addressed during the consideration of the application. In these circumstances it would be helpful if you could discuss these with the case officer **Angela Odell** on **(0118) 974 6445** in the first instance.

Yours sincerely
Trevor Watson
Development Control Manager

LISTING FORM
Case officer: **Angela Odell** Application Number: **F/2002/8100**
School Of Plant Science, Box Number221 University Of Reading, , , Reading.
Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building.
I wish this application to be listed should the officers recommendation be for: GRANT/REFUSAL and my reasons are:

_____

_____

Should the officers recommendation be in accordance with my views I am happy for the application to be determined under delegated powers. YES/NO

Signed: _____ Date: _____

Councillor F Rolls

**********FILE COPY**********

**********FILE COPY**********

Tel: (0118) 974 6445

Date: 30 December 2002

My ref: F/2002/8100

WOKINGHAM UNITARY
Aiming for Excellence

Councillor D Hare
9 Easby Way
Lower Earley
RG6 3XA

Environmental Services Department
Planning Services
P.O. Box 157
Shute End, Wokingham
Berkshire RG40 1WR
Tel: (0118) 974 6000
Fax: (0118) 974 6484
Minicom No: (0118) 974 6991
DX: 33506 – Wokingham

Dear Councillor

Application Number: F/2002/8100
School Of Plant Science, Box Number221 University Of Reading, , , Reading.
Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building.

I write to let you know that the above mentioned application has been received.

At this stage a recommendation has not yet been made. This form should only be returned if it is likely that you might wish for the application to be listed for consideration by the Development Control Committee. This form must be received no later than 28 days from the date of this letter.

If you have concerns about the proposals it may be possible for these to be addressed during the consideration of the application. In these circumstances it would be helpful if you could discuss these with the case officer **Angela Odell** on **(0118) 974 6445** in the first instance.

Yours sincerely
Trevor Watson
Development Control Manager

LISTING FORM
Case officer: **Angela Odell** Application Number: **F/2002/8100**
School Of Plant Science, Box Number221 University Of Reading, , , Reading.
Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building.
I wish this application to be listed should the officers recommendation be for: GRANT/REFUSAL and my reasons are:

_____

_____

Should the officers recommendation be in accordance with my views I am happy for the application to be determined under delegated powers. YES/NO

Signed: _____ Date: _____

Councillor D Hare

**********FILE COPY**********

Received by Wokingham District Council

Application No: F/2002/8100

PROPOSAL:
Proposed new entrance foyer and rooftop plant to Bioscience Building and rooftop plant to Food Studies building.

LOCATION:
School Of Plant Science, Box Number221 University Of Reading, , , Reading.

The application is available for inspection at the locations & during the times detailed below:

WOKINGHAM DISTRICT COUNCIL, PLANNING RECEPTION, SHUTE END, WOKINGHAM between 8.30 - 5.00 Monday - Thursday & 8.30 - 4.00 Friday. (TEL: (0118) 974 6428)
OR
WOODLEY LIBRARY, HEADLEY ROAD, WOODLEY between 9.30am - 7.00pm Mon, Thurs & Fri. 9.30am - 5.00pm Tues, 9.30am - 1.00pm Saturday and 1.00pm - 4.00pm Sunday. (closed all day Wednesday). If you intend to view this application at Woodley Library please allow 4 days from the date of this letter for delivery of plans and remember to quote application number F/2002/8100 to enable the library staff to locate the correct information.
OR
EARLEY TOWN COUNCIL, RADSTOCK HOUSE, RADSTOCK LANE, EARLEY between 9.00am – 1.00pm & 2.00pm – 4.30pm Monday to Friday. (TEL: (0118) 986 8995)

Comments should be sent in writing QUOTING THE APPLICATION NUMBER to the Case Officer Angela Odell P.O. Box 157 Council Offices, Shute End, Wokingham Berkshire, RG40 1WR to arrive on or before 23/01/2003. Written comments submitted will become available for public inspection.

In view of the very large number of planning applications and letters of comment received, it will not be possible for an individual reply to be issued to observations made. However any comments will be taken into account when the application is determined and you will be notified of the decision.

Trevor Watson
Development Control Manager
30 December 2002

Copy: D. Downing, Writer, Rob McMenamin (Reading Universty), Main File.

amec

19 DEC 2002

16 December 2002

Angela Odell
Wokingham District Council
PO Box 157
Shute End
Wokingham
Berkshire RG40 1WR

Direct tel 01789 204288
Direct fax 01789 413667
Email richard.parker@amec.com

Dear Angela

Re: 37482 Reading University

Please find enclosed re-submitted planning application forms and 6 copies of supporting drawings for the proposed new entrance foyer and roof top plant as requested in Carol Hurst's correspondence of 10th December 2002.

We have amended the red line on the site plan to include access, parking and area of proposed extension as shown on my fax dated 16th December 2002 and agreed with Carol Hurst. Also included are elevations to each side of Bio Science and FMSU buildings and a North elevation of the new entrance showing the escape door.

Should you require further clarification on any matters please do not hesitate to contact me.

Yours sincerely

Richard Parker

Encl.

Planning Application Form
Section 66 Certificate
Cheque
Plant Sciences Colour Perspective
3 x Photograph Sheets
Drawings: 37482-IDA-0200 rev.C, 0202 rev.OR, 0305 rev.OR, 1010 rev.OR, 1500 rev.B, 1510 rev.OR, 1520rev.OR, 1530 rev.OR.

19 DEC 2002 8100

Tel. (0118) 974 6429 or 6433

Date: 10 December 2002

Your Ref:

My Ref: F/2002/8100

WOKINGHAM UNITARY
Aiming for Excellence

The University Of Reading
C/O Richard Parker, Amec Group Ltd
Timothy's Bridge Road
Stratford On Avon
Warwicks
CU37 9NJ

Environmental Services Department
Planning Services
P.O. Box 157
Shute End, Wokingham
Berkshire RG40 1WR
Tel: (0118) 974 6000
Fax: (0118) 974 6484
Minicom No: (0118) 974 6991
DX: 33506 – Wokingham

Dear Sir/Madam

Reference Number: 2002/8100

Site Address: School Of Plant Science, Box Number221 University Of Reading, , , Reading.

Proposal: Proposed new entrance foyer to Bioscience Building and rooftop plant.

I return your application, as it is invalid and cannot be determined for the following reason(s);

Please extend red line to include access, parking and area of proposed extension.

Plant: There are roof plans for both buildings showing position of proposed plant but we also require elevations.

Entrance Foyer: North elevation does not show full side elevation of new entrance (we need to see side door).

Please supply six copies of all drawings.

Please re-submit the proposal with the amendments and/or additional information requested above.

Yours faithfully,

Carol Hurst

Senior Technical Officer
Development Control

19 DEC 2002 8100

amec

Fax

To	Carol Hurst	From	Richard Parker
Company	Wokingham District Council	Tel	01789 204288
Fax	0118 974 6484	Fax	01789 413667
Pages	02 (inc. this page)	Email	Richard.parker@amec.com
	Main File	Sent by	
	David Downing	Date	16 December 2002
		Ref	37492
		Filename	\\SUANW1\SYS\PROJECTS\37482\01 Cent Proj Data\Fax\ext org\03 0212 RP to CH re site boundary.doc

37482 Reading University - Biocentre & FMSU

Application Site Area

Carol,

Following is an extract of the site plan for Reading University with the application site marked on. Please can you call me to confirm that this is acceptable.

Regards,

Richard Parker
Architect

AMEC Capital Projects Limited
Timothy's Bridge Road
Stratford upon Avon
Warwickshire CV37 9NJ
United Kingdom
Tel +44 (0)1789 204288
Fax +44 (0)1789 299135
www.amec.com

This fax message is intended for the addressee only. The contents are confidential. If you are not the intended recipient please notify us by telephone as soon as possible and either return the message by post or destroy it. If you are not the intended recipient of this fax any use by you of its contents is prohibited.

AMEC CAPITAL PROJECTS LIMITED
Construction Division
Leonard Fairclough House, Church Street
Adlington, Chorley, Lancashire PR7 4LB
Telephone: (01257) 484400 Fax: (01257) 484420

REMITTANCE ADVICE

804530

YOUR REFERENCE			AMOUNT
37482 1762	37482 1762	37482 1762	220.00

Date 25-Nov-2002

WOKINGHAM DISTRICT COUNCIL
STRATFORD

19.DEC.2002 87CU

TOTAL 220.00

Please forward a VAT Invoice

1769a

WOKINGHAM DISTRICT COUNCIL
PLANNING APPLICATION

PART 1

WOKINGHAM UNITARY
Aiming for Excellence

APPLICATION FOR PERMISSION TO CARRY OUT DEVELOPMENT - TOWN AND COUNTRY PLANNING ACTS

Please answer **ALL QUESTIONS** in **BLOCK LETTERS**. If a question is not applicable, answer **N/A** in space. Please submit **SIX** copies of this form and plans to:-

THE DISTRICT PLANNING OFFICER
WOKINGHAM DISTRICT COUNCIL
PLANNING DEPARTMENT
P O Box No. 157
COUNCIL OFFICES
SHUTE END
WOKINGHAM
BERKSHIRE, RG40 1WR

FOR OFFICE USE ONLY

19 DEC 2002 29 NOV 2002

1.	APPLICANT'S NAME	ROB MC MENAMIN - THE UNIVERSITY OF READING
	ADDRESS	ESTATES + BUILDING DEPARTMENT, WHITENIGHTS PO BOX 235, READING
	POST CODE	RG6 6BW PHONE 0118 931 8958
2. If the applicant has an agent, all correspondence will be sent to the agent	AGENT'S NAME	RICHARD PARKER, AMEC GROUP LTD, TIMOTHY'S
	ADDRESS	BRIDGE ROAD, STRATFORD-UPON-AVON, WARWICKSHIRE
	POST CODE	CV37 9NJ PHONE 01789 204288
3. On the plans show the SITE outlined in RED Show also OTHER land in the applicant's ownership or control in BLUE.	SITE LOCATION	READING UNIVERSITY - BIOCENTRE + FMSU BUILDINGS
4. WHAT IS THE APPLICATION FOR ? Give brief details and state for what purpose this site and any buildings will be used.		NEW ENTRANCE FOYER TO BIOSCIENCE BLDG ROOFTOP PLANT TO BIOSCIENCE + FMSU BLDGS USE → UNIVERSITY TEACHING + RESEARCH
5. Give the area in hectares or part of a hectare	AREA OF SITE	2 HECTARES
6. State the applicant's interest in the land e.g. owner, prospective purchaser, lessee	OWNERSHIP	OWNER
List all the plans and drawings submitted with the application	PLANS/DRAWINGS	37482 - IDA - 0200 rev. ac, 0202 rev. or, 0305 rev. or, 1010 rev. or, 1500 rev. or, 1510 rev. or

8. DOES THE APPLICATION INVOLVE ANY OF THE FOLLOWING ?

Tick the boxes(x)

CHANGE OF USE	[ ]	REDEVELOPMENT	[ ]
ERECTION OF NEW BUILDING	[ ]	ALTERATION or EXTENSION	[✓]

9. WHAT TYPE OF APPLICATION IS THIS ? Tick one box only

OUTLINE PERMISSION	[ ]	See question 10
FULL PERMISSION	[✓]	
APPROVAL OF DETAILS/RESERVED MATTERS	[ ]	State relevant outline permission number Also complete Question 10
TEMPORARY PERMISSION	[ ]	State period required
RELAXATION OF CONDITIONS	[ ]	State relevant application number Conditions to be relaxed

10. IF THIS IS AN OUTLINE APPLICATION OR AN APPROVAL OF RESERVED MATTERS, which details, if any, do you wish to be considered as part of this application ?

		SITING	[ ]
EXTERNAL APPEARANCE	[ ]	DESIGN	[ ]
MEANS OF ACCESS	[ ]	LANDSCAPING	[ ]

11. **WHAT IS THE EXISTING USE OF THE LAND AND/OR BUILDING(S)** e.g. residential, industrial, etc. If the site is vacant say so, and also state its previous use and when that ceased.
UNIVERSITY TEACHING AND RESEARCH

12. **DOES A PUBLIC RIGHT OF WAY CROSS OR ABUT THE SITE OR THE PROPOSED ACCESS?** ~~YES~~/NO — If yes, show existing route(s) and any proposed alternatives on the plans

13. **ARE THERE ANY TREES ON THE SITE? IF YES, ARE ANY TO BE FELLED?** ~~YES~~/NO — If yes, please show their positions, spread and species on the plans and which, if any, are to be felled.

14. **STATE EXTERNAL MATERIALS TO BE USED.**
STRUCTURAL GLAZED UNITS WITH SILICON JOINTS
SINGLE PLY MEMBRANE ROOF ON LIGHTWEIGHT DECK
GREY METAL TO UNDERSIDE OF CANOPY OVERHANG
MANIFESTATION STRIP

15. **HOW WILL THE SITE BE ENCLOSED?** Say whether walls, fences or hedges, and give height, colour and materials. If the site is divided into plots, say how each is to be enclosed.
N/A

16. **HOW WILL SURFACE WATER BE DISPOSED OF?**
EXISTING DRAINAGE

17. **HOW WILL FOUL SEWAGE BE DISPOSED OF?** N/A
To existing system YES/NO
If no, please give details

18. **WHAT ARE THE ACCESS ARRANGEMENTS?**
AS EXISTING
AS PROPOSED
Give details of pedestrian and vehicular access
AS EXISTING - MAIN ENTRANCE CONTROLLED BY RECEPTION DESK. CAR PARKING OPPOSITE BUILDING.
AS PROPOSED - NEW ENTRANCE LOBBY USING EXISTING ENTRANCE + CAR PARK ARRANGEMENT

19. **HAS PROVISION BEEN MADE FOR THE DISABLED?** See notes for applicants
LEVEL ACCESS (UNIVERSITY ROLLING PROGRAMME FOR IMPLEMENTATION OF DDA 95 IS ONGOING).

20. **IF THIS PROPOSAL INVOLVES RESIDENTIAL DEVELOPMENT OR THE LOSS OF RESIDENTIAL UNITS, COMPLETE THE FOLLOWING TABLE**

	No. OF DWELLINGS/HABITABLE ROOMS PROPOSED	TO BE RETAINED	TO BE LOST
HOUSE	/ *	/ *	/ *
BUNGALOW	/ *	/ *	/ *
FLAT/MAISONETTE	/ *	/ *	/ *
OTHER	/ *	/ *	/ *

* STATE No. OF HABITABLE ROOMS

21. **DOES THE PROPOSAL INVOLVE ANY NON-RESIDENTIAL BUILDING OR USE?** ~~YES~~/NO — If YES, complete Part 2 of the form

22. **DOES THE PROPOSAL INVOLVE THE WINNING, WORKING OR PROCESSING OF MINERALS: THE DISPOSAL OF MINERAL WASTE, OR THE DEPOSIT OR PROCESSING OF REFUSE AND WASTE MATERIALS?** ~~YES~~/NO — If YES, please ask for and complete Part 3 of the form

23. **STATE THE FEE ENCLOSED WITH THIS APPLICATION** The current scale of fees is enclosed. If you believe a reduced fee or no fee is payable, say why.
£220

I hereby apply for permission in respect of the particulars described above and in the attached plans and drawings. If planning permission is granted, the development must be carried out strictly in accordance with the approved plans. Failure to do so could result in enforcement action being taken. Permission under the Town & Country Planning Acts does not obviate the possible need to apply for Building Regulations approval.

SIGNED [signature] ON BEHALF OF READING UNIVERSITY DATE 26/11/02

Before submitting the application check that it is complete, that all questions have been answered and that the site boundary and the new work are clearly edged in red on the plans. Every application must be accompanied by the appropriate certificate and fee. See "NOTES TO HELP APPLICANTS".

1769c

PLANNING APPLICATION

PART 2

This part of the form need only be completed if the application involves non-residential development. Please answer all questions in print or block letters. If the answer is not applicable, write N/A in the space. You may wish to amplify your answers in a covering letter.

24. STATE THE GROSS FLOOR SPACE (by external measurement) OF ALL BUILDINGS TO WHICH THIS APPLICATION REFERS. Please give all floor areas in SQUARE METRES.

	USE CLASS	Existing floor space		Proposed additional floorspace created by	
		Retained in existing use	Lost by change of use or demolition	New building	Change of use
A1	SHOPS				
A2	FINANCIAL AND PROFESSIONAL SERVICES				
A3	FOOD AND DRINK				
B1(a)	OFFICE (other than A2)				
B1 (b)	RESEARCH AND DEVELOPMENT				
B1 (c)	LIGHT INDUSTRIAL				
B2	GENERAL INDUSTRIAL				
B3-7	SPECIAL INDUSTRIAL				
B8	STORAGE OR DISTRIBUTION				
C1	HOTELS AND HOSTELS				
C2	RESIDENTIAL INSTITUTIONS				
D1	NON-RESIDENTIAL INSTITUTIONS				
D2	ASSEMBLY AND LEISURE	4970 m²	0	39.5 m²	0
OTHER	Please Specify				
OTHER	Please Specify				
	TOTAL	4970m²	0	39.5m²	0

25. IF C1 OR C2 USE IS PROPOSED, PLEASE STATE NUMBER OF BED SPACES

26. WHAT PROVISION IS BEING MADE FOR PARKING?

NOT APPLICABLE – REFURBISHMENT OF EXISTING NO ADDITIONAL STAFF

	Cars	Lorries
Existing		
Proposed		

27. DESCRIBE THE ACTIVITY OR PROCESSES TO BE CARRIED ON
Please provide details of any equipment, plant or machinery to be installed and any end products. You may wish to amplify your answers in a covering letter.

TEACHING + RESEARCH - FOOD + PLANT SCIENCE - ROOFTOP PLANT - AHU UNITS, EXTRACT FANS + EXHAUSTS, CONDENSER UNITS, DX HEAT RECOVERY UNIT, DX HEPA UNIT

28. WHO WILL OCCUPY THE PREMISES?
a) Give the name and current operating address of the proposed occupier
b) Will these premises be vacated?

a) READING UNIVERSITY

b) NO

29. IF KNOWN, HOW MANY PEOPLE ARE LIKELY TO BE EMPLOYED ON SITE AFTER COMPLETION OF THE DEVELOPMENT? NOT KNOWN

Existing Staff	Transferred Staff	New Staff	Total

30. DOES THE PROPOSAL INVOLVE THE USE OR STORAGE OF ANY OF THE HAZARDOUS SUBSTANCES LISTED IN THE NOTES?
If so, state this material, the quantity and method of storage.

NO

Before submitting the application check that it is complete, that all questions have been answered and that the site boundary and the new work are clearly edged in red on the plans. Every application must be accompanied by the appropriate certificate and fee. See "NOTES TO HELP APPLICANTS".

1769d

YOUR PLANNING APPLICATION

WHY DO YOU NEED TO MAKE A PLANNING APPLICATION ?

New buildings, major alterations and enlargement of existing buildings, and many changes in the use of buildings and land need planning permission.
The Town and Country Planning Acts impose a duty on Local Authorities to control these changes, and this means that a balance has to be found between the need and pressure for change, and the desire to protect the character of settlements and the countryside.
The merits of each application are, therefore, carefully examined.

WHAT ELSE MAY YOU HAVE TO DO ?

Listed Building Consent:	for works to a Listed Building; or for demolition works on land within the curtilage of a Listed Building or within a Conservation Area.
Advertisement Consent:	for the display of advertisements or signs
Building Regulation Approval:	for most new building or construction work.

Special forms are available for these types of applications.

You should also check whether there are any other regulations with which you may need to comply.

WHAT HAPPENS TO THE APPLICATION ?

It will first be checked to see if it is complete and if it is, it will be registered.

Consultations will be carried out with public and other bodies, such as the Highway Authority, or Local Parish Councils.

Publicity may be given to allow local people the opportunity to comment on your proposals.

The application will be considered in relation to the Council's planning policies and guidelines, the past history of decisions on that site or in the locality, other standards (such as parking, or visibility at road junctions), and any other material considerations.

The site will be visited by a Planning Officer You may be asked to submit more information, or to amend your application.

The application will then be considered either by a Planning Committee or Sub Committee (made up of Councillors) or by the Chief Officer responsible for planning matters. Objections to an application will be taken into consideration by the Committee or the Chief Officer.

Shortly after the application has been determined, you will receive a Decision Notice.

HOW LONG WILL IT TAKE ?

An application will generally be determined within eight weeks although a longer period may sometimes be required for a complicated application.

WHAT SORT OF DECISION CAN BE MADE ?

Your application may be approved.

Your application may be approved subject to certain conditions. These could impose restictions on the use of land or buildings, or require further details to be approved at a later stage, (e.g. materials or landscaping).
You may appeal against the conditions, but this opens the entire permission to review by the Secretary of State.

Your application may be refused. The reason will be listed on the Decision Notice.

WHAT HAPPENS IF THE APPLICATION IS REFUSED ?

You have the right to appeal against the refusal to the Secretary of State, but you have to do that within six months. Appeals can be dealt with by written representations by both sides, or by a Public Inquiry.
You may ask the Planning Officer whether an amended application would be more likely to receive planning permission.

DATA PROTECTION ACT 1984

'Information contained in this form is likely to be personal data within the terms of the Data Protection Act 1984, and as such will be held by the Council on computer (such as the PLANAPS applications processing system) and may be used by the Council only for purposes registered under the terms of the Data Protection Act.'

1789/a 29 NOV 2002

SECTION 66 CERTIFICATE

Application No.

13 DEC 2002 6760

Please fill in both Certificate A, B, C or D and the Agricultural Holdings Certificate. Delete sections not relevant.

(a) "Owner" means a person having a freehold interest or leasehold interest the unexpired term of which is not less than 7 years.

OR

+ See Note (a) to Certificate A

OR

(b) Insert description of steps taken.

(c) Name of local newspaper circulating in the area where the land is situated.

(d) Date of publication (which must be not earlier than the beginning of the period of 21 days ending with the date of the application).

CERTIFICATE A

I certify that:

at the beginning of the period of 21 days ending with the date of the accompanying application, nobody, except the applicant, was the owner of (a) of any part of the land to which the application relates.

CERTIFICATE B

I certify that:

I have/The applicant has* given the required notice to everyone else who, at the beginning of the period of 21 days ending with the date of the accompanying application was the owner (a) of any part of the land to which the application relates, as listed below.

Owner's(a) name	Address at which notice was served	Date on which notice was served

CERTIFICATE C

I certify that

- I/The applicant* cannot issued a certificate in accordance with either paragraph (a) or paragraph (b) of Section 66(1) of the Act in respect of the accompanying application.

- I have/The applicant has* given the required notice to the persons specified below, being persons who at the beginning of the period of 21 days ending with the date of the application were owners (a) of any part of the land to which the application relates.

Owner's(a) name	Address at which notice was served	Date on which notice was served

- I have/The applicant has* taken all reasonable steps open to me/him/her* to find out the names and addresses of the other owners (a) of the land, or of a part of it, but have/has* been unable to do so. These steps were as follows:

  (b) .....

  .....

- Notice of the application as attached to this Certificate, has been published in the (c) .....

  on (d) .....

1789/b

CERTIFICATE D

I certify that

● I/The applicant cannot issue a certificate in accordance with paragraph (a) of Section 66 of the Act in respect of the accompanying application.

OR

● I/The applicant have/has taken all reasonable steps open to me/him/her to find out the names and addresses of everyone else who, at the beginning of the period of 21 days beginning with the date of application was the owner (a) of any part of the land to which the application relates, but have/has been unable to do so. These steps were as follows:

(b) . . . . . .

. . . . . .

(b) Insert description of steps taken

(c) Insert name of local newspaper circulating in the area where the land is situated.

(d) Insert date of publication (which must not be earlier than the beginning of the period of 21 days ending with the date of the application).

● Notice of the application as attached to this Certificate, has been published in the (c) . . . . . ●

on (d) . . . . . .

ALL APPLICANTS MUST COMPLETE THIS SECTION

If any of the site is part of an area of land which is let or there is an agreement to let the land for agricultural purposes to a tenant, it may be an agricultural holding. Further advice may be obtained from the Department.

Agricultural Holdings Certificate

One or other section must be crossed through as not applicable.

If the applicant is the sole agricultural tenant he or she must delete the first alternative and insert "not applicable" as the information required by the second alternative.

● None of the land to which the application relates is, or is part of, an agricultural holding. ●

OR

● I have/The applicant has given the required notice to every person other than my/him/herself who, at the beginning of the period of 21 days ending with the date of the application, was a tenant of an agricultural holding on all or part of the land to which the application relates, as follows:

Tenant's name	Address at which notice was served	Date on which notice was served

Signed . . . . . .

On behalf of . . . READING UNIVERSITY . . . . . .

Date . . . . 26/11/02 . . . . . .

TOWN AND COUNTRY PLANNING ACT, 1990
TOWN & COUNTRY PLANNING GENERAL DEVELOPMENT ORDER 1988
Certificate under Section 66

THE FOLLOWING SCANNED IMAGES ARE DOCUMENTS OF BAD QUALITY OR ARE PHOTOCOPIES.



FOR THIS REASON THEY MAY APPEAR UNREADABLE ON SCREEN

ADDRESS WHITEKNIGHTS PARK PARISH EARLEY

PLOT No. ORD. SHEET No. SU.7371 (51)

BUILDER

Plan No.	Applicant	Description of Development	Date of Decision	Decision
396/50	The University of Reading	Outline - Use of Whiteknights Park for gen. Univ. purposes	12.12.50	N/A C/A
104/51	"	Outline & Layout	12.6.51	N/A C/A
R/418/69	"	Plant Biology Building with teaching & research facilities	19.2.70	App. N/A
1819/72	"	Single storey building for use with plant biology	23.11.72	- App
94/73	"	Green House at the P.B.B. Phase III building	25.1.73	App App
00700	"	GLASSHOUSE FOR DEPT. OF BOTANY	13.6.74	N/A App
BR 1371	"	"	19.9.74	App N/A
BR 2110	"	"	10.3.75	App. N/A
02214	"	Greenhouse block	20.3.75	N/A C/A
BR 2771	"	GARDEN MAINTENANCE STORE	28.5.75	App. N/A
02844	"	STORE BUILDING	10.7.75	N/A App
20148			22.9.83	N/A C/A
BR2735	"	"	31.8.83	App N/A

DATE OF COMPLETION

MINISTRY DECISION

SPECIAL ORDERS

DRAINAGE

BRA 5338	"	PLANT SCIENCE LABS / NEW TEACHING HALLER.	14.7.88	App
29515 / BRA7464	GARAGES	ALTERATIONS TO EXISTING BUILDING + ERECTION OF NEW GLASSHOUSES	15.4.88	6.6.88 App C/A

(2) ADDRESS PLANT SCIENCES PARISH EARLEY

PLOT No. WHITEKNIGHTS ORD. SHEET No. SU.7371 S

BUILDER

Plan No.	Applicant	Description of Development	Date of Decision	Decision
32755	UNIV. OF READING	STORAGE BUILDING	8.9.89	C/A
36304	"	2/ST. EXT. & ALTS. TO PROVIDE LECTURE THEATRE LAB., STUDIO & 2 OFFICES	23.8.90	Re
36687			14.11.90	C/
BRA9475	"	2/ST. EXT. FOR LECTURE THEATRE/LAB./STUDIO ETC.	1.10.90	App
38494	PLANT SCIENCES	RES. GARDEN - STORE	28.1.92	C/A
97/65810/F	" "	1ST COMPRESSOR ROOM	15.8.97	C/
FP97/6683	" "	"	15.8.97	App
99/69784/F	" Innov. Centre	Rebuild 1st Fl & Refurb	W/D	
F/2002/8100	Univ of Reading	New entrance foyer to Bioscience Bldg & rooftop		

DATE OF COMPLETION

MINISTRY DECISION

SPECIAL ORDERS Pdong - Entrance + plant on roof - PP req - 20/11/02 Amec Capital Projects Mr Parker.

DRAINAGE porch.

091074

cleaning + repainting - PP not req 20/11/02

Rem of Gr. Fl. glazing + panel below glazing PP not req 20/11/0

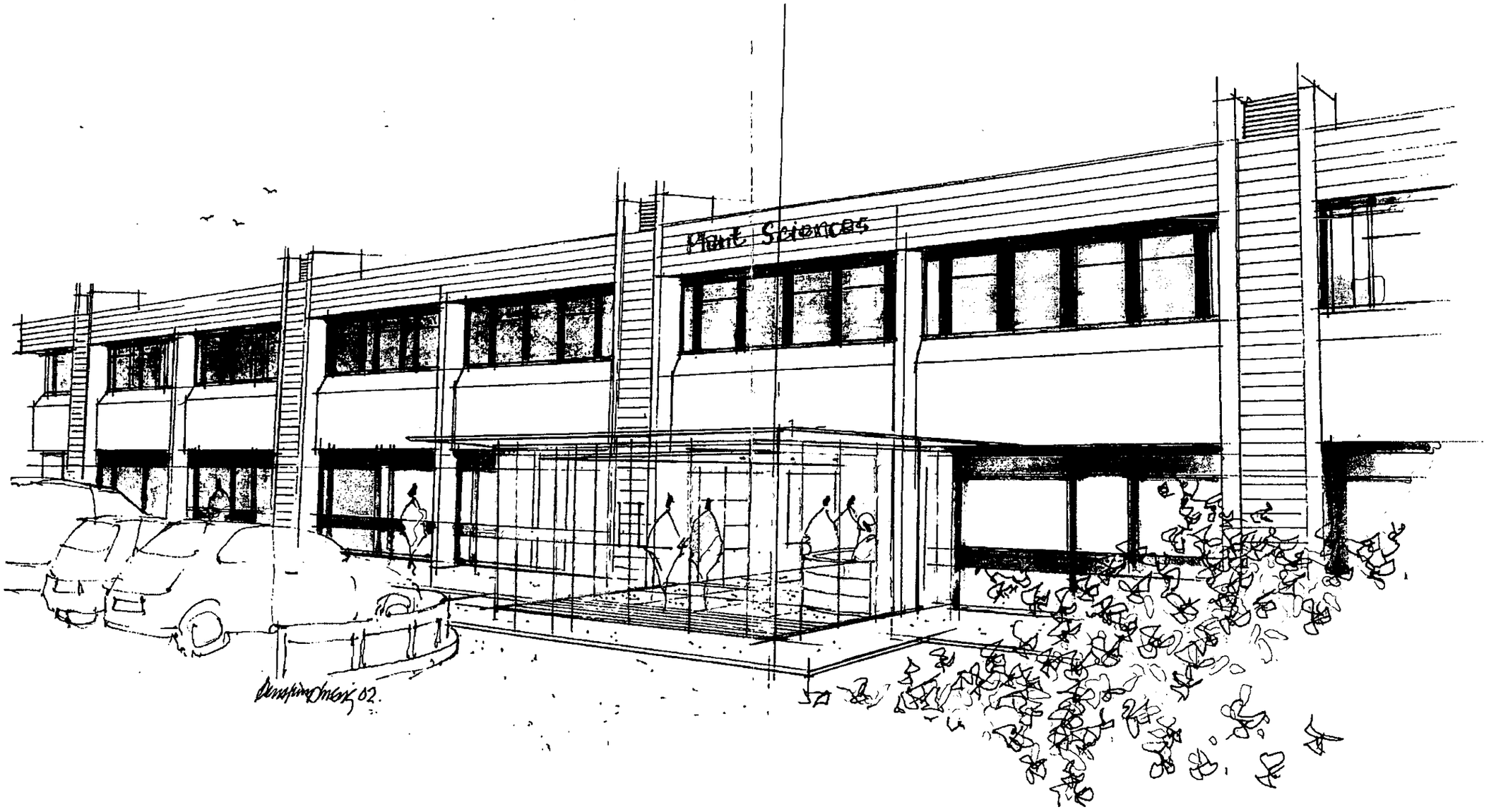
THE FOLLOWING SCANNED IMAGES ARE DOCUMENTS OF BAD QUALITY OR ARE PHOTOCOPIES.



FOR THIS REASON THEY MAY APPEAR UNREADABLE ON SCREEN

READING UNIVERSITY - BIOCENTRE

15.DEC.2002 8:00



APPROVED

INDICATIVE ONLY

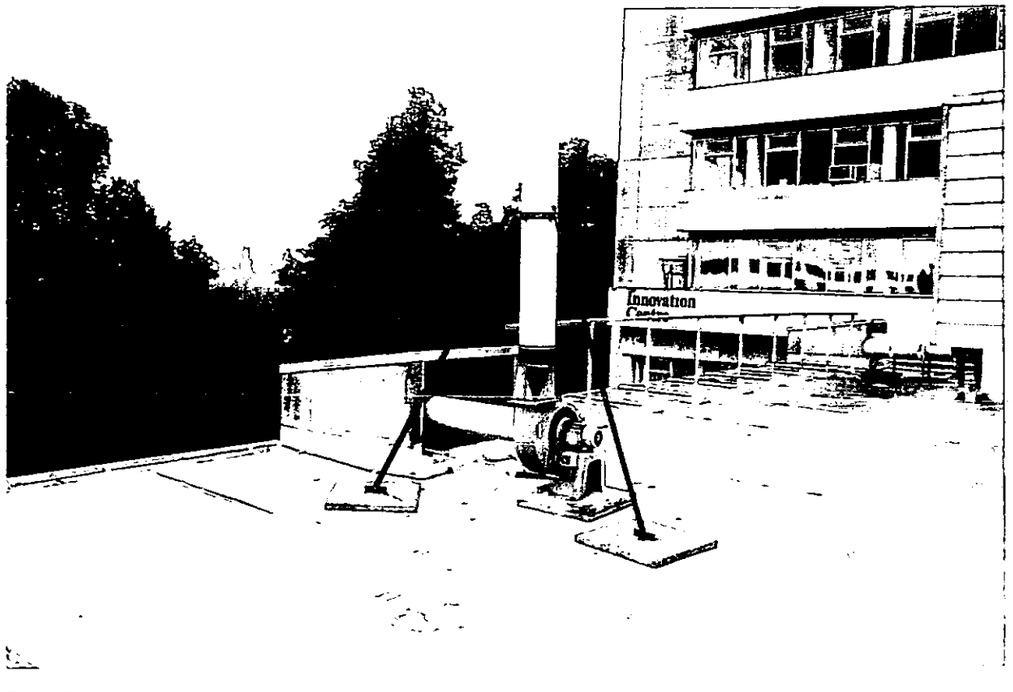
PLANT SCIENCES - PERSPECTIVE OF NEW ENTRANCE

amec

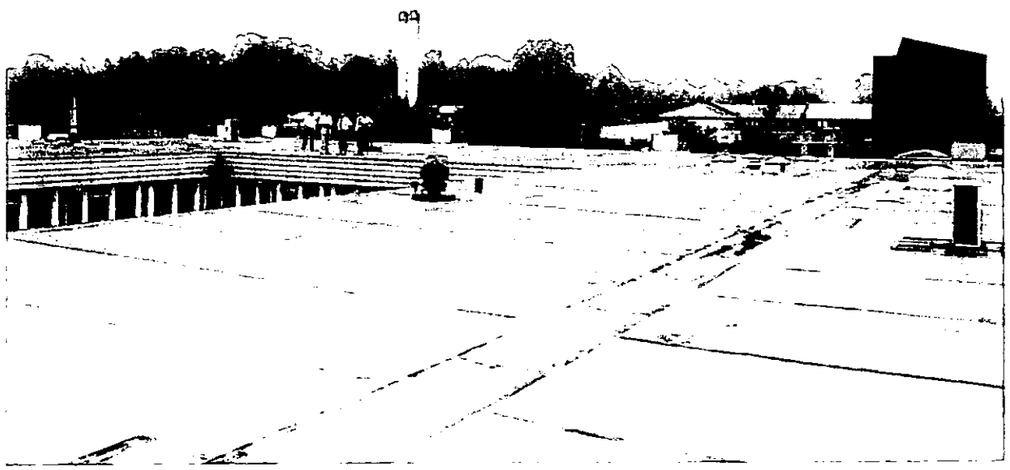
19.DEC.02 8100



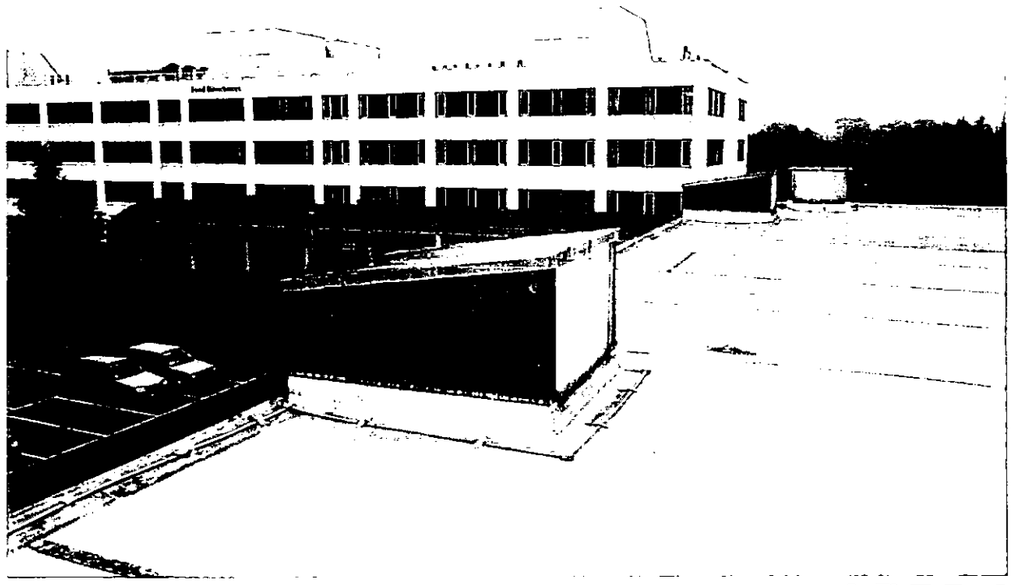
Roof scape



Roof mounted extract fan



Roof scape



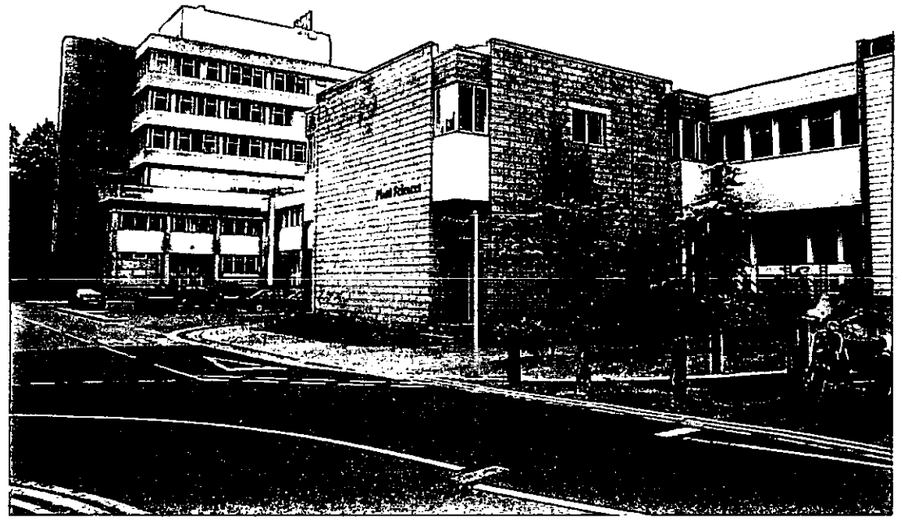
Top of service shaft housing fume cupboard fan

APPROVED

19.DEC.2002 07:00



West Elevation



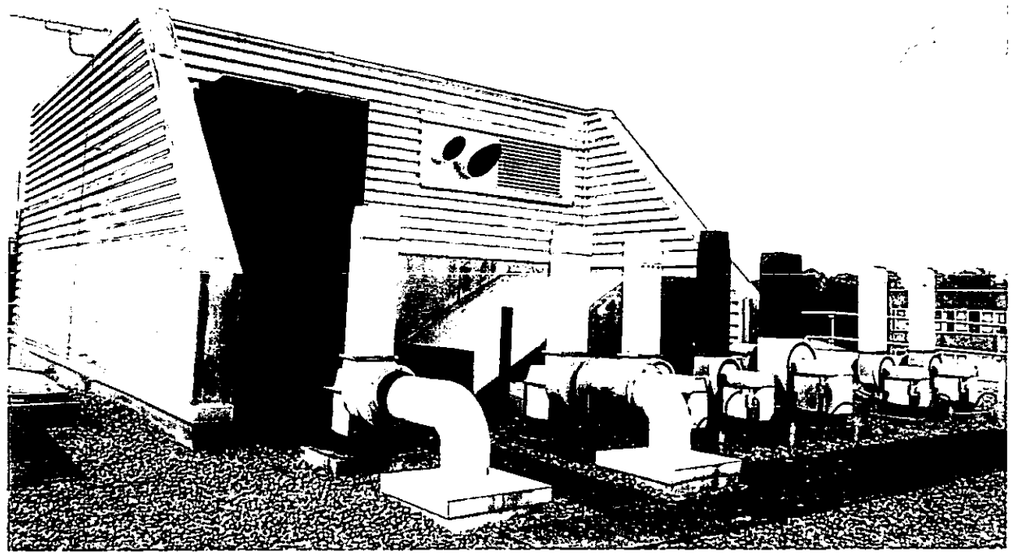
North Elevation



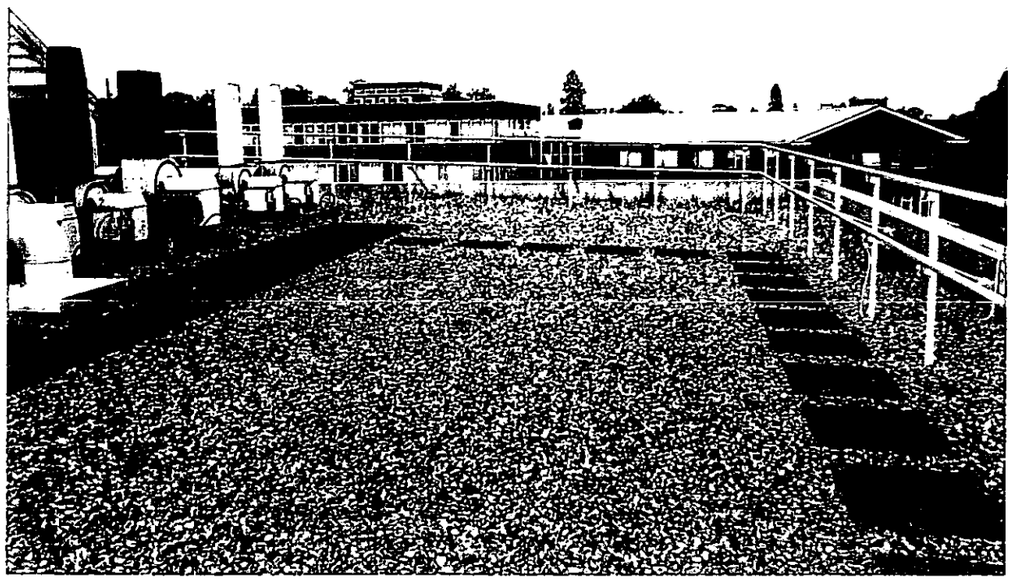
West Elevation

APPROVED

19 DEC 2002 8100



Roof top plant room - Existing



Roof scape - Existing



Roof mounted plant - Existing

APPROVED

FläktWoods

Air handling unit EU

NoName

Ver 5.05.11
30/01/03

Project	Reading University
Customer	Amec
Customer ref.	James Chorley
Our ref.	pm/Q72927A00
Unit	AHU 3 S/E PLANT SCIENCES

EF 3

Supply air flow	0.97	m³/s	Exhaust air flow	0.50	m³/s
Ext. static pressure	600	Pa	Ext. static pressure	500	Pa
Size	20		Size	20	
Voltage	3*400 V, 50	Hz	Weight	1281	kg
SFP_v	2.94	kW/m³/s			

SUMMARY

Functional sections in direction of airflow	v0 (m/s)	Et (%)	tw (°C)	ts (°C)	dP (Pa)
Supply:					
Connection section	3.9				107
Empty section					0
Silencer					19
Empty section					0
Heat exchanger, ECOTERM	2.6	43.9	-2.3 / 8.4		205
Panel filter	2.7				96
Bag filter	2.7				216
Air heater	2.9		8.0 / 21.0		34
Empty section					0
Air cooler	2.8			27.4 / 21.0	64
Fan		75.2			1404
Exhaust:					
Connection wall					0
Bag filter	1.4				85
Heat exchanger, ECOTERM	1.4		22.0 / 6.9		112
Fan		67.5			756
Empty section					0
Silencer					6
Empty section					0
Connection section	2.5				29

Project Reading University
Unit AHU 3 S/E PLANT SCIENCES

TECHNICAL SPECIFICATION
(Components listed in direction of air flow)

SUPPLY

1	**Connection section** Damper leakage class T4 (CEN3) Galvanized steel frame Grille with galvanized steel frame and plastic vanes.	**EUVE-20-1-2-1-1**			**107 Pa**
2	**Empty section** Length	**EUTC-20-1-0-0-1**			**0 Pa** 100 mm
3	**Silencer** Length Baffles cleanable, dry Galvanized steel frame	**EUSA-20-3-6-0-1-1-2**			**19 Pa** 900 mm
4	**Empty section** Length With inspection door	**EUTC-20-3-0-1-1**			**0 Pa** 300 mm
5	**Heat exchanger, ECOTERM** Copper tubes, aluminium fins Fin pitch Output variant Short circuit Galvanized steel frame Water connection size Water flow rate Ethylene glycol Temperature efficiency Capacity Air temperature Water temperature Water pressure drop Performance,unregulated Air temperature in Air temperature out Temerature efficiency Capacity	**EURE-20-1-4-1-4-2-1-1-1** 4.0 mm 4 25 0.27 l/s 30.0 % 43.9 % 12.5 kW -2.3 / 8.4 °C 15.7 / 3.4 °C 22.3 kPa -5.0 0.0 5.0 °C 6.8 9.5 12.1 °C 43.8 43.4 41.9 % 13.8 11.2 8.3 kW			**205 Pa**
6	**Filter** Galvanized steel frame ***Panel filter Synthetic, class G4 (EU4)*** Pressure drop, design Pressure drop, start	**EUPA-20-4-1-1**			**96 Pa** 96 Pa 61 Pa

	Pressure drop, end		131	Pa
	Filter area		0.56	m²
	Number of filters		1x1/1	
	Face velocity		2.7	m/s
	Accessories:			
	Manometer (number 1)		EUPZ-07	
7	**Filter**	**EUPC-20-19-1-0-1-1-1**	**217**	**Pa**
	Galvanized steel frame			
	Bag filter Glass fibre, class F9 (EU9)			
	Number of filters		1x1/1	
	Pressure drop, design		216	Pa
	Pressure drop, start		166	Pa
	Pressure drop, end		266	Pa
	Filter area		6.50	m²
	Face velocity		2.7	m/s
	Accessories:			
	Manometer (number 1)		EUPZ-07	
8	**Air heater**	**EUEV-20-2-01-1-2-1-1**	**34**	**Pa**
	Copper tubes, aluminium fins			
	Galvanized steel frame			
	Capacity variant		2	
	Water connection size		25	
	Capacity		15.2	kW
	Air temperature		8.0 / 21.0	°C
	Water temperature	80/66	~~82.0 / 71~~.0	°C
	Water flow rate		0.34	l/s
	Water pressure drop		0.8	kPa
			3 l	
9	**Empty section**	**EUTC-20-3-0-1-1**	**0**	**Pa**
	Length		300	mm
	With inspection door			
10	**Air cooler**	**EUNP-20-2-1-1-01-1-0-1-1**	**64**	**Pa**
	Copper tubes, aluminium fins			
	Fin pitch		2.0	mm
	1 stage			
	Galvanized steel frame			
	Capacity variant		2	
	Capacity		7.7	kW
	Face velocity		2.8	m/s
	Air temperature		27.4 / 21.0	°C
	Wet bulb temperature		18.4 / 16.2	°C
	Refrigerant		R407C	
	Evaporation temperature		6.0	°C
	Pressure drop, refrigerant		5.6	kPa
11	**Fan**	**EULB-20-3-3-0-1-01-1-1**		

Backward curved blades, flat-belt drive
Fan size 3
One motor, Internal, Rubber anti-vibration mounts
Galvanized steel frame
Fan speed 3964 rpm
Efficiency, fan 75.2 %
Efficiency, total 58.6 %
Total pressure rise 1404 Pa
to duct with dimension 400 * 400 mm
A straight duct of 230 mm is needed between fan and bend but if the bend direction is the same as that of fan scroll then no straight duct is needed.
Fan Shaft Power 1.81 kW

Sound power levels
(standard: AMCA 300-85 fig. 3)

	Lw per octave band (dB)								LwA
Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	dB (A)
To unit inlet	57	59	42	37	38	36	29	20	46
To unit outlet	87	87	88	82	87	82	80	75	90
To surroundings	68	70	62	57	61	56	48	36	64

Motor: ***APAL-2-90220-1-2***
Start: Direct start
One stator winding
With thermistor
Efficiency 80.8 %
Voltage 400 V
Speed 2870 rpm
Rated power 2.20 kW
Current 4.55 A
Number of poles 2
Belt drive: ***EULT-20-3-7-0-3964***
For flat belts
Efficiency 96.4 %
Accessories:
Screen prot. door (number 1) EULZ-24-20-1
Duct connection (number 1) EULZ-02-20-3-1

EXHAUST

12 Connection wall **EUVA-20-0-0-1-0** **0 Pa**
Without damper
Accessories:
Duct connection (number 1) EUVZ-03-20-1-1

13 Filter **EUPB-20-05-3-1-1-1** **85 Pa**
Galvanized steel frame
Bag filter Synthetic, class F5 (EU5)
Number of filters 1x1/1

	Pressure drop, design		85 Pa
	Pressure drop, start		35 Pa
	Pressure drop, end		135 Pa
	Filter area		1.70 m²
	Face velocity		1.4 m/s
	Accessories:		
	Manometer (number 1)		EUPZ-07
14	**Heat exchanger, ECOTERM**	**EURE-20-2-4-1-1-2-1-1-1**	**112 Pa**
	Copper tubes, aluminium fins		
	Fin pitch		2.0 mm
	Output variant		4
	Galvanized steel frame		
	Air temperature		22.0 / 6.9 °C
	Wet bulb temperature		15.4 / 6.8 °C
	Water temperature		3.4 / 15.7 °C
	Water pressure drop		22.3 kPa
15	**Fan**	**EULB-20-3-3-0-1-04-1-1**	
	Backward curved blades, flat-belt drive		
	Fan size		3
	One motor, Internal, Rubber anti-vibration mounts		
	Galvanized steel frame		
	Fan speed		2798 rpm
	Efficiency, fan		67.5 %
	Efficiency, total		52.4 %
	Total pressure rise		756 Pa
	Fan Shaft Power		0.56 kW

Sound power levels
(standard: AMCA 300-85 fig. 3)

	Lw per octave band (dB)								LwA
Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	dB (A)
To unit inlet	63	69	69	75	68	61	52	39	74
To unit outlet	76	68	46	41	32	48	48	45	57
To surroundings	63	66	59	56	49	47	38	27	57

Motor:		***APAL-2-90110-1-2***	
	Start: Direct start		
	One stator winding		
	With thermistor		
	Efficiency		82.2 %
	Voltage		400 V
	Speed		2850 rpm
	Rated power		1.10 kW
	Current		2.50 A
	Number of poles		2
Belt drive:		***EULT-20-3-7-0-2798***	

	For flat belts			
	Efficiency		94.4	%
	Accessories:			
	Screen prot. door (number 1)		EULZ-24-20-1	
16	**Empty section**	**EUTC-20-4-0-0-1**	**0**	**Pa**
	Length		400	mm
17	**Silencer**	**EUSA-20-4-6-0-1-1-2**	**6**	**Pa**
	Length		1300	mm
	Baffles cleanable, dry			
	Galvanized steel frame			
18	**Empty section**	**EUTC-20-1-0-0-1**	**0**	**Pa**
	Length		100	mm
19	**Connection section**	**EUVE-20-5-2-1-1**	**29**	**Pa**
	Damper leakage class T4 (CEN3)			
	Galvanized steel frame			
	Grille with galvanized steel frame and plastic vanes.			

Block

UNIT CASING

Casing:	Outdoor version with external sealing
Material:	Galvanized steel, 0.7 mm. Frame made of galvanized sheet steel
Insulation:	Thermal insulation
Thightness class:	CEN A

Unit casing	1	*	EUBA-20-240-1-1-1-1-0
Roof	1	*	EUBZ-01-20-240-1-1
Base frame	1		EUAZ-04-20-240-1-1-1
Connection section	1	*	EUVE-20-1-2-1-1
Empty section	1		EUTC-20-1-0-0-1
Silencer	1		EUSA-20-3-6-0-1-1-2
Empty section	1		EUTC-20-3-0-1-1
Heat exchanger, ECOTERM	1		EURE-20-1-4-1-4-2-1-1-1
Filter	1		EUPA-20-4-1-1
Manometer	1		EUPZ-07
Transport dimensions:	Length 2685 mm, Height 1159 mm, Width 1164 mm Volume 3.62 m³, Weight 358 kg		

Unit casing	1	*	EUBA-20-270-1-1-1-1-0
Roof	1	*	EUBZ-01-20-270-3-1
Base frame	1		EUAZ-04-20-270-1-1-1
Filter	1		EUPC-20-19-1-0-1-1-1
Manometer	1		EUPZ-07
Air heater	1		EUEV-20-2-01-1-2-1-1
Empty section	1		EUTC-20-3-0-1-1
Air cooler	1	*	EUNP-20-2-1-1-01-1-0-1-1
Fan, Supply	1		EULB-20-3-3-0-1-01-1-1
Motor	1		APAL-2-90220-1-2
Belt drive	1		EULT-20-3-7-0-3964
Screen prot. door	1		EULZ-24-20-1
Duct connection	1		EULZ-02-20-3-1
Transport dimensions:	Length 2985 mm, Height 1159 mm, Width 1164 mm Volume 4.03 m³, Weight 360 kg		

Unit casing	1	*	EUBA-20-210-1-1-1-1-0
Roof	1	*	EUBZ-01-20-210-1-1
Base frame	1		EUAZ-04-20-210-1-1-1
Connection wall	1		EUVA-20-0-0-1-0
Duct connection	1		EUVZ-03-20-1-1
Filter	1		EUPB-20-05-3-1-1-1
Manometer	1		EUPZ-07
Heat exchanger, ECOTERM	1		EURE-20-2-4-1-1-2-1-1-1
Fan, Exhaust	1		EULB-20-3-3-0-1-04-1-1
Motor	1		APAL-2-90110-1-2
Belt drive	1		EULT-20-3-7-0-2798

Project Reading University
Unit AHU 3 S/E PLANT SCIENCES

Screen prot. door	1		EULZ-24-20-1
Transport dimensions:	Length 2385 mm, Height 1159 mm, Width 1164 mm Volume 3.22 m³, Weight 344 kg		
Unit casing	1	*	EUBA-20-190-1-1-1-1-0
Roof	1	*	EUBZ-01-20-190-3-1
Base frame	1		EUAZ-04-20-190-1-1-1
Empty section	1		EUTC-20-4-0-0-1
Silencer	1		EUSA-20-4-6-0-1-1-2
Empty section	1		EUTC-20-1-0-0-1
Connection section	1	*	EUVE-20-5-2-1-1
Transport dimensions:	Length 2185 mm, Height 1159 mm, Width 1164 mm Volume 2.95 m³, Weight 219 kg		