

REF. NO.: 91A/0298

CERTIFICATE NO.: 14202B

PROPOSAL: Extension to warehouse

LOCATION: Greenfield Road, Woodhurstow

APPLICANT: B. W. G. Foods Ltd

	1	2	3	4	5	6	7
CLASS	DWELLINGS/AREA LENGTH/STRUCTURE	RATE	AMT. OF FEE REQUIRED	AMT. LODGED	BALANCE DUE	RED. FEE APPL.	AMT. OF RED. FEE
A	Dwelling (Houses/Flats)	@ £55					
B	Domestic Ext. (Improvement/Alts.)	@ £30					
C	Building for office or other comm. purpose <i>21.0m</i>	@ £3.50 per M ² or £70	<i>738</i>	<i>738.50</i>	<i>—</i>	<i>50p overpayment</i>	
D	Building or other structure for purposes of agriculture	@ £1.00 per M ² in excess of 300 M ² Min. £70					
E	Petrol Filling Station	@ £200					
F	Dev. of prop. not coming within any of the foregoing classes	£70 or £9 per .1 hect. whichever is the greater					

Column 1 Certified: Signed: [Signature] Grade: DHI Date: 11/8/91

Column 1 Endorsed: Signed: _____ Grade: _____ Date: _____

Columns 2,3,4,5,6 & 7 Certified: Signed: [Signature] Grade: SO Date: 8/3/91

Columns 2,3,4,5,6 & 7 Endorsed: Signed: _____ Grade: _____ Date: _____

91A/0298

CERTIFICATE NO: 24474

PROPOSAL: Extension to Warehouse
LOCATION: Greenhills Road Walkinstown
APPLICANT: B.W.G. Foods Ltd

1	2	3	4	5	6	7
Dwellings/Area Length/Struct	RATE	PNT. OF FEE RES.	AMOUNT LODGED	BALANCE DUE	BALANCE DUE	DATE/ RECEIPT NO
Dwellings	€52					
	€516					
	€500 per M ² in excess of 300M ² Min. €40					
metres ² 211.0m ²	€21.75 per M ² or €40		369.00	369.00	—	25p overpayment
x .1 hect.	€225 per hect. or €250					
x .1 hect.	€215 per hect. or €20					
x .1 hect.	€225 per hect. or €100					
	€100					
x metres ²	€210 per M ² or €40					
x 1,000m ²	€215 per 1,000m ² or €40					
x .1 hect.	€25 per hect. or €40					

Column 1 Certified: Signed: *[Signature]* DHI Date: 11/3/91
 Column 1 Endorsed: Signed: _____ Date: _____
 Columns 2,3,4,5,6 & 7 Certified: Signed: *[Signature]* Date: 8/3/91
 Columns 2,3,4,5,6 & 7 Endorsed: Signed: _____ Date: _____

LOCATION GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS, 1963 TO 1982

ASSESSMENT OF FINANCIAL CONTRIBUTION

REG. REF.: *Q1A/298*

CONT. REG.:

SERVICES INVOLVED: WATER/FOUL SEWER/SURFACE WATER

AREA OF SITE:

FLOOR AREA OF PRESENT PROPOSAL:

2272^{sq} ft. J.Y.

MEASURED BY:

11/8/91

CHECKED BY:

Del

METHOD OF ASSESSMENT:

TOTAL ASSESSMENT

2242

MANAGER'S ORDERED NO: P/
DATED

1000 @ 700

ENTERED IN CONTRIBUTIONS REGISTER:

= 1704

roads

no repair

or file at date

of assessment

J. C. / 11/9

DEVELOPMENT CONTROL ASSISTANT GRADE

*f 68
11/9*

DUBLIN COUNTY COUNCIL

Record of Executive Business and Manager's Orders

BUILDING BYE LAWS

APPROVAL ORDER

Address for
Correspondence:
Building Control Section
Planning Dept.
Block 2
Irish Life Centre
Lower Abbey Street
Dublin 1

Callers/
Addresses to:
City House
28 Tara Street
Dublin 2
Telephone 773066

Application received: 6/3/91 and 29/5/91 and 14/6/91
Applicant: B.W.G. Foods Ltd.
Submitted by: Michael Punch & Pts.
Reg. No.: 91A/298
Order No.: BBL/1746/91
Proposal: Extension to the bonded warehouse.
Location: Greenhills Road, Walkinstown, Dublin 12.

The above plans have been examined and I recommend that approval under the Building Bye Laws be accorded subject to the following conditions:

- (1) That the applicant submits the statutory notice of commencement and completion of work in accordance with Bye Law no's 114 and 117. Premises should not be occupied until the requirements of these Bye Laws have been fulfilled.
- (2) The applicant must comply with the requirements of the Chief Fire Officer where applicable.

Note A The Chief Fire Officer's requirements include the provisions of Parts, N, P, Q and R of the Proposed Building Regulations issued by the Department of the Environment.

Note B The Applicant is advised to comply with the provisions of the Proposed Building Regulations issued by the Department of the Environment.

- 3) All work to be carried out in accordance with the requirements of Dublin County Council's Building Bye Laws.
- 4) That all access to drains be located outside building, other than rodding eyes at bottom of RWP.
- 5) That prior to commencement of construction, a Chartered Engineer's Certificate be submitted to this department to certify that the building is designed in accordance with the relevant codes of practice.

Endorsed: _____
Senior Administrative Officer

_____ for County Engineer

ORDER: Recommendation approved.

DATE: 3 July '91

_____ Assistant Chief & County Manager
APPROVED OFFICER.

to whom the appropriate powers have been delegated by order of the Dublin City and County
Manager dated

19/6/91

DUBLIN COUNTY COUNCIL

f. Kenny

REG. REF: 91A/298.

LOCATION: Greenhills Road, Walkinstown.

APPLICANT: B.W.G. Foods Ltd.

PROPOSAL: Ext. to warehouse.

DATE LODGED: 6.3.91.

MD

This application is for full permission for an extension to warehouse at Walkinstown.

The proposed development comprises 211m² floor area intended for manufacturing/warehousing use. The development would require on additional 6-7 car spaces.

It should be noted that the entire site is severely affected by the proposed Roads line improvement of the Greenhills Road. Roads require additional information regarding (1) existing parking plan (2) how the additional spaces would be provided (3) to what extent parking is affected by the roads line (4) and if so what steps are proposed to provide alternative parking and access details to existing and proposed Roads.

Enclosed RPS. 3459 detailing roads line affecting site.

It should be noted that the road line shown is a vital road link to serve the Ballymount area and investigate into the possibility of early construction is currently under way.

DEVELOPMENT CONTROL
 14 MAY 1991

MA/BMcC
25.4.91.

PLANNING DEPT.
DEVELOPMENT CONTROL SECT
 Date 29.4.91
 Time 11.20

PLANNING DEPT.
DEVELOPMENT CONTROL SECT
 Date 14.5.91
 Time

SIGNED: Michael Artress
 DATE: 26-4-91

ENDORSED: E. Madden
 DATE: 26th April '91



Dublin County Council Comhairle Chontae Atha Cliath

Roads Department

TITLE			
R.P.S. 3459	SCALE 1:2500	DATE	D.S. Ref.



P.O. Box 174
 45/49 Upper O'Connell St
 Dublin 1
 Telephone (01) 727777

DUBLIN COUNTY COUNCIL

REG. REF:

91A/298.

LOCATION:

Greenhills Road, Walkinstown.

APPLICANT:

B.W.G. Foods Ltd.

PROPOSAL:

Ext. to warehouse.

DATE LODGED:

6.3.91.

This application is for full permission for an extension to warehouse at Walkinstown.

The proposed development comprises 211m² floor area intended for manufacturing/warehousing use. The development would require on additional 6-7 car spaces.

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MA/BMcC
25.4.91.

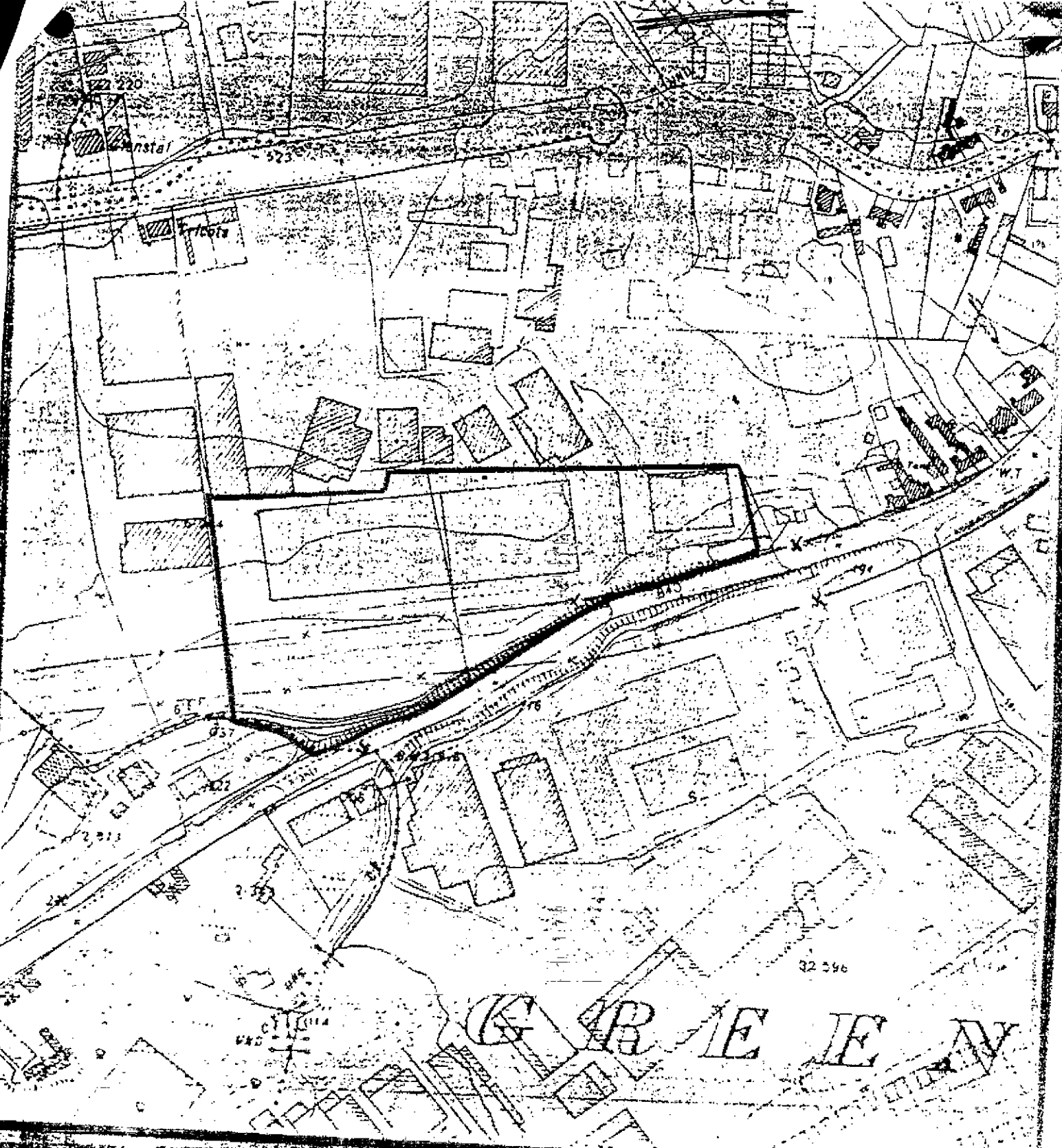


SIGNED: Michael Arthur

ENDORSED: E. Wadden

DATE: 26-4-91

DATE: 26th April '91



Dublin County Council Comhairle Chontae Atha Cliath

Roads Department

TITLE

R.P.S.
3459

SCALE
1:2500

DATE

D.S. Ref.



PO Box 174
46/49 Upper O'Connell St
Dublin 1
Telephone (01) 727777



SS only.

MD

12

Register Reference : 91A/298

Date : 15/3/91

Development : Extension to the bonded warehouse
 LOCATION : Greenhills Road, Walkinstown, D.12.
 Applicant : B.W.G. Foods Ltd.
 App. Type : P/BBL

Planning Officer :

Date Recd. : 6/3/91

Attached is a copy of the application for the above development .Your report would be appreciated within the next 28 days.

Yours faithfully,

DUBLIN COUNCIL
 21 MAR 1991
 SAN SERVICES

DUBLIN COUNCIL
 SANITARY SERVICES
 PRINCIPAL OFFICER
 23 APR 1991
 Returned *[Signature]*

Date received in sanitary services

FOUL SEWER

No objection, subject to the following:
 This building is situated on an estate for which Dublin Council has no drainage records. It is the applicant's responsibility to ensure that any building operation does not interfere with the on site private drainage or does interfere with the drainage of these premises.

SURFACE WATER

As above

PLANNING DEPT.
 DEVELOPMENT CONTROL SECT
 Date 26/4/91
 Time 2pm

SENIOR ENGINEER,
 SANITARY SERVICES DEPARTMENT,
 46/49 UPPER O'CONNELL STREET,
 DUBLIN 1

[Signature]
 18.4.91

Register Reference : 91A/298

Date : 15/3/91

.....
ENDORSED _____ DATE _____

WATER SUPPLY Avail after for general use 24 hours
storage to be provided
Refer to F.O.

[Signature]
25/3/91

.....
ENDORSED *[Signature]* DATE 27/3/91

[Signature] 22/4/91

SS only

MD

Ⓢ

Register Reference : 91A/298

Date : 15/3/91

Development : Extension to the bonded warehouse

LOCATION : Greenhills Road, Walkinstown, D-12.

Applicant : B.W.G. Foods Ltd.

App. Type : P/B3L

Planning Officer :

Date Recd. : 6/3/91

Attached is a copy of the application for the above development .Your report would be appreciated within the next 28 days.

Yours faithfully,

DUBLIN CO. COUNCIL
21 MAR 1991
SAN SERVICES

DUBLIN CO. COUNCIL
SANITARY SERVICES
PRINCIPAL OFFICER
23 APR 1991
Returned *GL*

Date received in sanitary services

FOUL SEWER

No objection, subject to the following
This building is situated in an estate for which Dublin Council has no drainage records. It is the applicant's responsibility to ensure that any building operation does not interfere with the on site private drainage or does interfere with the drainage of neighbouring premises.

SURFACE WATER

As above

PLANNING DEPT.
DEVELOPMENT CONTROL SECT
Date 26/4/91
Time 2pm

Planned
18.4.91

SENIOR ENGINEER,
SANITARY SERVICES DEPARTMENT,
46/49 UPPER O'CONNELL STREET,
DUBLIN 1

Register Reference : 91A/298

Date : 15/3/91

.....
ENDORSED _____ DATE _____

WATER SUPPLY. Avail able for general use 24 hours
storage to be provided
Refer to F.O.

[Signature]
25/3/91

.....
ENDORSED *[Signature]* DATE 27/3/91

[Signature] 16/4/91

P/1746/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Register Reference : 91A/0298

Date Received : 6th March 1991

Correspondence : Michael Punch & Partners,
Name and : 24 Mellifont Avenue,
Address : Dunlaoire,
Co. Dublin.

Development : Extension to the bonded warehouse.

Location : Greenhills Road, Walkinstown, Dublin 12.

Applicant : B. W. G. Foods Ltd.,

App. Type : Permission

Zoning : E

COMMISSION
Standard 1704
Roads
S. Serv.
Open
Other
SECURITY
Bond. Cert.
Cash

MO
(MD/AC)

Report of Dublin Planning Officer dated 22 April, 1991.

This is an application for PERMISSION for an extension to a bonded warehouse at B.W.G. Foods Ltd., Greenhills Road, Walkinstown.

The floor area of the proposed development is 211 sq.m. There is an existing extension at this part of the building and it is proposed to remove this and replace it with larger structures. The site is well below road level and the adjacent site to the east is about 20ft. above the site of the present development. There is storage of materials on the access route to this part of the site. There ~~is~~^{will} be adequate space on this site for parking if the proposed development is permitted.

I recommend that a decision to GRANT PERMISSION be made under the Local Government (Planning and Development) Act, 1963-1990, subject to the following (5) conditions:

CONDITIONS / REASONS

01 The development to be carried out in its entirety in accordance with the plans, particulars and specifications lodged with the application save as may be required by the other conditions attached hereto.

REASON: To ensure that the development shall be in accordance with the permission and that effective control be maintained.

02 That before development commences, approval under the Building Bye-Laws be obtained and all conditions of that approval be observed in the development.

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Reg.Ref: 91A/0298

Page No: 0002

Location: Greenhills Road, Walkinstown, Dublin 12.

REASON: In order to comply with the Sanitary Services Acts, 1878-1964.

03 That all external finishes harmonise in colour and texture with the existing premises.

REASON: In the interest of visual amenity.

04 That a financial contribution in the sum of £ 1704 be paid by the proposer to the Dublin County Council towards the cost of provision of public services in the area of the proposed development and which facilitate this development; this contribution to be paid before the commencement of development on the site.

REASON: The provision of such services in the area by the Council will facilitate the proposed development. It is considered reasonable that the developer should contribute towards the cost of providing the services.

05 The tarmacadamed area between the existing building, the proposed extension and the access road from the Greenhills Road, to be kept free from materials storage and storage of waste.

05 REASON: In the interest of the proper planning and development of the area.

Endorsed: - *[Signature]* *Richard Cremins* SEP
for Dublin Planning Officer 24.4.91
for Principal Officer

Order: A decision pursuant to Section 26(1) of the Local Government (Planning and Development) Acts, 1963-1990 to GRANT PERMISSION for the above proposal subject to the (5) conditions set out above is hereby made.

Dated : *20 April 1991* *K.O. Sullivan*
ASSISTANT CITY AND COUNTY MANAGER

to whom the appropriate powers have been delegated by order of the Dublin City and County Manager dated *26th* April, 1991.



Bloc 2, Ionad Bheatha na hEireann,
Block 2, Irish Life Centre,
Sraid na Mainistreach Iacht,
Lower Abbey Street,
Baile Atha Cliath 1.
Dublin 1.
Telephone. (01)724755
Fax. (01)724896

NOTIFICATION OF DECISION TO GRANT PERMISSION
LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS 1963-1990.

Decision Order Number : P/ 1746 /91 Date of Decision : 30th April 1991

Register Reference : 91A/0298 Date Received : 6th March 1991

Applicant : B. W. G. Foods Ltd.,

Development : Extension to the bonded warehouse.

Location : Greenhills Road, Walkinstown, Dublin 12.

Time Extension(s) up to and including :

Additional Information Requested/Received : //

In pursuance of its functions under the above mentioned Acts, the Dublin County Council, being the Planning Authority for the County Health District of Dublin, did by Order dated as above make a decision to GRANT PERMISSION in respect of the above proposal.

Subject to the Conditions on the attached Numbered Pages.

NUMBER OF CONDITIONS:-⁵.....ATTACHED.

Signed on behalf of the Dublin County Council.....
for Principal Officer

Date: ..^{21/5/91}.....

Michael Punch & Partners,
24 Mellifont Avenue,
Dunlaoire,
Co. Dublin.

Reg.Ref. 91A/0298
Decision Order No. P/ 1746 /91
Page No: 0002



Bloc 2, Ionad Bheatha na hEireann,
Block 2, Irish Life Centre,
Sraid na Mainistreach Iacht,
Lower Abbey Street,
Baile Atha Cliath 1.
Dublin 1.
Telephone. (01)724755
Fax. (01)724896

CONDITIONS / REASONS

- 01 The development to be carried out in its entirety in accordance with the plans, particulars and specifications lodged with the application save as may be required by the other conditions attached hereto.
REASON: To ensure that the development shall be in accordance with the permission and that effective control be maintained.
- 02 That before development commences, approval under the Building Bye-Laws be obtained and all conditions of that approval be observed in the development.
REASON: In order to comply with the Sanitary Services Acts, 1878-1964.
- 03 That all external finishes harmonise in colour and texture with the existing premises.
REASON: In the interest of visual amenity.
- 04 That a financial contribution in the sum of £1704 be paid by the proposer to the Dublin County Council towards the cost of provision of public services in the area of the proposed development and which facilitate this development; this contribution to be paid before the commencement of development on the site.
REASON: The provision of such services in the area by the Council will facilitate the proposed development. It is considered reasonable that the developer should contribute towards the cost of providing the services.
- 05 The tarmacadamed area between the existing building, the proposed extension and the access road from the Greenhills Road to be kept free from materials storage and storage of waste.
- 05 REASON: In the interest of the proper planning and development of the area.

Building Control Department,
Liffey House,
Tara Street,
Dublin 1.
Telephone:773066



Bloc 2, Ionad Bheatha na hEireann,
Block 2, Irish Life Centre,
Sraid na Mainistreach Iacht,
Lower Abbey Street,
Baile Atha Cliath 1.
Dublin 1.
Telephone. (01)724755
Fax. (01)724896

Register Reference : 91A/0298

Date : 7th March 1991

LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS, 1963 TO 1990

Dear Sir/Madam,

DEVELOPMENT : Extension to the bonded warehouse.

LOCATION : Greenhills Road, Walkinstown, Dublin 12.

APPLICANT : B. W. G. Foods Ltd.,

APP. TYPE : PERMISSION/BUILDING BYE-LAW APPROVAL

With reference to above, I acknowledge receipt of your application received on 6th March 1991.

Yours faithfully,

.....
PRINCIPAL OFFICER

Michael Punch & Partners,
24 Mellifont Avenue,
Dunlaoire,
Co. Dublin.



PLEASE READ INSTRUCTIONS AT BACK BEFORE COMPLETING FORM. ALL QUESTIONS MUST BE ANSWERED.

1. Application for Permission Outline Permission Approval Place / in appropriate box.
Approval should be sought only where an outline permission was previously granted. Outline permission may not be sought for the retention of structures or continuances of uses.

2. Postal address of site or building BWG FOODS LTD, GREENHILLS RD, WALKINSTOWN
(If none, give description sufficient to identify) DUBLIN 12

3. Name of applicant (Principal not Agent) B.W.G. FOODS LTD
Address P.O. Box 1470, GREENHILLS RD, WALKINSTOWN D.12 Tel. No. 562533

4. Name and address of MICHAEL PUNCH & PARTNERS, CONSULTING ENGINEERS
person or firm responsible for preparation of drawings 24, MELLIFONT AVE, DUN LADRE, CO. DUBLIN Tel. No. 809833

5. Name and address to which MICHAEL PUNCH & PARTNERS, 24 MELLIFONT AVE,
notifications should be sent DUNLADRE, CO. DUBLIN.

6. Brief description of proposed development EXTENSION TO BONDED WAREHOUSE.

7. Method of drainage MAINS 8. Source of Water Supply MAINS

9. In the case of any building or buildings to be retained on site, please state:
(a) Present use of each floor or use when last used WAREHOUSING
(b) Proposed use of each floor WAREHOUSING

CO. DUBLIN full permission is being sought by B.W.G. Foods Limited for an extension to the bonded warehouse at Greenhills Road, Walkinstown, Dublin 12.

10 Does the proposal involve demolition, partial demolition or change of use of any habitable house or part thereof? NO

11.(a) Area of Site 22935 Sq. m.
(b) Floor area of proposed development 211 Sq. m.
(c) Floor area of buildings proposed to be retained within site 6790 Sq. m.

12.State applicant's legal interest or estate in site (i.e. freehold, leasehold, etc.) FREEHOLD.

13.Are you now applying also for an approval under the Building Bye Laws?
Yes No Place / in appropriate box.

14.Please state the extent to which the Draft Building Regulations have been taken in account in your proposal.
IN FULL

15.List of documents enclosed with application.
FOUR SETS OF DRAWINGS, CHEQUE, NEWSPAPER AD.

16.Gross floor space of proposed development (See back) 211 Sq. m.

No of dwellings proposed (if any) NIL Class(es) of Development
Fee Payable £ 1107-75 Basis of Calculation 211 (1.75 + 3.50) = £1107-75
If a reduced fee is tendered details of previous relevant payment should be given

Signature of Applicant (or his Agent) J. Sheehan Date 6/3/91

Application Type P/BOL FOR OFFICE USE ONLY
Register Reference 91A/0298
Amount Received £ 2,2012,2
Receipt No
Date

RECEIVED
-6 MAR 1991
REG SEC.

Irish
Pres
26/2/91

REG. SEC. APPLICATION
738-50

N 34447

9369-25 6/3

N 34101

LOCAL GOVERNMENT (PLANNING & DEVELOPMENT) REGULATIONS 1977 to 1984.

Outline of requirements for applications for permission or Approval under the Local Government (Planning & Development) Acts 1963 to 1983. The Planning Acts and Regulations made thereunder may be purchased from the Government Publications Sales Office, Sun Alliance House, Molesworth Street, Dublin 2.

1. Name and Address of applicant.
2. Particulars of the interest held in the land or structure, i.e. whether freehold, leasehold, etc.
3. The page of a newspaper, circulating in the area in which the land or structure is situate, containing the required statutory notice. The newspaper advertisement should state after the heading Co. Dublin.
 - (a) The address of the structure or the location of the land.
 - (b) The nature and extent of the development proposed. If retention of development is involved, the notice should be worded accordingly. Any demolition of habitable accommodation should be indicated.
 - (c) The name of the applicant.

NB. Applications must be received within 2 weeks from date of publication of the notice.

4. Four (4) sets of drawings to a stated scale must be submitted. Each set to include a layout or block plan, proposed and existing services to be shown on this drawing, location map, and drawings of relevant floor plans, elevations, sections, details of type and location of septic tank (if applicable) and such other particulars as are necessary to identify the land and to describe the works or structure to which the application relates (new work to be coloured or otherwise distinguished from any retained structures). Buildings, roads, boundaries and other features bounding the structure or other land to which the application relates shall be shown on site plans or layout plans. The location map should be of scale not less than 1: 2500 and should indicate the north point. The site of the proposed development must be outlined in red. Plans and drawings should indicate the name and address of the person by whom they were prepared. Any adjoining lands in which the applicant has an interest must be outlined in blue.
5. In the case of a proposed change of use of any structure or land, requirements in addition to 1, 2, & 3 are.
 - (a) a statement of the existing use and the proposed use, or, where appropriate, the former use and the use proposed.
 - (b) (i) Four (4) sets of the drawings to a stated scale must be submitted. Each set to consist of a plan or location map (marked or coloured in red so as to identify the structure or land to which the application relates) to a scale of not less than 1:2500 and to indicate the North point. Any adjoining lands in which the application has an interest must be outlined in blue.
 - (ii) A layout and a survey plan of each floor of any structure to which the application relates.
 - (c) Plans and drawings should indicate the name and address of the person by whom they were prepared.
6. Applications should be addressed to: Dublin County Council, Planning Department, Irish Life Centre, Lr. Abbey Street, Dublin 1, Tel. 724755.

SEPTIC TANK DRAINAGE: Where drainage by means of a septic tank is proposed, before a planning application is considered, the applicant may be required to arrange for a trial hole to be inspected and declared suitable for the satisfactory percolation of septic tank effluent. The trial hole to be dug seven feet deep at or about the site of the septic tank. Septic tanks are to be in accordance with I.I.R.S. S.R. 6:75.

INDUSTRIAL DEVELOPMENT:

The proposed use of an industrial premises should, where possible, be stated together with the estimated number of employees, (male and female). Details of trade effluents, if any, should be submitted.

Applicants to comply in full with the requirements of the Local Government (Water Pollution) Act, 1977 in particular the licencing provisions of Sections 4 and 16.

PLANNING APPLICATIONS

CLASS NO.	DESCRIPTION	FEE
1.	Provision of dwelling — House/Flat.	£32.00 each
2.	Domestic extensions/other improvements.	£16.00
3.	Provision of agricultural buildings (See Regs.)	£40.00 minimum
4.	Other buildings (i.e. offices, commercial, etc.)	£1.75 per sq. metre (Min. £40.00)
5.	Use of land (Mining, deposit or waste)	£25.00 per 0.1 ha (Min. £250.00)
6.	Use of land (Camping, parking, storage)	£25.00 per 0.1 ha (Min. £40.00)
7.	Provision of plant/machinery/tank or other structure for storage purposes.	£25.00 per 0.1 ha (Min. £100.00)
8.	Petrol Filling Station.	£100.00
9.	Advertising Structures.	£10.00 per m ² (min. £40.00)
10.	Electricity transmission lines.	£25.00 per 1,000m (Min. £40.00)
11.	Any other development.	£5.00 per 0.1 ha (Min. £40.00)

BUILDING BYE-LAW APPLICATIONS

CLASS NO.	DESCRIPTION	FEE
A	Dwelling (House/Flat)	£55.00 each
B	Domestic Extension (improvement/alteration)	£30.00 each
C	Building — Office/Commercial Purposes	£3.50 per m ² (min. £70.00)
D	Agricultural Buildings/Structures	£1.00 per m ² in excess of 300 sq. metres (min. - £70.00) (Max. - £300.00)
E	Petrol Filling Station	£200.00
F	Development or Proposals not coming within any of the foregoing classes.	£9.00 per 0.1 ha (£70.00 min.)
		Min. Fee £30.00 Max. Fee £20,000

Cheques etc. should be made payable to: Dublin County Council.

Gross Floor space is to be taken as the total floor space on each floor measured from the inside of the external walls. For full details of Fees and Exemptions see Local Government (Planning and Development) (Fees) Regulations 1984.

COMHAIRLE CHONTAE ÁTHA CLIATH
DUBLIN COUNTY COUNCIL

PAID BY

CASH

CHEQUE

M.O.

B.I.L.

I.T.

RECEIPT CODE

46/49 UPPER O'CONNELL STREET, BYE LAW APPLICATION.
DUBLIN 1.

REG. No. N 34447

£ 738.50

Received this

6th

day of

March

19 91

from Mr Pynch & P.B. Esq.

24 Mellifont Ave.
Dun Loughkeera

the sum of seven hundred and thirty eight

eight

Pounds

being

bye-law application at Greenhills Rd.

Lettinstown

Mselleen

Deane

Cashier

S. CAREY

Principal Officer

Class C

COMHAIRLE CHONTAE ÁTHA CLIATH

PAID BY — DUBLIN COUNTY COUNCIL
46/49 UPPER O'CONNELL STREET
DUBLIN 1.

RECEIPT CODE

Issue of this receipt is not an acknowledgement that the fee tendered is the prescribed application fee.

N^o 34101

£ 369.25

Received this 6th day of March 19 91

from Mr. Pouch & As. Hd.,
20 Mellifont Ave.,
Donaghmore

the sum of three hundred and sixty nine pounds

twenty five pence being fee for

planning application at Greenhills Rd.,
Walkinstown

Michael D. e. Cashier

S. CAREY
Principal Officer

COMHAIRLE CHONTAE ÁTHA CLIATH

DUBLIN COUNTY COUNCIL
46/49 UPPER O'CONNELL STREET
DUBLIN 1.

RECEIPT CODE

PAID BY —
CASH
CHEQUE
M.O.
B.L.
I.T.

of this receipt is not an
acknowledgement that the fee
tendered is the prescribed application
fee. **N^o 34101**

£

Received this

day of

19

from *Mr. J. J. Kelly*

the sum of

Three pounds

being

Pounds

Cashier

S. CAREY
Principal Officer

Carey

Michael Punch & Partners

Fax 01-809048
Telephone 01-809833

Consulting Engineers
24 Mellifont Avenue
Dun Laoghaire
Co Dublin
Ireland

Dublin County Council
Planning Department
Irish Life Centre
Lower Abbey Street
Dublin. 1

Our Ref:

TS/CK

Your Ref:

Date:

6 March 1991

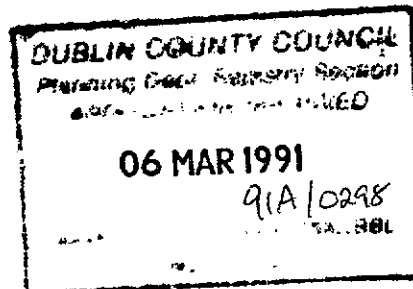
Dear Sirs,

Re: B.W.G. Foods Bonded Warehouse at Walkinstown Dublin. 12

We on behalf of our clients wish to apply for Planning Permission for the above project in accordance with the enclosed documents.

1. Four copies each of the following drawings
91.32.01, 02, 03, 04 and 05
2. Outline Specifications for concrete, steelwork and blockwork.
3. Newspaper advertisement
4. Cheque in the amount of £1,107.75
5. Completed application form
6. Bye-Law calculations

Yours faithfully,



Terry Sheehan
Michael Punch & Partners

Encls.

DUBLIN COUNTY COUNCIL
Planning Dept. Registry Section
APPLICABLE TO THE FOLLOWING
06 MAR 1991
91A/0298

CONCRETE SPECIFICATION

C.01 Materials : cement

Cement used in concrete, concrete products and other cement based products shall be certified as complying with IS 1:1963 as amended, in accordance with the Irish Standard Mark Licensing Scheme of Eolas. Manufacturers' or suppliers' certificates of compliance with the Standard shall be provided when requested by the engineer.

Cement must be stored in completely moisture proof conditions. Invoices and delivery dockets shall be available on request.

Records shall be kept by the contractor (and verified by resident supervisory staff) of the cement used in each pour. Care shall be taken that cement is used rotationally and that no cement is stored too long.

C.02 Materials : aggregates

Aggregates shall consist of natural pit sand and washed gravel or approved crushed stone. All aggregates shall be hard, uniform and clean. Aggregates shall conform to BS 877:Part 2, BS 1047, BS 882, BS 3681:Part 2, and BS 3797:Part 2.

Normal maximum sizes of aggregates are 40 mm, 20 mm, 14 mm, and 10 mm.

Separate fine coarse aggregates shall be used except for grades 7, 10 & 15 where "all-in" aggregate may be used.

All aggregate deliveries shall be inspected and samples shall be sent for testing at engineer's discretion.

For grades of concrete other than 7, the grading of each size of aggregate from each source shall be determined weekly or otherwise at the discretion of the engineer.

For ordinary unreinforced structural concrete of grades 7, 10, 15, 20, 25 and 30 the mix proportions should be selected either:

- (i) from the schedule of prescribed mixes and the constituent materials selected as detailed below or
- (ii) from a designed mix to be determined by the contractor or his agent and submitted to the Engineer for his approval. In either case the requirements of clauses C.09 shall be adhered to as applicable.

For reinforced concrete the mix-proportions shall be determined as in (ii) above.

The grade of concrete to be used in a particular situation shall be as indicated on the relevant drawings but in any case shall not be less than the appropriate grade chosen from table 3.4 clause C.09 taking account of the relevant exposure condition as defined in table 3.2 of BS 8110.

The maximum nominal aggregate size shall be 20 mm. The Engineer shall be notified of any proposal to depart from this.

For Grades 7, 10 and 15

Cement complying with the requirements of clause C.01 above and with either BS 12, BS 146 or coarse aggregate complying with the requirements of BS 882 or BS 1047 and fine aggregate complying with the requirements of BS 882 or all-in aggregate complying with BS 882 with the higher sand contents given in the schedule of prescribed mixes.

For Grades 20, 25, and 30:

Cement complying with the requirements of clause C.01 above and with BS 12, BS 146 or BS 4027, coarse aggregate complying with the requirements of BS 882 or BS 1047 and sand complying with grading zones, 1 2 or 3 of BS 882.

The engineer should be informed of the nature and source of each material to be used and subsequently whenever a change is made. No admixtures should be used without written approval of the engineer.

The cement contents for these prescribed mixes are given in the schedule of prescribed mixes together with the total weights of dry aggregate to produce approximately one cubic metre of concrete. Depending upon the specific gravity of the aggregates slight adjustment may be required to the quantity of aggregates to produce this volume of concrete having the required workability, strength and cement content.

The schedule of prescribed mixes also gives the approximate proportions of fine aggregate to be used although small adjustments may be required on the site depending on the properties of the local materials. For grades 7 a range of fine aggregate proportions is given, the lower percentage being applicable to finer material such as zone 3 sand and higher percentage being applicable to coarser material such as zone 1 sand. Where single sizes coarse aggregates are used, the proportions should be chosen to produce a combined grading within the limits of BS 882 or BS 1047 for graded coarse aggregate of the appropriate size.

The actual batch weight should be calculated to suit the size of the mixer from the values given in the schedule of prescribed mixes for the appropriate grade of concrete. Allowances should be made for a moisture content typical of the aggregates being used.

Where necessary the aggregates for grades 7, may be batched by volume in which case the bulk density of the damp aggregate may be taken as 1500 kg/cu m. One whole bag of cement may be taken as weighing 50 kg.

All aggregate deliveries shall be inspected and samples shall be sent for testing at the engineer's discretion.

The results of such tests shall be reported to the engineer and be used to check whether the gradings are consistent with those of the samples used in the establishment of the batch weights.

Separate storage facilities shall be provided for each different size of aggregate used. Proper drainage of such storage facilities shall be provided and maintained.

Sufficient materials with an excess in each case of 20% shall be available in each aggregate bin before commencement of concreting.

C.03

Materials : water

Water shall be clean and free from harmful matter. Where tests are required they shall be in accordance with the requirement of BS 3148.

C.04

Materials : admixtures

Suitable admixtures may be used in concrete mixes for special structural concrete or for waterproof concrete.

The amount of admixture and the method by which the admixture is added shall be approved by the engineer.

The engineer shall be provided with all data relating to the effect of the additive such as:

- a recommended dosage
- b effect of over dosage
- c effect of under dosage
- d name of additive and chemical constituents in percentage.
- e information on the air entrainment effect of the additive.

C.05

Classification of concrete mixes

Mixes shall be either "designed" or "prescribed".

Where mixes are "designed" the contractor shall be responsible for selecting the mix proportions and providing concrete which achieves the specified strength and workability subject to a stipulated minimum cement content, maximum free water/cement ratio and maximum aggregate size.

Where mixes are "prescribed" the mix proportions are specified. The contractor shall provide a properly mixed concrete containing the constituents in the specified proportions, but subject to a maximum free water/cement ratio.

C.06

Prescribed mixes

The concrete grade reference refers to the 28 day strength of the concrete (N/sq mm), workability and maximum size aggregate viz 25M20 represents a 28 day strength of 25 N/sq mm, medium workability and a maximum aggregate size of 20 mm.

REQUIREMENTS FOR PRESCRIBED MIXES:

Prescribed mixes for ordinary structural concrete:

The concrete should be produced to comply with any requirement described in detail in the specification.

Prescribed mixes for special structural concrete:

The concrete mix should be produced to comply with all the requirements described in detail in the specification.

C.07

Schedule of prescribed mixes for ordinary structural concrete

Weights of cement and total dry aggregates in kg to produce approximately one cubic metre of fully compacted concrete together with the percentages by weight of fine aggregate in total dry aggregates.

		Nominal maximum size of aggregate (mm)					
		40		20		14	
Concrete grade	Workability	Medium	High	Medium	High	Medium	High
		Limits to slump that may be expected (mm)					
		50-100	100-150	25-75	75-125	10-50	50-100
7	Cement (kg)	180	200	210	230	----	----
	Total aggregate (kg)	1950	1850	1900	1800	----	----
	Fine aggregate (%)	30-45	30-45	35-50	35-50	----	----
10	Cement (kg)	210	230	240	260	----	----
	Total aggregate (kg)	1900	1850	1850	1800	----	----
	Fine aggregate (%)	30-45	30-45	35-50	35-50	----	----
15	Cement (kg)	250	270	280	310	----	----
	Total aggregate (kg)	1850	1800	1800	1750	----	----
	Fine aggregate (%)	30-45	30-45	35-50	35-50	----	----
20	Cement (kg)	300	320	320	350	340	380
	Total aggregate (kg)	1850	1750	1800	1750	1750	1700
	Sand*						
	Zone 1 (%)	35	40	40	45	45	50
	Zone 2 (%)	30	35	35	40	40	45
	Zone 3 (%)	30	30	30	35	35	40
25	Cement (kg)	340	360	360	390	380	420
	Total aggregate (kg)	1800	1750	1750	1700	1700	1650
	Sand*						
	Zone 1 (%)	35	40	40	45	45	50
	Zone 2 (%)	30	35	35	40	40	45
	Zone 3 (%)	30	30	30	35	35	40
30	Cement (kg)	370	390	400	430	430	470
	Total aggregate (kg)	1750	1700	1700	1650	1700	1600
	Sand*						
	Zone 1 (%)	35	40	40	45	45	50
	Zone 2 (%)	30	35	35	40	40	45
	Zone 3 (%)	30	30	30	35	35	40

*Sand is fine aggregate resulting from the natural disintegration of rock.

C.08 Designed mixes

Designed mixes shall be used for the concrete grades listed hereunder whenever ready mixed concrete is used:

<u>Grade</u>	<u>Characteristic strength</u>
25	25 N/sq mm
30	30 N/sq mm
35	35 N/sq mm
37	37.5 N/sq mm
40	40 N/sq mm
42.5	42.5 N/sq mm
50	50 N/sq mm
60	60 N/sq mm

The characteristic strength shall be The 28 day strength of all concrete.

C.09 Cement content, Water/Cement Ratio

The maximum free water/cement ratio for prescribed mixes (unreinforced concrete) shall be in accordance with Table 6.2 of BS 8110.

For designed mixes the minimum cement content and maximum free water/cement ratio shall be in accordance with Table 3.4 BS 8110 but modified as set out below:

TABLE 3.4 FOR USE IN IRISH CONDITIONS

Conditions of Exposure	Nominal Cover				
	mm	mm	mm	mm	mm
Mild	20	20	20	20	20
Moderate	-	40	30	25	20
Severe	-	-	40	30	25
Very Severe	-	-	50	40	30
Extreme	-	-	-	60	50
Max. free water /cement ratio	0.65	0.6	0.55	0.5	0.45
Min. cement content kg/m ³	275	300	325	350	400
Lowest grade					

of concrete C30 C35 C37.5 C40 C42.5

Target mean strength

The Compliance Scheme for strength shall be in accordance with BS 5328. Specifically for concrete of grade C20 and above:

- (i) The average strength of any group of 4 consecutive 28 day cube results shall exceed the specified characteristic strength by 3 Newtons per sq mm.
- (ii) No single test result shall fall short of the characteristic strength by more than 3 Newtons per sq mm.

At the Engineer's discretion the Target Mean Strength may be adjusted in the course of a job in the light of the variability of cube results as they accumulate. Specifically if the standard deviation of 28 day results exceeds 7.5 Newtons per sq mm, the Target Mean Strength will be adjusted upwards and shall exceed the Characteristic Strength by 1.64 times the standard deviation.

C.10

Preliminary information

Evidence shall be submitted to the satisfaction of the engineer that the proposed mix proportions and manufacturing method will produce a concrete of required quality and workability. Before any designed mix is supplied the contractor shall supply the following items of information:

- a Nature and source of each material.
- b Data indicating satisfactory previous performance for target mean strength, current margin and workability or full details of tests on trial mixes.
- c Proposed quantities of each ingredient per cubic metre of fully compacted concrete.

C.11

Trial mixes

Three separate batches of concrete shall be made using material likely to be typical of the proposed supply under full scale production conditions. If this is not feasible laboratory sampling facilities may be used. Sampling and testing shall be in accordance with BS 1881.

The workability of each of the trial batches shall be determined and three samples made from each batch for testing at 28 days. Three sample cubes shall also be made for testing at 7 days.

The trial mix proportions will be approved if the average strength of the nine cubes tested at 28 days exceeds the specified characteristic strength by the current margin minus 3.5 N/sq mm or if nine tests at an earlier date indicate that it is likely to be exceeded by this amount.

If trial mixes are required to demonstrate that the maximum free water/cement ratio is not exceeded two batches should be made in the laboratory with cement and surface dry aggregates known from past records of the suppliers of the material to be typical. Proposed mix proportions should not be accepted unless both batches have the correct cement content and a free water/cement ratio below the maximum specified value at the proposed degree of workability.

For this purpose existing laboratory test reports may be accepted instead of trial mixes only if the engineer is satisfied that the materials to be used in the structural concrete are likely to be similar to those used in the tests.

During construction the engineer may require trial mixes to be made before a substantial change is made in the materials or in the proportions of the materials to be used.

C.12

Adjustments to mix proportions

During production adjustments of mix proportions will be made in order to minimize the variability of strength and approach more closely the target mean strength. Such adjustments should not be taken to imply any change to the current margin.

C.13

Change of current margin:

A change in the current margin used for judging compliance with the specified characteristic strength becomes appropriate when results of a sufficiently large number of tests show that the previously established margin is significantly too large or too small. Recalculation of the margin should be carried out only with the agreement of the engineer.

C.14 Testing and non-compliance

Testing plan and rates of sampling shall conform with the relevant Clauses of BS 5328: 1981 and BS 1881.

C.15 Cement content, workability, water/cement ratio compliance:

These shall comply with clauses 16.4, 16.5, and 16.6 of BS 5328: 1981.

C.16 Batching and mixing

The quantity of cement, fine aggregate shall be measured by weight only except for grades 7. The weighing apparatus for cement shall be totally separate or otherwise the cement shall be measured by using whole bag units.

Water may be measured by volume or by weight. Admixtures shall be measured and added in accordance with manufacturer's instructions.

Batch weights of aggregate shall be adjusted to allow for moisture content. Accuracy of the measuring equipment shall be within $\pm 3\%$ for aggregates, cement and water and $\pm 5\%$ for admixtures.

All measuring equipment shall be maintained clean and serviceable and shall be subjected to periodic tests by an approved authority.

Mixing time shall be determined on site to give workable mix consistent with the cement content, required workability and maximum strength subject to tests.

The capacity of the mechanical mixer shall be the minimum size consistent with bag batching in the various grades.

The mixer must be properly calibrated and shall be checked periodically. The measuring devices in the mixer must be properly calibrated and shall be checked periodically.

Suitable containers and weighing equipment shall be made available for weight testing. Tests shall be done at the engineer's discretion. Concrete may be rejected if weight tests are not consistent with the mix and aggregate being used.

Slump tests will be carried out. A 300 mm x 200mm x 100 mm cone shall be available at all times on site.

Mixing shall conform with the best modern techniques consistent with producing a uniform dense thoroughly mixed concrete. Water shall be measured and added in an approved manner.

Hand mixing shall be allowed only on the approval of the engineer and in no case where significant structural members are being cast.

If allowed, hand mixing shall be on water-proofed timber or on a concrete platform.

Materials shall be thoroughly mixed and water added in an approved manner.

C.17

Conveying and placing concrete

The concrete shall be conveyed from the mixer to its final position in the work as rapidly as possible and in no case shall more than 20 minutes elapse between mixing and placing.

The depth of lift and or the extent of pour to be concreted in any one pour shall be subject to approval by the engineer.

Concrete shall be placed in such a manner that segregation does not occur.

In general the formwork shall be filled to the topmost point for the particular pour and shall be vibrated forward to avoid as far as possible the incidence of air bubbles. The concrete shall be thoroughly worked around reinforcement, tendons or duct formers.

In all cases with the exception of screeding all concrete shall be mechanically vibrated.

A standby vibrator of similar performance to the vibrator being used shall be available at all times on site when concrete is being placed.

C.18

Curing

After being placed concrete shall not be jarred, walked on or otherwise disturbed during setting. All concrete shall be kept thoroughly damp for at least a week after concreting and special precautions taken to prevent it drying out too quickly. Protection shall be provided to freshly placed concrete to prevent damage caused by heavy rain.

C.19

Defective work

Any concrete damaged during setting from any cause whatsoever shall be cut out and replaced by the contractor at his own expense.

All work damaged by frost or inclement weather shall be removed and reinstated at the contractor's expense, entirely to the satisfaction of the engineer.

C.20

Frosty weather

Concrete shall not be placed when temperature is below two degrees Celsius on a falling thermometer or below one degree Celsius on a rising thermometer unless the temperature of the concrete at the time of placing is five degrees Celsius and maintained at that temperature until a strength of 5N/sq mm is reached.

C.21

Stoppages and joints

All day work joints shall be in the positions shown on the drawings and if not specifically shown the following practice shall be adopted:

- 1 slabs and beams at the points of contraflexure
- 2 columns at the soffits of inframing beams
- 3 walls at points to be agreed on site

Joints shall be made at right angles to the main reinforcement. The surfaces shall be thoroughly brushed to remove laitance and to expose the aggregate. Vertical joints shall be swilled down and grouted with sand cement mortar. Fresh concrete shall then be thoroughly compacted against the existing face. Joints made on facing surfaces shall be treated especially carefully to avoid any leakage of grout.

All horizontal joints shall have a suitable rebate detail and shall be cleaned as above and grouted with a 30 mm thickness of 1:1 sand cement grout directly ahead of concreting.

When each beam is being poured a 30 mm thickness of 1:1 sand cement grout shall be poured directly ahead of concreting. Care shall be taken that the concrete is well worked into the grout to leave a dense uniform finish on the soffit of the beam.

C.22

Horsing

The contractor shall submit written proposals and drawings as may be required by the engineer for the systems of false work which he proposes to adopt for the various sections of the work. Where significant structural formwork for freshly placed concrete is required calculations shall be submitted with the proposals and drawings. This false work shall be structurally designed to comply with the British Standards relevant to the material being used and to the loads associated with the operation. Temporary supports under precast concrete units shall be similarly treated.

Where supported on the ground the sole pieces carrying the vertical supports shall be bedded and shall be designed to ensure against settlement under full load.

All vertical props shall be fitted with adjustable screws or hardwood folding wedges for adjusting or striking.

C.23

Shuttering

Shuttering shall be constructed from purpose made mild steel units, from quality planned seasoned timber or from other approved materials lined or treated consistent with the categories of finishes schedule.

All formwork shall be close jointed throughout to prevent cement paste or fine aggregate leaking.

All formwork shall be designed and arranged so that stripping can be carried out progressively without vibration or damage and without interference to props etc which have to be maintained in position longer.

The formwork to vertical sides of walls and beams shall be supported by means of suitable external braces, internal metal fasteners or bolts. The use of internal timber spacers or wire ties will not be permitted.

Internal metal fasteners and bolts shall be such that on removal of shuttering, resulting hole can be suitably filled to give the minimum cover on the steelwork generally.

All formwork shall be provided with temporary opens to facilitate removal of debris, the inner surface of all formwork shall be treated with an approved mould oil or retarding compound as appropriate.

Minimum period before striking

Type of formwork	Surface temperature of concrete	
	16°C	7°C
Vertical formwork to columns, walls and large beams	1 day	1 day
Soffit formwork to slabs	4 days	7 days
Props to slabs	11 days	14 days
Soffit formwork to beams	8 days	14 days
Props for beams	15 days	12 days

days

Shuttering shall be removed without undue abrasion, impact or damage to the finished concrete.

C.24

Finishes

General

All concrete overground shall be finished smooth to Type C finish as described in BS 8110:Part 1:1985, Clause 6.10.3.

This finish can be achieved by using marine ply faced shuttering with taped joints. The concrete shall be smooth with true clean arrises and shall be free from voids, honeycombing and air bubbles.

All concrete underground, not visible and generally behind suspended ceilings shall be finished to conform

with Type A finish as described in BS 8110:Part 1: 1985, Clause 6.10.3.

This finish can be achieved by using properly designed formwork or moulds of closely jointed sawn boards. The surface shall be dense, free from voids, honeycombing and large blemishes but may be imprinted with the grain of the sawn boards and their joints.

Where fair faced, bush hammered or sand blasted concrete is specified sufficient aggregate of uniform colour, texture, shape and moisture content shall be arranged or stored to ensure a uniformity of finish, colour and texture throughout the project. All joints whether vertical or horizontal shall be in locations previously agreed with the architect or engineer. Tapered and indiscriminate jointing will not be acceptable.

Fair faced concrete

Where wrought and oiled formwork is described the basic finish shall be TYPE C above; however, THE FORMWORK SHALL BE SO FIXED, BRACED AND TIED THAT NEITHER BOLTS, WIRES NOR PATENTED FASTENERS SHALL BE USED THROUGH THE CONCRETE SECTION. THE FORMWORK SHALL BE ADEQUATELY STRONG AND SHALL BE BRACED OR TIED ABOVE AND BELOW THE RELEVANT SECTION IN ORDER TO AVOID THE FILLING OF HOLES ETC.

C.25

Holes

Holes, chases and other openings required for the passage of pipes, conduits, etc, shall be provided by inserting suitable sleeves, cores and sinkings in the shuttering before placing the concrete. Subcontractors shall be required by the general contractor to furnish full information in regard to the position and size of such opes and chases and the positions of bolts, slips and other fastenings to the engineer for approval. The cutting of chases, holes or other openings in the finished work shall not be permitted without the approval of the engineer. Such holes and chases shall be made only in approved locations and shall be cut with approved tools.

Plug holes shall be drilled at the rate of 5 mm/3 mm length of span and proportionally if required by the Engineer.

C.26 Camber

All beams shall be cambered at the rate of 5 mm/3 m length of span and proportionally if required by the Engineer.

C.27 Dimensional Tolerances:

Subject to C.26 all arrises, soffits and surfaces shall be true to line and level and shall generally conform to the following standard or to such other standard as shall be acceptable to the Engineer and agreed with the Contractor.

The standard described in BS 8110 Clause 6.11.3 for precast concrete. For cast-in-situ, these tolerances plus 50%.

Floor flatness shall conform with the following:

Level: ± 15 mm from datum
Slope: 1:350 max measured over 700 mm in any direction.
Texture: as per a sample approved by the Architect.

C.28 Reinforcement

Reinforcement shall conform to the requirements of the following standards:

Rolled mild steel bars BS 4449
Cold worked bars (high yield) BS 4461
Fabrics BS 4483

Fabrics will be made of hard drawn wire to BS 4482 or cold worked bars to BS 4461.

All mild steel bars from 16 mm to 40 mm sizes shall be of Irish manufacture and conform to BS 4449. Departure from this specification will only be allowed on the written approval of the Engineer.

All high yield bars from 12 mm to 40 mm sizes shall be of Irish manufacture, conforming to BS 4461 and classified as BS 8110 Type 2 bars. Departure from this specification will only be allowed on the written approval of the Engineer.

The contractor shall deliver free of charge samples of reinforcement for testing as directed or otherwise manufacturer's certificates. Any reinforcement not complying with the specification shall be removed from the site. In the measurement of weight, the nett lengths as shown on the drawings and schedules shall be taken in conjunction with the nett weight per metre based on the nominal diameter or size of reinforcement. Reinforcement shall be deemed to weigh 7850 kg/cu m. Reinforcement shall be cut and bent to the engineer's schedules and in accordance with BS 4466.

The size and other dimensions of the reinforcement shall be checked against the drawings and site dimensions before the materials are ordered. No alterations or substitution shall be made in the lengths, sizes or arrangement of reinforcement without prior written approval of the engineer.

Welding of reinforcement shall be allowed only on the written approval of the engineer subject always to a rigorous specification which will be provided if the contractor requests permission to weld reinforcement.

Reinforcement shall not be pitted and shall be free from millscale, loose rust, oil, paint, grease, soap or other lubricants, and shall be cleaned by wire brushing if so dirty.

C.29

Fixing reinforcement

Reinforcement shall be maintained in its correct position by means of suitable clips, soft tying wire, plastic stools, etc, where necessary all supplied under the item for reinforcement. Knots in tying wire shall be located on the side remote from the surface of the concrete. Concreting shall not commence until the formwork and reinforcing has been approved by the engineer. Mesh and fabric reinforcing shall be similarly supported at intervals of not more than 1 m centres each way.

C.30

Precast Concrete:

Precast concrete grade shall be as determined in accordance with clause C.02. Prices should include

for timber moulds lined with 3 mm thick oil-tempered hardboard and for casting in suitable lengths. All exposed faces to be finished at least 6 mm thick in cement and sand (1 : 3) homogeneous with unit. Holes shall be filled and the surfaces pumiced. Arrises shall be protected. Joints shall be 3 mm maximum thickness and flush pointed where exposed.

C.31

Air Entrained Concrete:

Air entrained concrete, where specified, shall have nominal air content of 5% when tested in accordance with Clause 6 of BS 1881: Part 2: 1972.

The air content of any batch of air entrained concrete shall be within 1.5% of the nominal value specified above.

SPECIFICATION

FOR

STRUCTURAL STEELWORK

DOCUMENT 'B' WITHOUT PROCEDURE APPROVAL

LAST REVISION : AUGUST 24TH 1989

SPECIFICATION

FOR

STRUCTURAL STEELWORK

DOCUMENT 'B' WITHOUT PROCEDURE APPROVAL

LAST REVISION : AUGUST 24TH 1989

1.00 DESCRIPTION:

The work consists of the supply, fabrication, delivery and erection of the structural steelwork, in accordance with the detail drawings and specifications.

2.00 LOCATION:

The project is located at King John Castle King's Island, Limerick.

3.00 LIST OF DRAWINGS:

Drawing No: See cover letter.

4.00 PROGRAMME:

Steelwork will be required on site on in accordance with the Main Contractors programme. See cover letter.

5.00 FORM OF AGREEMENT:

The form of agreement applicable to the main contract is the RIAI Form of Agreement (latest edition) where quantities form part of the contract.

6.00 SHOP DRAWINGS:

The steelwork contractors shall prepare shop drawings in sufficient detail to ensure accurate and adequate fabrication and submit at least two copies of each drawing to the Engineer at least 14 days prior to commencement of fabrication. Approval of shop drawings shall not relieve the Contractor of his responsibility for the accuracy of the fabrication or for the structural adequacy of the various details. Fabrication shall not commence until shop drawings are approved at which stage a full set of approved shop drawings shall be sent to the Engineer. The Engineer shall be notified of all discrepancies from the approved drawings at all stages of fabrication. The structural steelwork contractor shall be responsible for all errors in setting out and detailing and shall rectify same at his own expense.

7.00 SUPERVISION:

Competent supervisory staff shall be employed by the steelwork contractor in the workshop and on site at all stages of fabrication and erection.

8.00 FABRICATORS & ERECTORS:

Every welder shall be approved in accordance with the provisions of BS 4872. "Specification for approval testing of welders where procedure approval is not required". A current certificate from a recognised testing institution shall be presented at the Engineers request. Only such approved welders shall be employed on the job. Any expenses borne by the Contractor in respect of meeting the above requirements including proving the competence of the Welders shall be at the fabricators expense. Tenderers shall include for such approval testing as necessary. All erectors employed shall be adequately experienced in the erection of structural steel, careful and skilled in the work.

9.00 PROCEDURES:

The provisions of BS 5135 shall apply. The fabricator shall keep a copy of this standard at his works for reference.

10.00 MATERIALS:

Materials fabrication and erection of steelwork shall comply with the requirements of the relevant British Standards and latest amendments, including the following:

	BS	4	Part 1 & 2 Structural Steel Sections.
	BS	449	Use of Structural Steel in buildings.
or	BS	5950	Parts 1, 2 and 5
	BS	4360	Weldable Structural Steel.
	BS	1775	Steel tubes for structural engineering purposes.
	BS	2708	Unified black square hexagon bolts and nuts.
	BS	1768	Unified precision hexagon bolts and nuts.
	BS	3139	High strength friction grip bolts.
	BS	3294	Use of high strength friction grip bolts.
	BS	3410	Metal washers for general engineering purposes.
	BS	639	Covered electrodes for the manual arc-welding of carbon manganese steels.
	BS	5135	Metal arc-welding of carbon and carbon manganese steels.
	BS	4848	Part 2 and 4 hot rolled structural steel sections.

11.00 TESTING:

The Engineer may require any elements of material to be tested to prove that the element in question conforms to the relevant Specification. Certificates from the manufacturers shall be made available on demand. All tests shall comply with relevant British Standards. Every tenderer shall indicate with his tender the procedures he intends to adopt to ensure compliance with the specification. Tenderers shall also indicate how compliance with the paint specification is assured. A sum of £ shall be included in all tenders to cover costs of testing finished work. (If no amount specified, include £500). This money shall be dispensed at the Engineers discretion.

12.00 ANCHORAGE:

The steelwork contractor shall provide and deliver to site in advance all anchorages and assemblies requiring to be cast into reinforced concrete structure by the General Contractor. The steelwork subcontractor shall check dimensions before fabrication or otherwise agree dimensions with the General Contractor. In the event of any discrepancies any expenditure in making corrections will not be borne by the client. The relevant recommendations of the publication "Holding down systems for steel stanchions" shall be complied with (Concrete Society BCSA and Constrado).

13. 00 ERECTION:

The erection shall be carried out in such a way that at no stage will the safety of any operatives and site workers be impaired. Adequate bracing and tie ropes shall be provided at all stages, to secure the stability of the structure through to final completion. In the event of failure all responsibility for making good the damage and correcting the faults will rest with the steelwork subcontractor. On completion the steelwork will be plumb, level and straight in accordance with the steelwork drawings to a tolerance of 4mm in level and 8mm in line. Tolerances shall only be exceeded on written permission of the Engineer.

On completion of any section it shall be inspected and if any corrections are necessary they shall be carried out at the steelwork contractors expense. All erection procedures shall conform with the relevant statutory requirement relating to safety of erectors.

14.00 CONNECTIONS AND DETAILS:

All joints shall be as detailed on the relevant drawings. Where joints have not been detailed the Steelwork contractor shall make provision for fully developing the member in question for its particular function whether shear, tension, compression or combination of stresses.

15.00 DRIFTING:

All holes shall be sufficiently concentric that drifting is unnecessary to insert bolts. Reaming and burning

holes during erection will not be allowed except by written permission from the Engineer.

16.00 TIGHTENING BOLTS:

All bolts shall be fully tightened by standard spanners of correct sizes and shapes for the bolts used. Calibrated torque spanners for the appropriate high strength bolts shall be used. The spanners or load indicating washers for the appropriate bolts shall be calibrated in accordance with the Manufacturers instructions and shall be tested periodically by the Engineer.

17.00 SITE WELDING:

Site welding shall only be done where shown specifically on drawings. If the steelwork contractor wishes to use site welding for any reason he shall apply in writing to the Engineer. Permission will only be granted provided all necessary working platforms are provided at no extra charge to the client. Unless the joints in question are readily accessible such permission will not be granted. Welding shall not be permitted on wet surfaces during rain, snow or high winds unless good and sufficient cover is provided. Welding shall not be permitted at temperatures below 0°C.

18.00 INSURANCES:

The steelwork Contractor shall indemnify the client with good and sufficient insurance policies against all claims in accordance with the requirements of the Contract.

19.00 QUOTATIONS:

The rates quoted shall include all bolts and other ancillaries for the proper fabrication and erection of the building. Bolts and other ancillaries are not measured separately in the schedule. The Contractor shall provide in his tender for the payment of 5% Discount to the Main Contractor.

20.00 RETENTION:

The percentages of certified value retained shall be in accordance with the main contract.

21.00 SAFETY REGULATIONS:

All statutory safety regulations shall be adhered to in respect of both the erection of structural steelwork and cladding and all reasonable care shall be taken as a precaution against accidents. The Contractor shall include in his quotation for all the necessary labour and materials to meet these requirements.

22.00 QUANTITIES:

Where a schedule of quantities is submitted for pricing it shall be priced and extended in ink and returned with the tender. Allowance for fabrication, waste has not been made in this schedule and the tenderer's rates and price shall include for any such waste. Final quantities shall be re-measured from the successful tenderer's approved shop drawings.

23.00 ACCEPTANCE OF TENDER:

The lowest or any tender need not be accepted.

SPECIFICATION

FOR

BLOCKWORK

Latest revision date: 8 March 1988

SECTION 1

MATERIALS AND PROPERTIES

1.1 CONCRETE BLOCKS

All blocks shall comply with the requirements of IS 20: Part I: 1987.

1.1.1 Standard Blocks

The concrete blocks shall be Type A(5) solid (440 x 215 x 100mm 20kg 5N/mm²) and conform to IS 20: Part I: 1987.

Methods of measuring dimensions and determining strength and drying shrinkage shall be in accordance with IS : 20 1987.

1.2 MORTARS

1.2.1 Materials for Mortar

1.2.1.1 Cement

The cement used in the mortar shall be in accordance with IS 1: 1987.

1.2.1.2 Lime

Lime used in mortars shall be non-hydraulic (calcium) limes or semi-hydraulic (calcium) and magnesium limes to conform to the requirements of BS 890.

Alternatively lime shall be hydrated or magnesium hydrated and conform with IS 8: 1973.

1.2.1.3 Sand

The sand shall be free from deleterious substances and shall comply with the requirement for quality and grading of sand for mortar given in IS 5: 1974.

1.2.1.4 Water

Water shall be free from impurities harmful to the mortar. Where the quality of supply is doubtful the water shall be tested in accordance with BS 3148.

1.2.1.5 Admixtures

Admixtures may be used subject to the engineer's approval in writing. This includes plasticisers and anti-freeze agents.

Only plasticisers complying with BS 4887: Part 1: 1986 will be considered. Calcium-chloride based agents may never be used.

1.2.2 Preparation of mortars

1.2.2.1 Recommended mortars

A type (iii) mortar as described in Table 15 of BS 5628 Part 3 : 1985 shall, unless otherwise noted on drawings, be used. For example for a cement: sand mortar with plasticiser proportions by volume of dry materials shall be 1:5 to 6.

1.2.2.2 Equivalent mortar mixes

Alternative mortar mixes may be used subject to the engineer's approval in writing.

1.2.2.3 Batching of mortars

The materials for the mortar shall be measured accurately to conform with the specified mix proportions either by weigh batching or by the use of gauge boxes.

1.2.2.4 Mixing of mortar

The mortar shall be mixed by machine. Mortar shall be used within two hours of the mixing of the cement and water and any mortar not then used shall be discarded and not retempered.

1.3 CONCRETE FOR CORE FILLING

1.3.1 Materials

1.3.1.1. Cement

The cement used in the concrete shall be in accordance with IS 1.

1.3.1.2 Fine and Coarse Aggregates

The coarse aggregate shall have a nominal size of 10mm and shall comply with the requirements of IS 5: 1974.

Fine aggregate shall be in accordance with IS 5.

1.3.1.3 Water

Water shall be free from impurities harmful to the concrete. Where the quality of supply is doubtful the water shall be tested in accordance with BS 3148: 1980.

1.3.1.4 Admixtures

Use of admixtures and the procedure for their use shall be subject to the engineers approval in writing.

1.3.2 Preparation of Concrete

1.3.2.1 Recommended mix

Concrete core filling shall be 35N having:

A slump of 125 mm

Minimum cement content = 300 kg/m³

Maximum free water/cement ratio = 0.6

Details of proposed mix shall be forwarded to the engineer for approval in good time.

1.3.2.2 Alternative mix

Alternative concrete mixes may be used subject to the engineers approval in writing.

1.4 REINFORCEMENT, WALL AND BONDING TIES.

1.4.1 Reinforcement

Reinforcement used shall comply with the requirements of BS 4461 and BS 4449 as appropriate.

1.4.2 Bed Joint Reinforcement.

Bed joint reinforcement shall comply with the requirements of BS 4449 and BS 4461 as appropriate. Reinforcement in the outer leaves of external cavity walls or external walls generally shall be of stainless steel, Grade 304.

1.4.3 Bonding Ties

Metal straps for bonding where shown on drawings shall be galvanised mild steel for the dimensions as specified on drawing.

1.4.4 Wall Ties

Wall ties shall be stainless steel vertical twist ties with fish tail ends and a minimum cross section of 20mm x 2mm and conform to the requirements of BS 1243: 1978 and for 200mm cavities ties shall be 325mm long stainless steel vertical twist ties with fish tail ends a minimum cross section of 30mm x 4mm. Alternatively double triangle grade 304 stainless steel wire ties of 3.75mm diam. ("e.g. Aerotie") are acceptable. Lugs shall be provided for fixing of insulation.

1.5 HANDLING AND STORAGE OF MATERIALS

1.5.1 Cement

Cement shall be stored in a manner to ensure that it is not affected by damp and shall be used in the order of delivery.

1.5.2 Sand

Sands shall be stored separately according to type where they will not be contaminated.

1.5.3 Metals

Reinforcement and ties shall be protected from becoming contaminated, and reinforcement shall be free from loose mill scale and rust.

1.5.4 Blocks

Facing blocks shall be carefully unloaded so as to avoid damage to the units. All blocks shall be stacked on prepared level areas to ensure that the stack is stable and blocks used for fairfaced work shall be protected to prevent the exposed faces from becoming stained or marked.

1.5.5 Suppliers

Proposed suppliers of blocks, and readymixed mortar shall be notified and agreed with the engineer before the works commence and in sufficient time to enable samples to be seen and tested.

Any proposed change in suppliers shall be notified to the Engineer who may direct additional materials testing to be done.

1.6 TESTING

1.6.1 General

Independent testing of blocks shall be carried out in accordance with IS 20: 1987.

At least 2 sets of block samples shall be tested during the course of construction.

The maximum interval between sampling shall be 3 months.

The engineer shall be notified to supervise sampling.

1.6.2 Mortar

Independent testing of mortar shall be in accordance with BS 4551: 1980.

Section 2

WORKMANSHIP

2.1 GENERAL

2.1.1 Dimensions

All blockwork shall be set out and built to the respective dimensions, thickness and heights shown upon the drawings.

2.1.2 Uniformity

All perpend, quoins, joints, etc., shall be kept strictly true and square, other angles shall be plumbed and the whole properly bonded or tied together and the bed joints levelled as the work proceeds.

2.1.3 Bond

The blockwork shall be built to the bond indicated on the drawings. Where no bond is indicated, the units shall be laid in stretcher bond. Where possible the coursing shall be arranged to allow a full block to be positioned directly beneath a lintel bearing.

For 215mm solid, a double course stretcher bond in accordance with normal practice is acceptable, unless otherwise noted on drawings.

2.1.4 Cutting

Blocks used for facing shall be cut with a masonry saw. Where it is necessary to cut the blocks wet they shall be allowed to dry before being built into the wall. Blocks used for profiled piers (see drawings) shall also be sawcut.

2.1.5 Chases

The positions and size of the chasings shall be as indicated on the drawings and shall be carried out neatly using a chasing tool. Chasing in any 4 inch blockwork and load bearing walls generally shall be only with the engineers approval. Chasing generally shall not exceed one third of the wall thickness.

2.1.6 Weather

No block laying shall be carried out when the temperature is at or below 3°C unless precautions are taken to ensure a minimum temperature of 4°C in the work when laid and thereafter to maintain the temperature above freezing point until the mortar has hardened. Should any block wall be damaged by frost it shall be pulled down and made good at the contractor's expense. Walls shall, where necessary, be adequately braced during construction to prevent damage by winds or other causes.

Scaffolding platform planks shall be turned on edge at night to prevent damage to mortar beds from rain drop spatters.

2.1.7 Laying

Each block shall be laid and adjusted to its final position while the mortar is still plastic.

2.1.8 Maximum Tolerances

Plumbness: ± 10mm per metre
 ± 10mm max.

Line: ± 10mm per metre
 ± 10mm max

Level: ± 5mm per metre
 ± 10mm max

Note: these figures are a guide only. The approved sample shall comprise the acceptable standard.

A 2m x 2m sample of each block type shall be built for the engineer's and architect's approval.

2.2 MORTAR JOINTS

2.2.1 Bedding

All blocks shall be laid on a full mortar bed. Vertical joints shall be filled. All joints are to be nominally 10mm thick.

2.2.2 Joint Types

2.2.2.1 Facing work

Joint profiles to be tooled as shown in drawings. The tooling of joints shall be carried out to the specified profiles while the mortar is thumb-print hard.

2.2.2.2 Standard work

Joints shall be raked for plastering.

2.2.3 Excess mortar

Any mortar which extrudes from the joint of fairfaced units shall be cut away and on no account is mortar to be smeared onto the face of the block.

Mortar droppings shall be removed from all wall ties and from cavity trays and stepped flashings.

2.2.4 Reinforced Walls

The cores shall be kept clear and clean of mortar droppings and any extruding mortar shall be removed while soft.

2.3 CONTROL JOINTS

Control joints shall be constructed as indicated on the drawings. Expansion joints shall be cleaned out to ensure that mortar does not bridge the joint.

2.4 DOUBLE LEAF (CAVITY) WALLS

2.4.1 Wall ties

The walls shall be built with cavities of the width shown on the drawings and tied together with ties embedded in the mortar at least 50 mm. Unless otherwise detailed the ties shall be staggered in alternate courses and spaced in accordance with the following table. (Applicable horizontal spacing of ties in 100mm cavity = 750mm.)

Where insulation is to be provided, the ties shall be fitted with lugs.

Least leaf thickness (mm)	Cavity Width (mm)	Horizontally (mm)	Vertically (mm)
75	50 - 75	450	450

90 or more	50 - 75	900	450
90 or more	75 - 100	750	450
90 or more greater than	100 - 150	450	450

The spacing may be varied locally provided that the number of ties per unit area is maintained.

Additional ties shall be provided in every course within 225mm of openings and on each side of control joints. Ties shall be falling to the external leaf.

2.4.2 Cavities

The cavity and ties shall be kept clear and clean of mortar droppings or other materials during construction and any extruding mortar shall be struck off flush. No cavity shall be sealed off until inspected and approved by the engineer.

2.4.3 Weepholes (cavity walls, for Brickwork and Fairface Blockwork Only)

Weepholes 10 mm wide by 75mm high, spaced at centres not exceeding 900mm and extending through the vertical mortar joints of the outer leaf, shall be provided at ground level and at positions where the cavity is bridged (eg over lintels, stepped damp proof courses etc.) or at locations indicated on the drawings.

2.4.4 Vent holes

Vent holes shall be of the dimensions as for weepholes and shall be positioned at locations indicated on the drawings.

2.5 PARTITIONS

Partitions shall not be built on suspended slabs until after the props have been removed.

2.6 REINFORCEMENT

2.6.1 Reinforcement

The reinforcement shall be of the size and number as shown on the drawings and shall be positioned accurately and secured against displacement so as to maintain the specified cover as shown on the drawings.

2.6.2 Bed Joint Reinforcement

Bed joint reinforcement shall have an effective cover of not less than 20 mm and shall be continuous except at control joints, or where otherwise indicated. Bed joint reinforcement is to be positioned as shown on the drawings.

2.7 CORE FILLING

Core shall be filled in lifts not exceeding 675 mm. The concrete or mortar filling shall be well tamped around reinforcement to ensure that it is fully compacted. The procedure for core filling shall be approved by the Engineer.

2.8 LINTELS

2.8.1 All lintels shall have a minimum sound bearing of 200mm or greater if indicated on drawings or recommended by manufacturers.

2.8.2 In situ concrete lintels shall be of concrete grade appropriate to the exposure condition as indicated on drawings. Cover to reinforcement shall likewise be appropriate. Details generally shall be as shown on drawings.

2.8.3 Prestressed concrete lintels shall not be used in spans exceeding 1500mm. Concrete grade and cover to reinforcement shall be as detailed in BS 8110. Propping arrangements shall be strictly in accordance with manufacturers recommendations. Lintels shall be laid rough side up and soffits shall be plastered using expanded metal as necessary. Lintels shall be not be drilled or notched. The contractor shall forward span/load tables from the proposed supplier. The suppliers shall be responsible for ensuring the correct type and stress level of reinforcement in accordance with BS 8110.

2.8.4 Steel lintels shall be used where indicated on drawings. All steel lintels shall be hot dip galvanised. Ends shall be touched up on site using bitumastic paint.

2.9 PROTECTION:

2.9.1 Stability

Precautions shall be taken to ensure stability of walls during backfilling and concreting operations.

2.9.2 Finished Work

The tops of constructed walls be protected from rain and in addition fairfaced work shall be protected against staining from construction activities.

2.10 MAKING GOOD

At the completion of the work all temporary holes in mortar joints of fairfaced work shall be filled with mortar and suitably tooled. Any damaged blockwork shall be repaired with approved materials or replaced to the satisfaction of the engineer.

SECTION 3

3.1 SEALING

Joints around door and window frames, control joints, abutting joints at external columns and other joints where sealing is indicated or required shall be brush painted with primer and filled with sealant of a colour specified by the architect, the whole of which shall be carried out in accordance with the manufacturer's recommendations.

3.2 FLASHING

Wall flashings shall be built into or secured to the blockwork in accordance with the details shown on the drawings. Care shall be taken to ensure that the flashing has adequate laps.

3.3 DAMP-PROOFING

3.3.1 Damp- proof courses

Horizontal damp-proof courses shall be provided at positions shown on the drawings and be positioned so as to fully cover the leaf thickness. All horizontal damp-proof courses shall be laid on an even bed of fresh mortar and eventually covered by mortar so as to maintain regular coursing and joint thickness and while exposed shall be protected from damage while the building is proceeding. Stepped damp-proof courses at openings shall extend beyond the end of lintel by at least 100mm. All horizontal damp-proof courses shall protrude 10mm from the external face of the wall and be turned downwards. Vertical damp-proof courses shall be of adequate width and be fixed so as to separate the inner and outer leaves of the wall. The material for damp-proof courses shall comply with BS 743 or BS 6515.

3.3.2 Tanking

Tanking and waterproofing of basement walls or retaining walls shall be carried out to the details as shown on the drawings and all materials are to be used in accordance with the manufacturer's recommendations.

3.4 BACKFILLING

Backfilling shall not be placed against concrete masonry walls within 5 days of completion of the construction. Vehicles shall not be operated closer to the wall than a distance equal to the height of the wall except where the engineer gives explicit approval in writing.

3.5 PAINTING

Concrete blockwork shall be painted in accordance with the painting schedule and paint shall be applied in accordance with the manufacturer's recommendations. Painting shall not commence until the surface of the walls has been allowed to dry out and has been cleaned down to remove all dust, dirt and mortar dabs. Where efflorescent occurs, it shall be removed with a cloth or stiff brush, prior to painting.

3.6 RENDERING

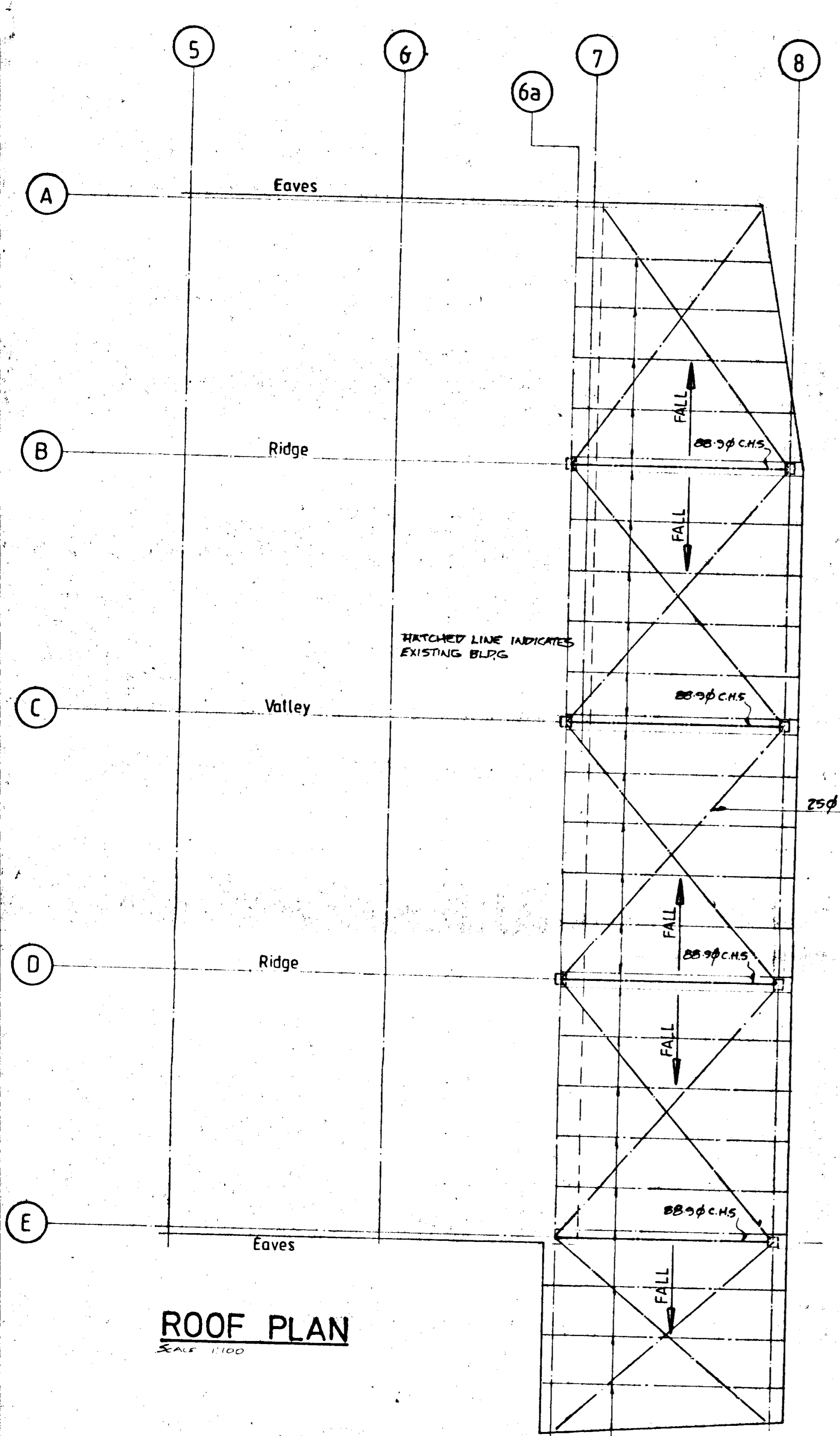
Newly applied rendering, including stipple and spatter-dash coats, shall be kept damp for the first three days. A second coat shall not be applied until the previous layer has hardened for seven days. The surface of rendering shall be as specified on the engineers drawings. The block surface and subsequent rendering coats may be damped sufficiently to ensure suction but in no case shall free water be left on the surface. Rendering shall not be applied to frost-bound walls or during frosty conditions. Any rendering shall be discontinuous at control joints. Plaster stops shall be provided as appropriate.

3.7 PLASTERING

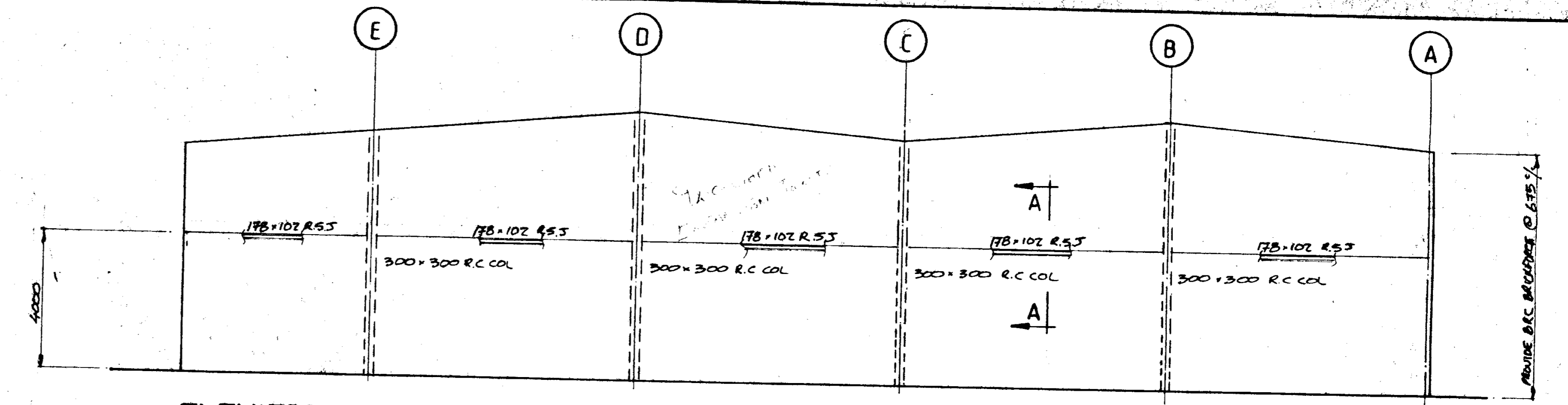
Before plastering all dirt, dust and efflorescence shall be removed. The walls shall be treated and plastered in accordance with the manufacturer's recommendations. Any plastering shall be discontinuous at control joints. Plaster stops shall be provided as appropriate.

3.8 WALL TILING

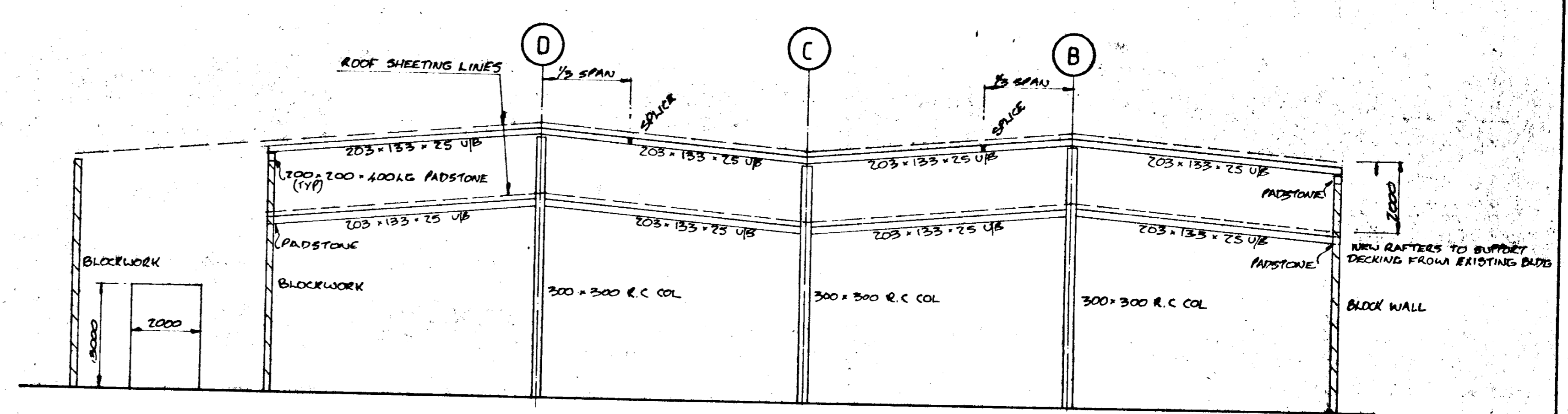
Before tiling all walls shall be allowed to dry to the level recommended by the tiling manufacturer. Movement joints shall be provided at control joints and any other locations recommended by the tiling manufacturer.



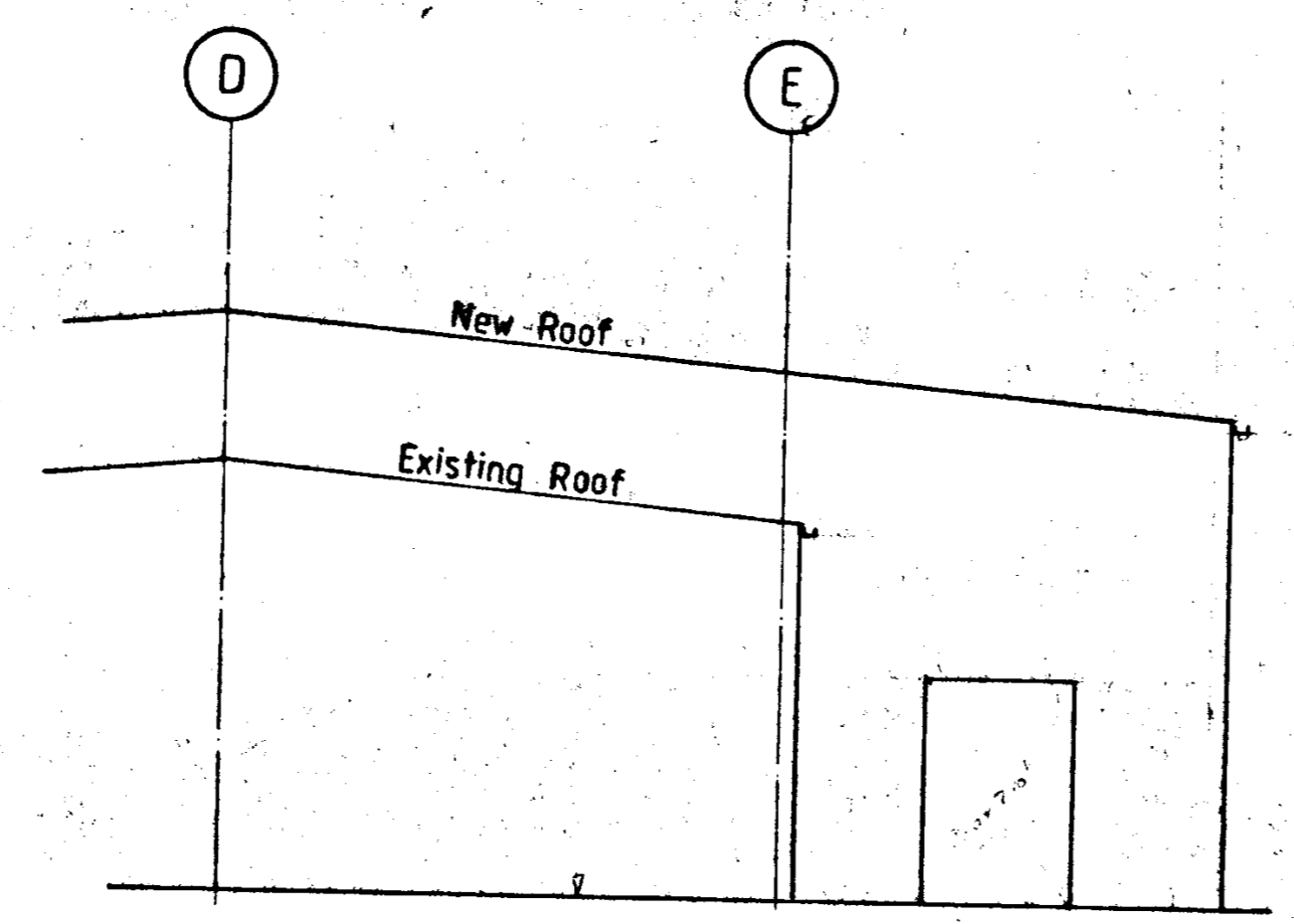
ROOF PLAN
SCALE 1:100



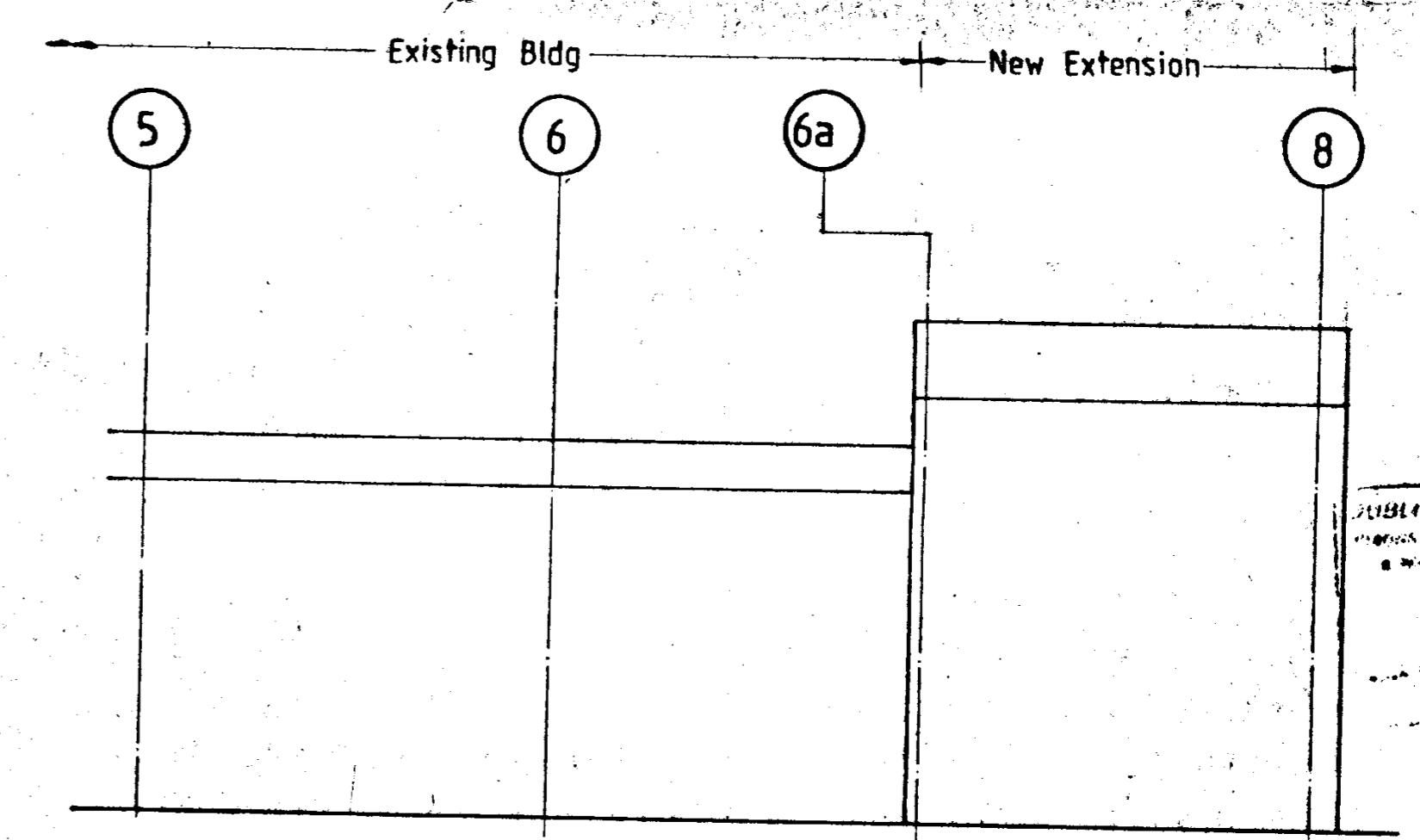
ELEVATION ON LINE 8
SCALE 1:100



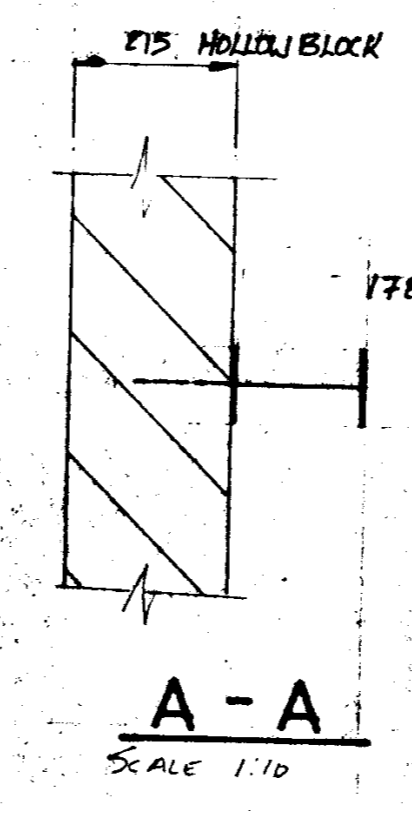
ELEVATION ON LINE 6a
SCALE 1:100



ELEVATION ON LINE 6a
SCALE 1:10



ELEVATION ON LINE E
SCALE 1:100



A-A
SCALE 1:10

DUBLIN COUNTY COUNCIL
Planning & Development Section
06 MAR 1991
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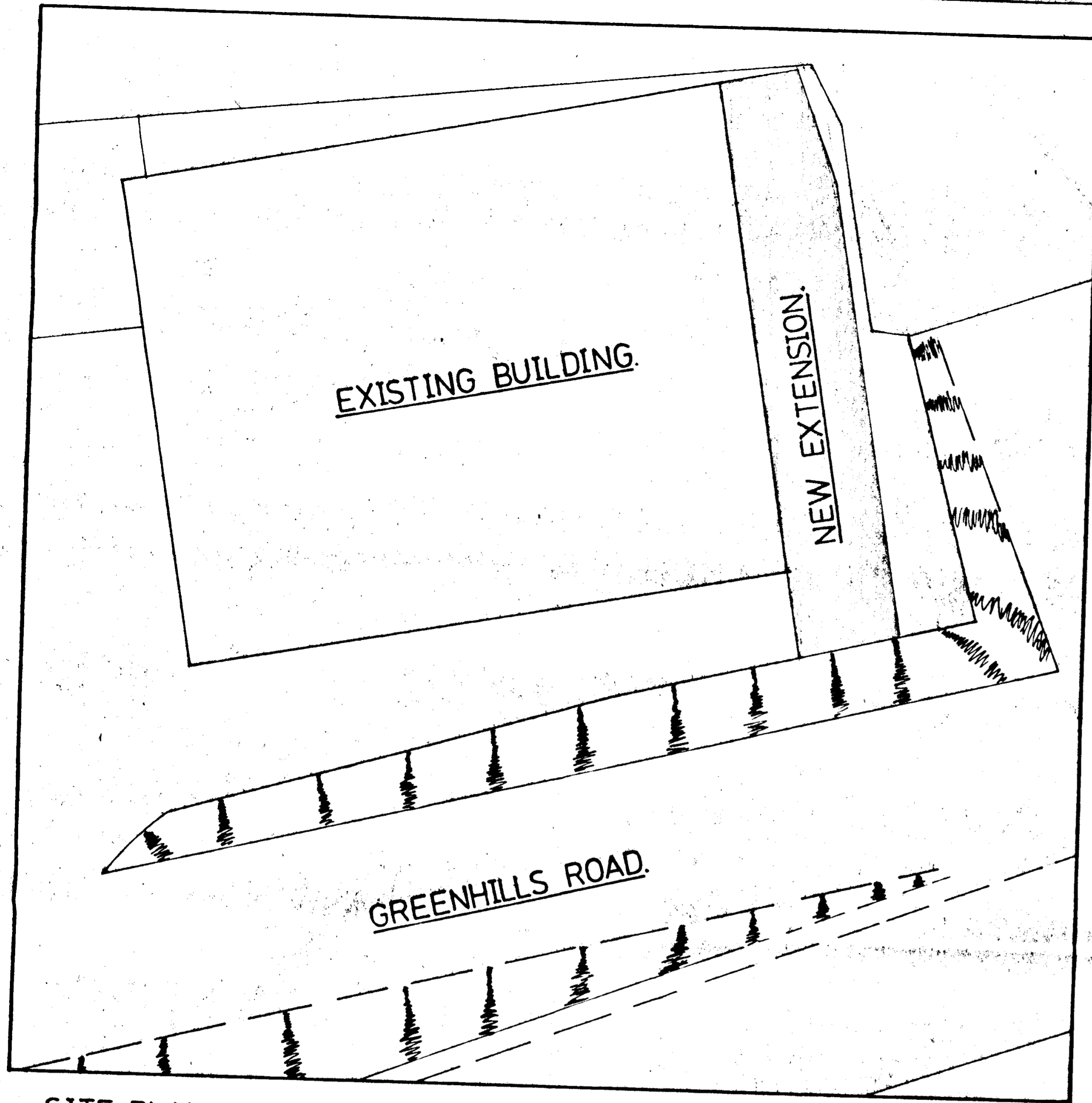
MINIMUM CONCRETE GRADES BS 8110 AS AMENDED IN I.S. 326

Exposure Condition	Internal Dry	Foundations or Internal Wet	External
Concrete Grade	30N/mm ²	35 N/mm ²	37.5 N/mm ²
Minimum Cover to All Reinforcement (± 5mm)	20mm	40mm	40mm
Minimum Cement Content	275kg/m ³	300 kg/m ³	325 kg/m ³
Maximum Free Water / Cement Ratio	0.65	0.60	0.55
Maximum Aggregate Size	20mm	20mm	20mm

Note: Other Special Requirements For Precast Concrete, Water Retaining Structures, Aggressive Soils, Prestressed Concrete, Concrete Fill to Hollow Blockwork. (see Relevant Specifications)

ISSUE	AMENDMENT	DATE

JOB: B.W.G Bond Walkinstown
TITLE: Plans, Elevations & Sections
MICHAEL PUNCH & PARTNERS
24 Marlborough Avenue
Dun Laoghaire
Co. Dublin
Tel: 01-289940
Fax: 01-289943
SCALE: As Shown
DATE: 21/02/91
DRG No: 91-32-05
DRN By: *Alfie Burke*



SITE PLAN.

SCALE 1:200

DUBLIN COUNTY COUNCIL
 Planning (Civil Engineering Section)
 06 MAR 1991
 [Signature]

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MINIMUM CONCRETE GRADES BS 8110 AS AMENDED IN I.S. 328

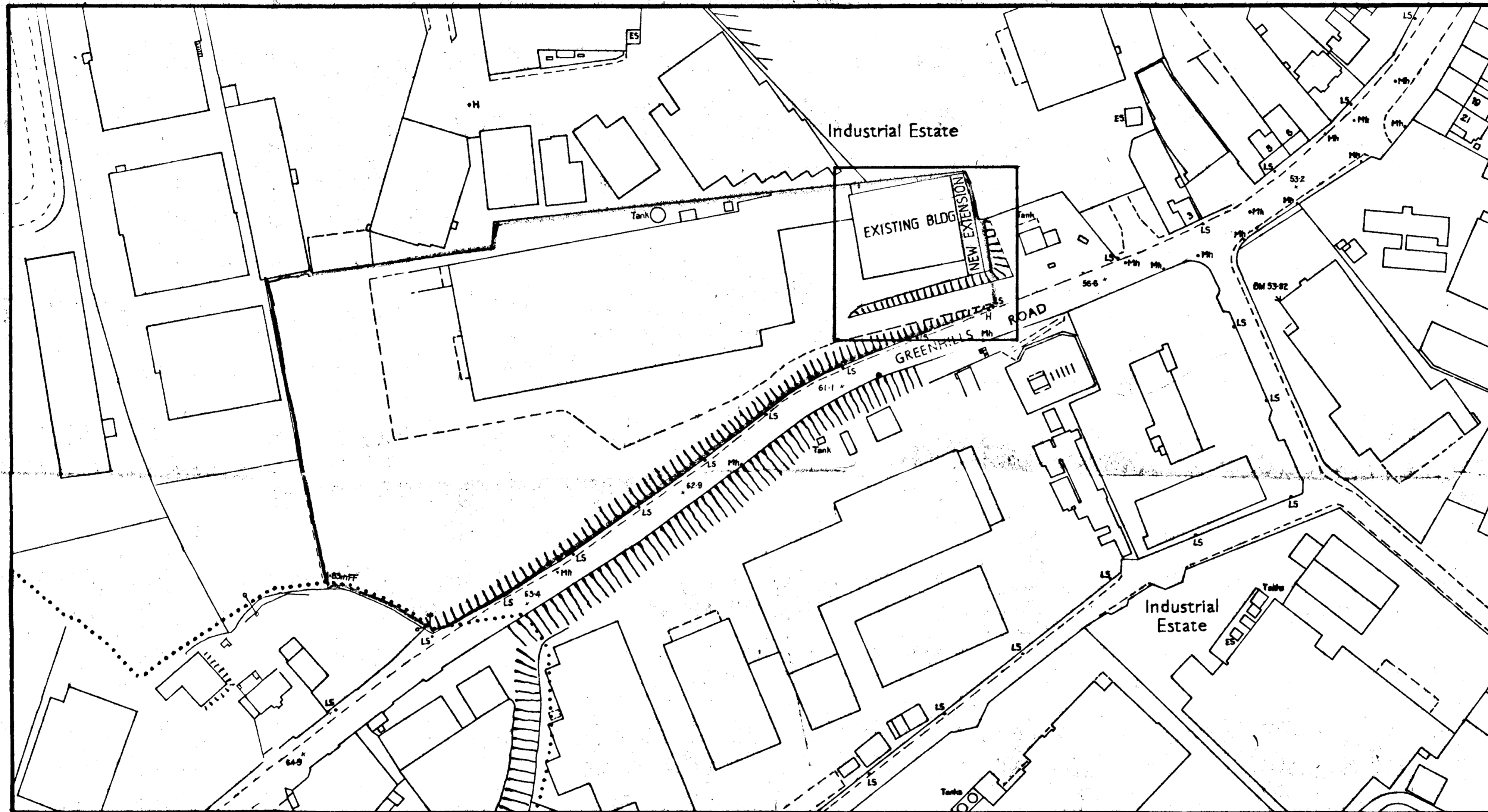
Exposure Condition	Internal Dry	Foundations, or Internal Wet	External
Concrete Grade	30N/mm ²	35 N/mm ²	37.5 N/mm ²
Nominal Cover To All Reinforcement (± 5mm)	20mm	40mm	40mm
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Maximum Free Water / Cement Ratio	0.65	0.60	0.55
Maximum Aggregate Size	20mm	20mm	20mm

Note: Other Special Requirements For Precast Concrete Water Retaining Structures Aggressive Soils
 Prestressed Concrete Concrete Fall to Hollow Blockwork (see Relevant Specifications)

ISSUE	AMENDMENT	DATE

JOB: B.W.G Bond Walkinstown	STAGE
TITLE: Site Plan	DRG No 91-32-03
MICHAEL PUNCH & PARTNERS	DRN By <i>Mike Burke</i>
CONSULTING ENGINEERS	SCALE As Shown
DATE 22/02/91	

24 Marlborough Avenue
 Dun Laoghaire
 Co. Dublin
 Fax 01-899040
 Phone 01-899033



DUBLIN COUNTY COUNCIL
 Planning & Building Section
 06 MAR 1991
 D.M. Carthy

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MINIMUM CONCRETE GRADES BS 8110 AS AMENDED IN I.S. 326

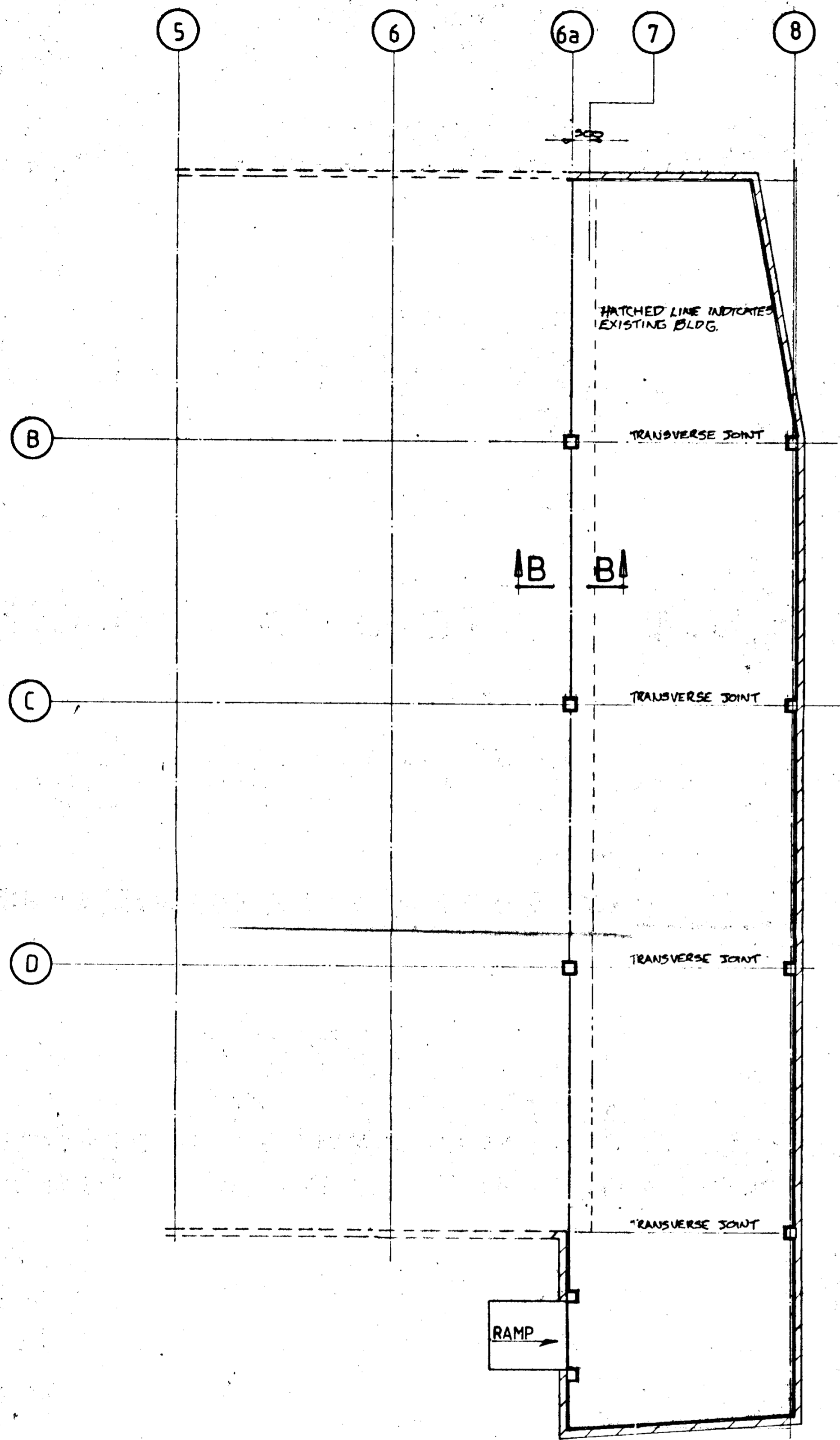
Exposure Condition	Internal Dry	Foundations or Internal Wet	External
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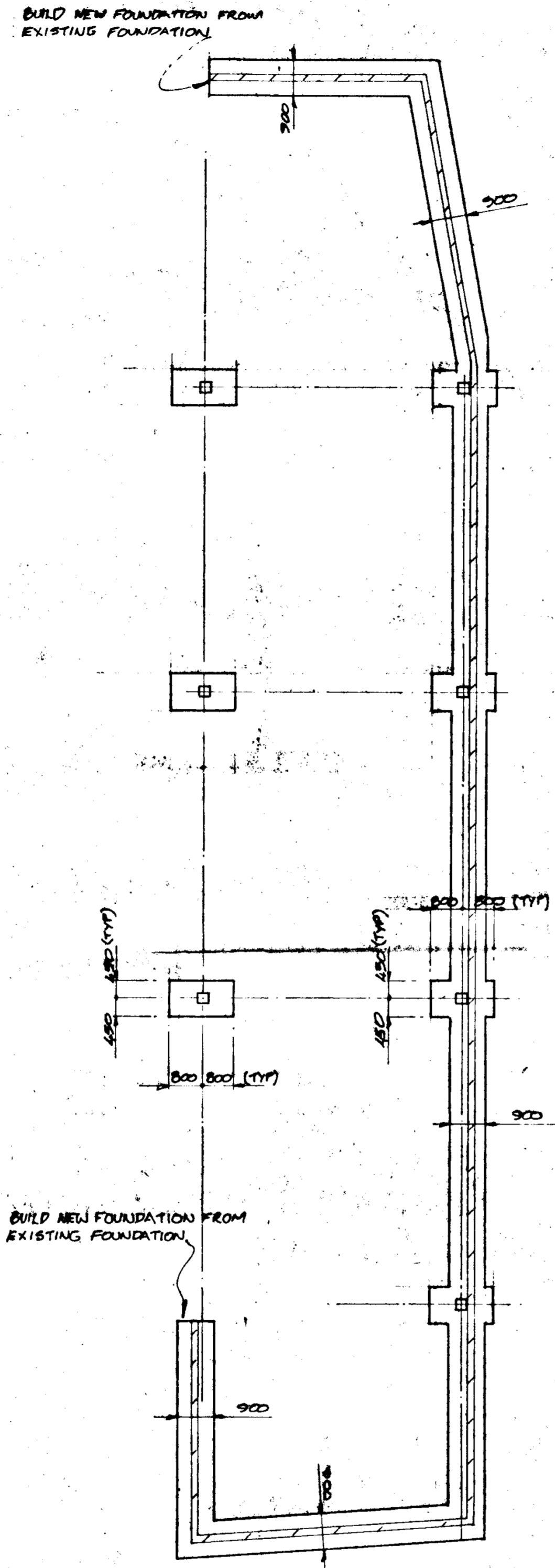
ISSUE	AMENDMENT	DATE

JOB: BWG BOND, WALKINSTOWN
 TITLE: LOCATION PLAN
MICHAEL PUNCH & PARTNERS
 CONSULTING ENGINEERS
 4 Perry Square, Limerick
 Fax: 061-319071
 Phone: 061-319177

STAGE
 DRG No: 91.32/02
 DRN By: D.M. Carthy
 SCALE: 1:1000
 DATE: FEB '91

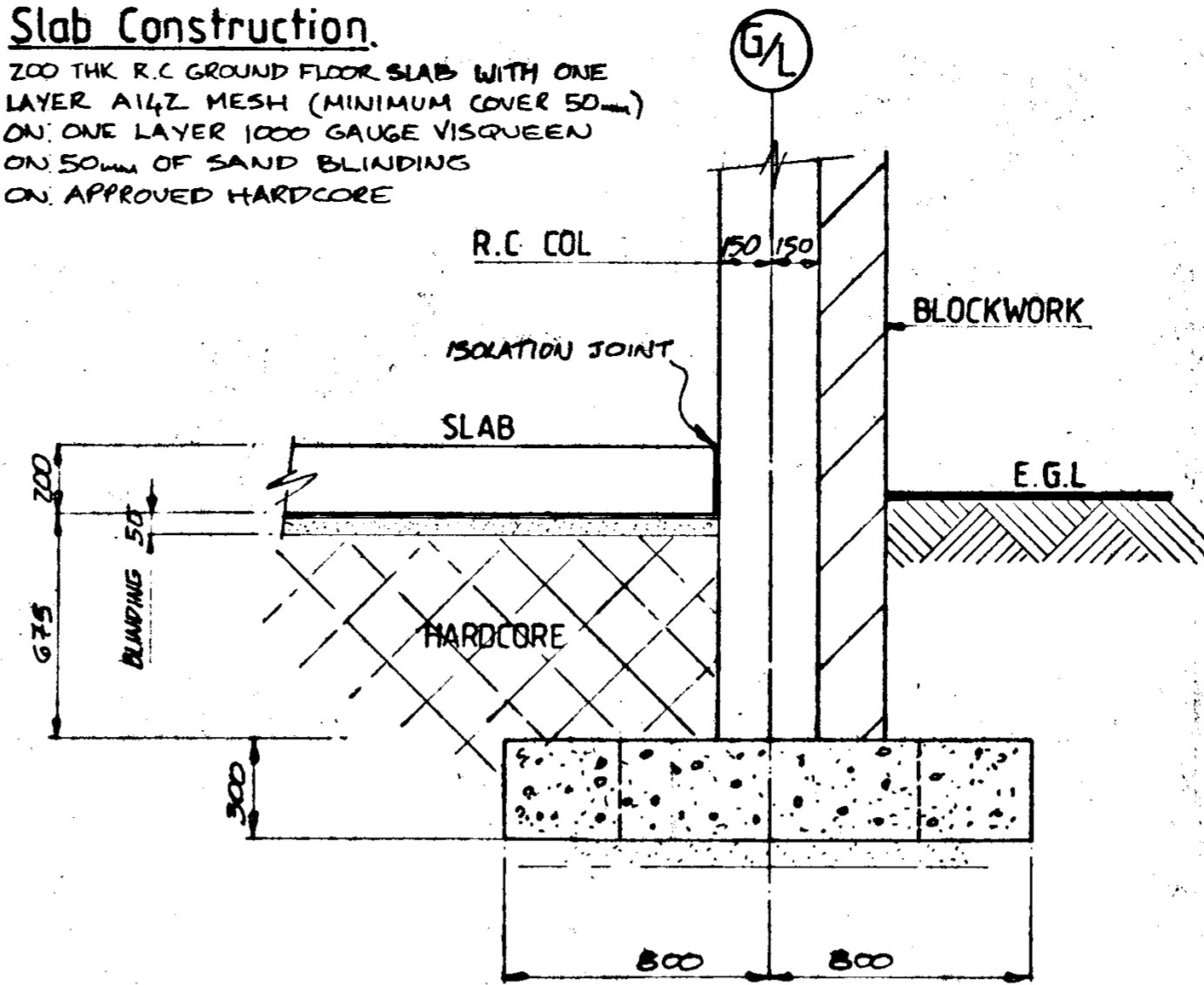


FLOOR SLAB DETAIL (211 m² Floor Area.)
SCALE 1:100

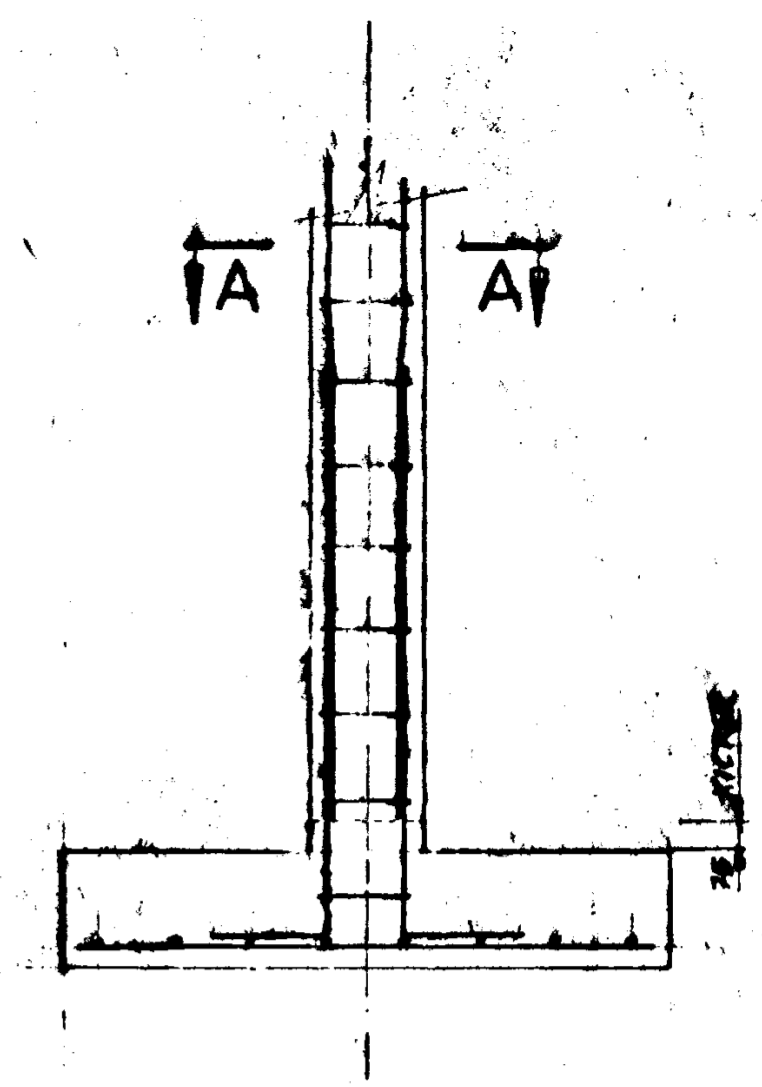


FOUNDATION LAYOUT
SCALE 1:10

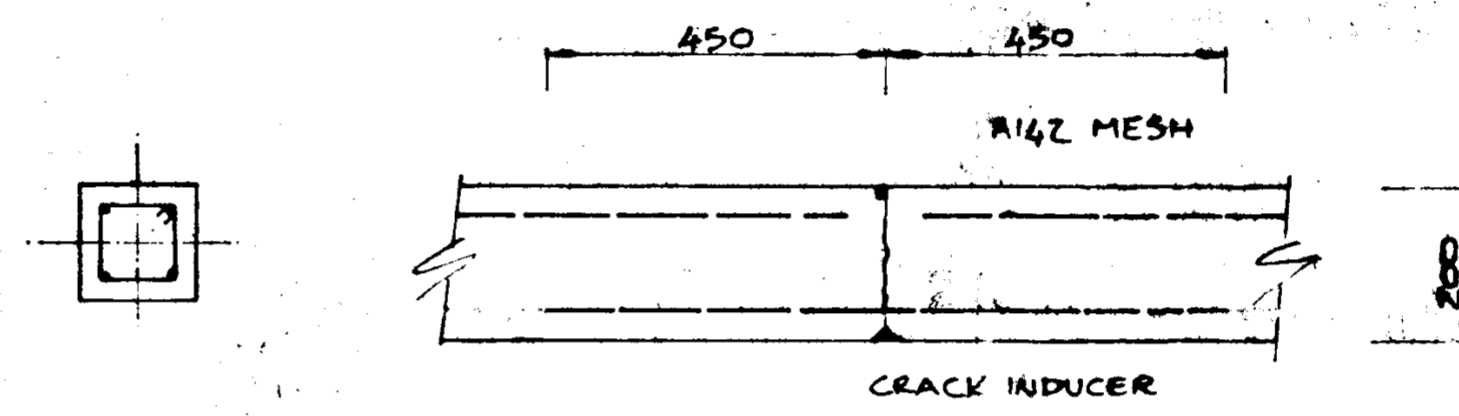
Slab Construction
200 THK R.C. GROUND FLOOR SLAB WITH ONE LAYER A14Z MESH (MINIMUM COVER 50mm) ON ONE LAYER 1000 GAUGE VISQUEEN ON 50mm OF SAND BLINDING ON APPROVED HARDCORE



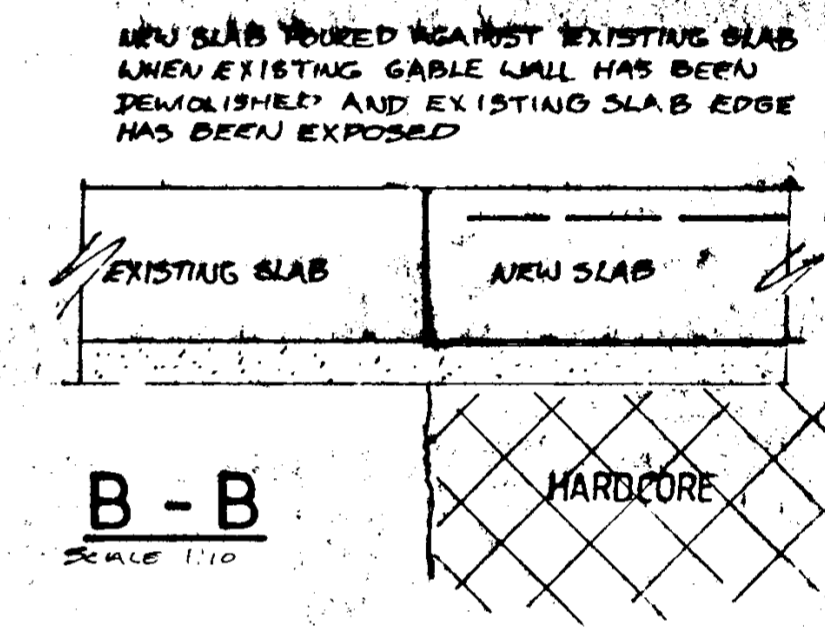
TYPICAL FOUNDATION DETAIL
Reinforcing Steel Not Indicated
SCALE 1:10



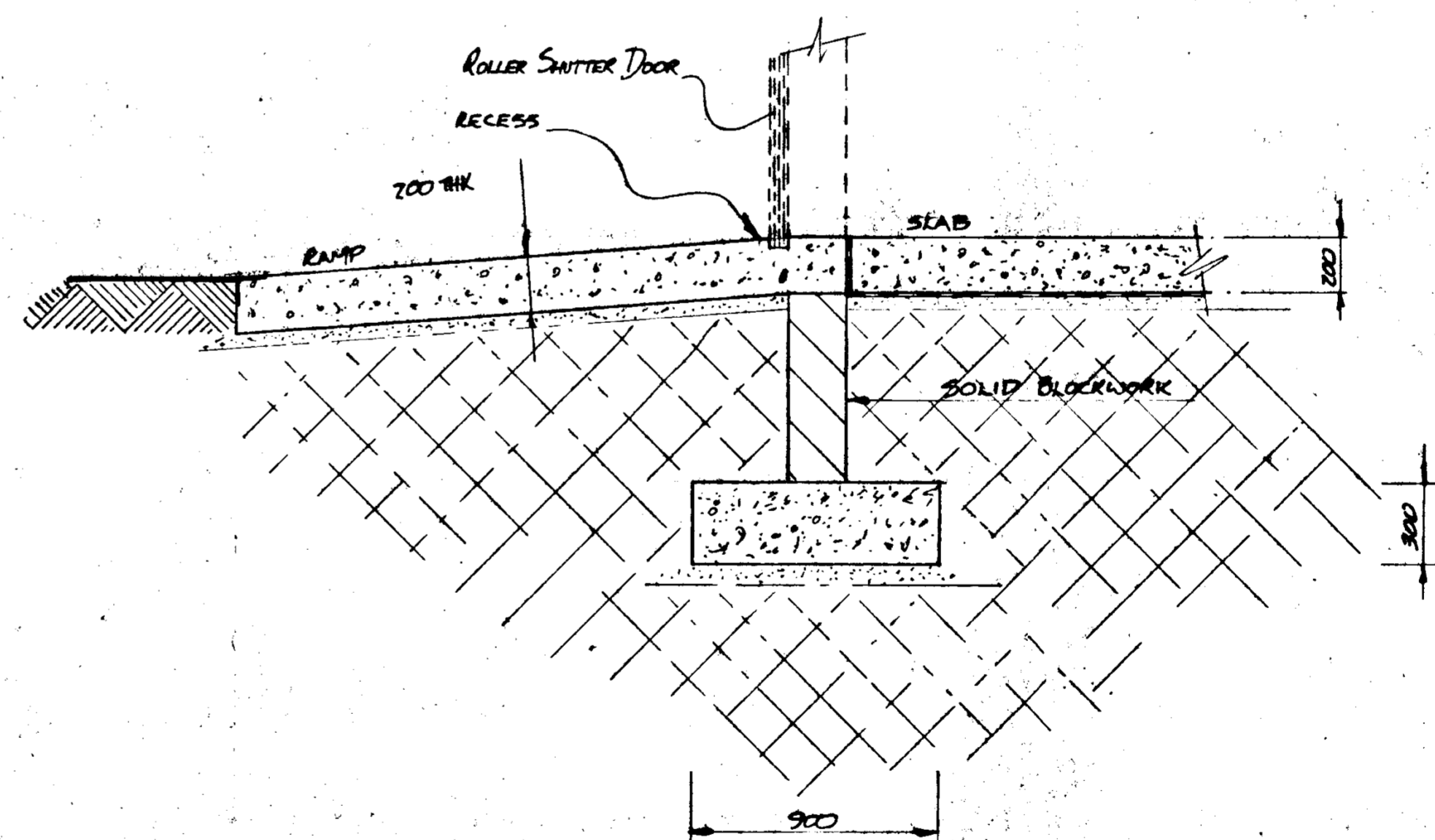
R.C. COL DETAIL
SCALE 1:10



A - A TRANSVERSE JOINT DETAIL
SCALE 1:10



B - B
SCALE 1:10



SECTION THRO RAMP
SCALE 1:20

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11A/02AB

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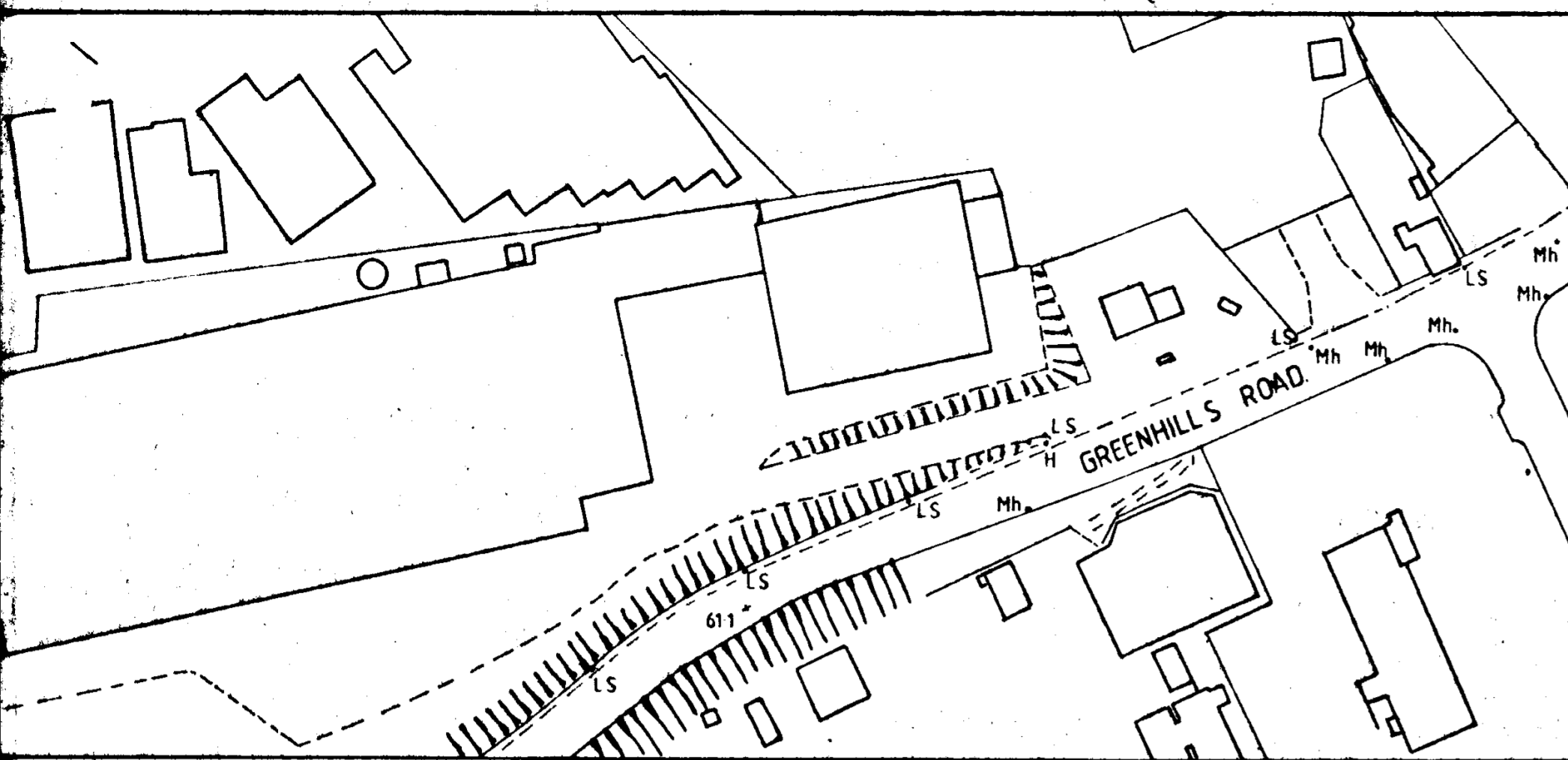
MINIMUM CONCRETE GRADES BS 8110 AS AMENDED IN I.S.326			
Exposure Condition	Internal Dry	Foundations or Internal Wet	External
Concrete Grade	30N/mm ²	35 N/mm ²	37.5 N/mm ²
Nominal Cover To All Reinforcement (± 5mm)	20mm	40mm	40mm
Minimum Cement Content	275kg/m ³	300 kg/m ³	325 kg/m ³
Maximum Free Water / Cement Ratio	0.65	0.60	0.55
Maximum Aggregate Size	20mm	20mm	20mm

Note: Other Special Requirements For Precast Concrete, Water Retaining Structures, Aggressive Soils, Prestressed Concrete, Concrete Fill to Hollow Blockwork (see Relevant Specifications)

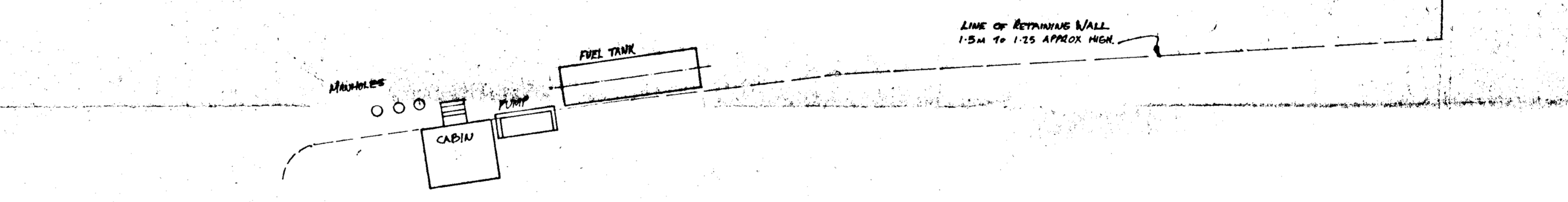
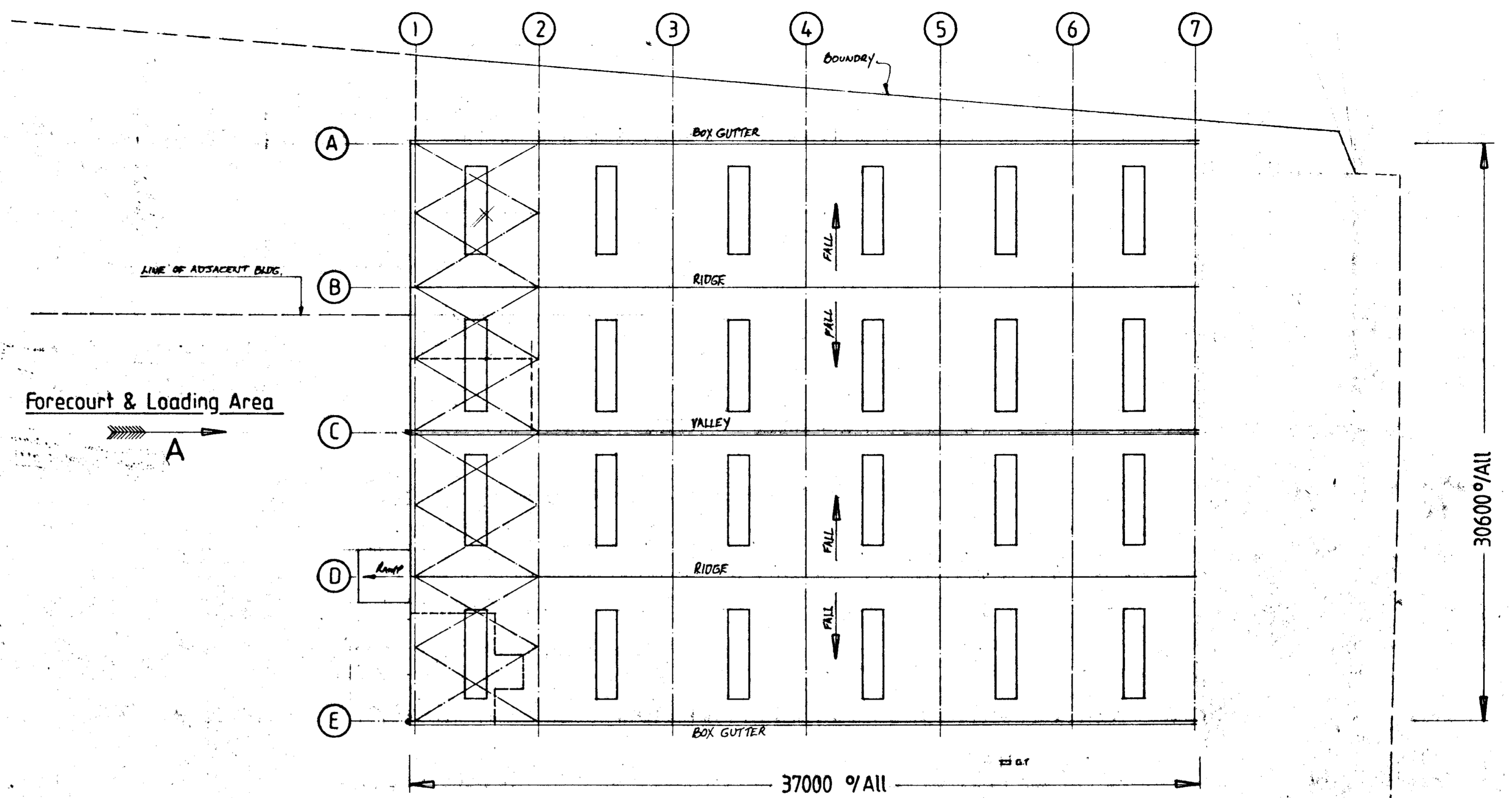
ISSUE	AMENDMENT	DATE

JOB: B.W.G BOND WALKINSTOWN
TITLE: Ground Floor Slab & Foundation Details
DRG No 91-32-04
DRN BY *Alto Buecke*
SCALE AS SHOWN
DATE 22/02/91

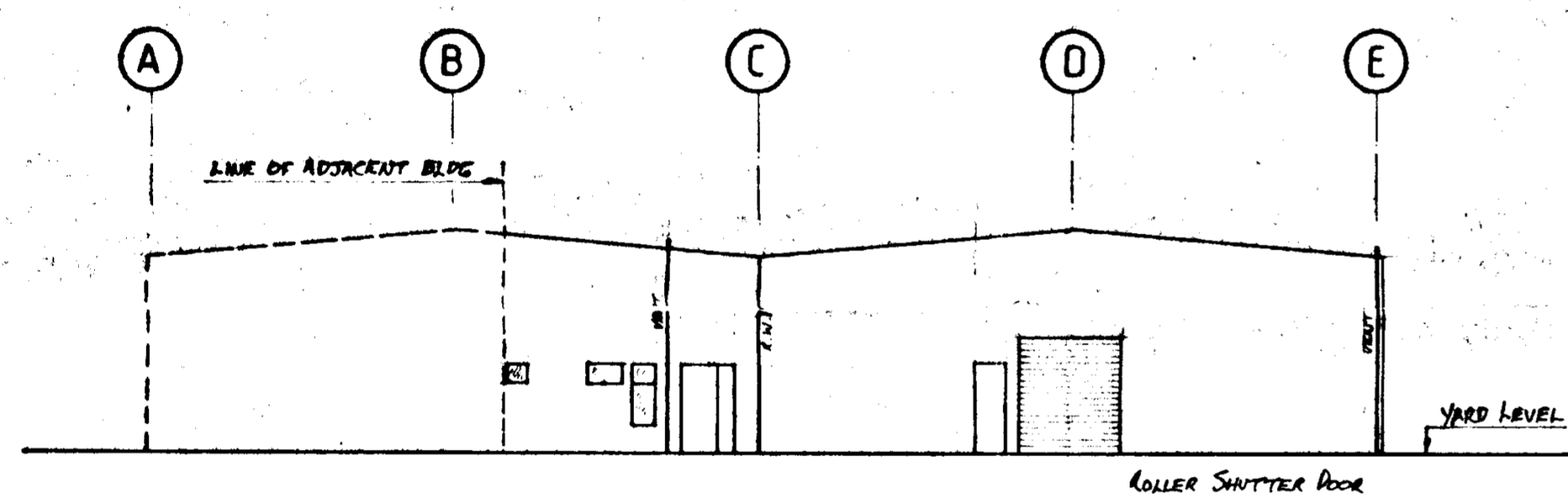
MICHAEL PUNCH & PARTNERS
CONSULTING ENGINEERS
24 Merrion Avenue
Dublin 4
Tel: 01-399880
Fax: 01-399833



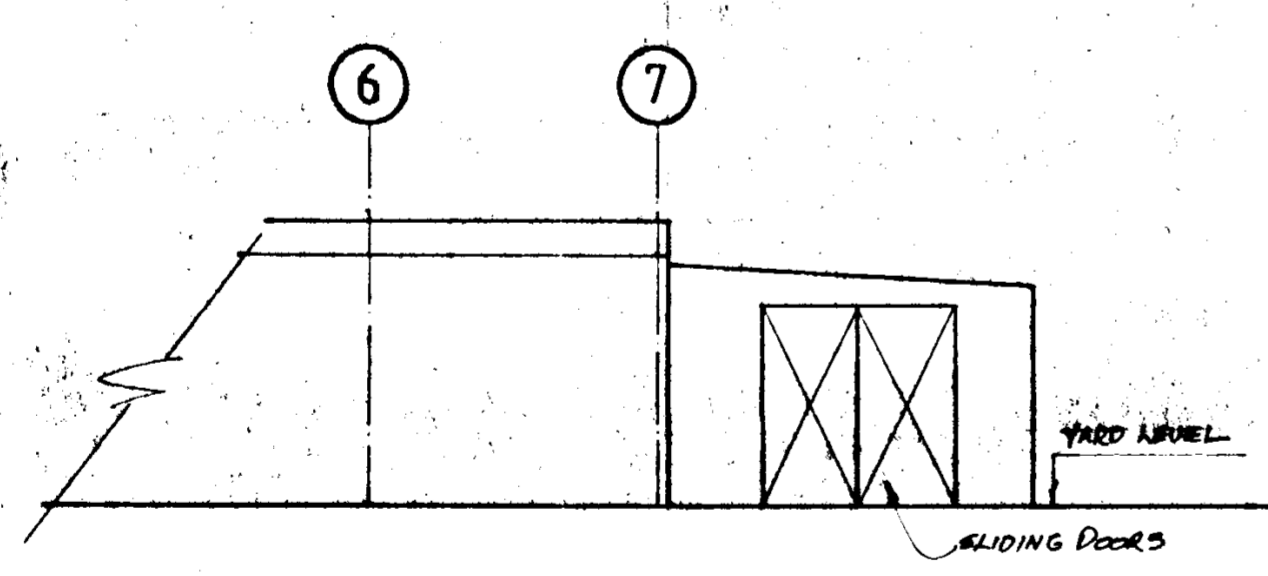
Location Plan
SCALE 1:1000



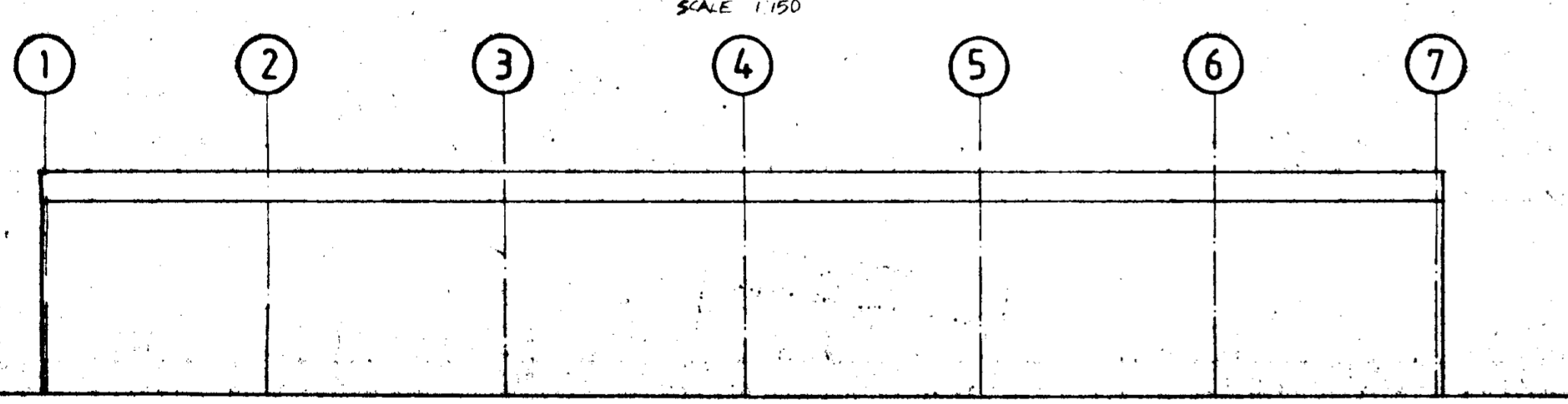
SITE PLAN
SCALE 1:150



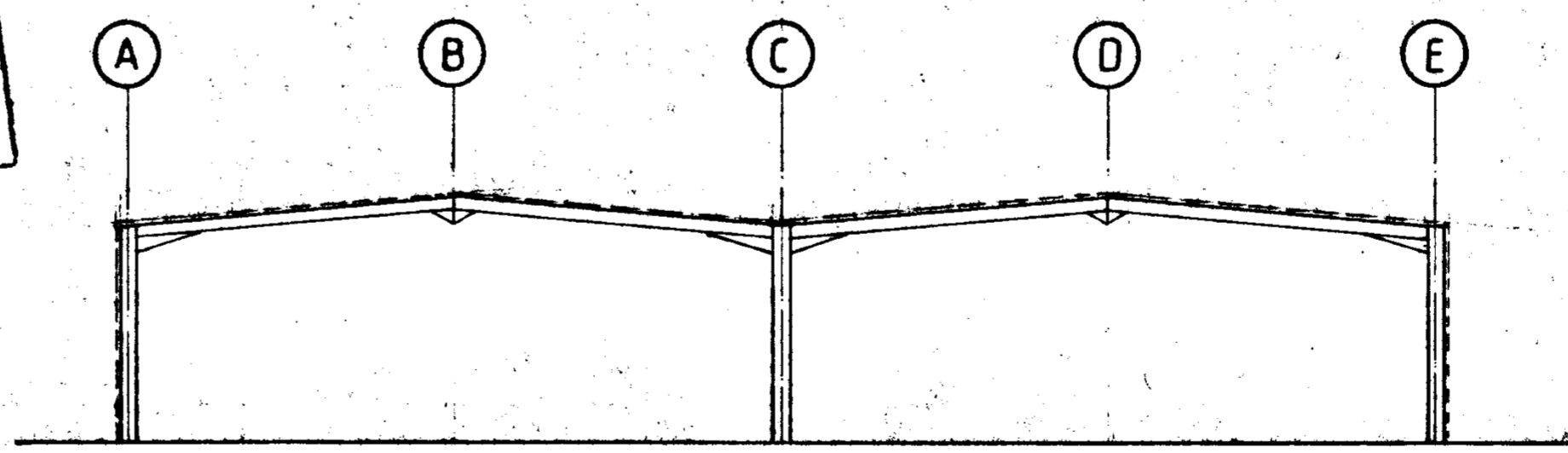
View On Arrow A
SCALE 1:150



View On Arrow B
SCALE 1:150



Elevation On Line E
SCALE 1:150



Typical Section Thro.
SCALE 1:150

DUBLIN COUNTY COUNCIL
06 MAR 1991
91A/0258

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Note
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Consultants to be informed immediately of any discrepancies before work proceeds.

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ISSUE	AMENDMENT	DATE

JOB: B.W.G Bond Walkinstown
 TITLE: Plan + Elevations (EXISTING)
MICHAEL PUNCH & PARTNERS
 CONSULTING ENGINEERS
 4 Free Square, Limerick
 Tel: 061-319871, Fax: 01-809848, Phone: 01-319877

STAGE
 DRG No 91.32.01
 DRN By: *Oliver Burke*
 SCALE: As Shown
 DATE: 26/01/91