BYE LAW APPLICATION FEES

REF. NO.: 91A/1326 CERTIFICATE NO.: 17776

PROPOSAL: Warehouse

LOCATION: Site 14, Cherry Orchard Ind. Est.

APPLICANT: Hathcourt 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 1241 m²	@ £3.50 per M² or £70	£4343.50	434340 10/	not	sought	
D	Building or other structure for purposes of agriculture	@ £1.00 per M² in excess of 300 M² Min. £70					
E	Petrol Filling Station	@ £200					
F	Dev. of prop. not coming within any of the forgoing classes	£70 or £9 per .1 hect. whichever is the greater					

Column 1 Certified: Signed: _____ Grade: _____ Date: _____

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

Columns 2,3,4,5,6 & 7 Certified: Signed: N. Deane Grade: III Date: 23/3/92

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

FILE DISCUSSED AT COUNCIL/COMMITTEE MEETING

FILE REF: 91A 1326

MEETING	COMMENTS	NOTED IN DEV. CONTROL	NOTED BY
BELGARD H+P 28/1/92	Noted by Cllr O Connell Concerned re Conditions 4/9 being complied with		

FILE DISCUSSED AT COUNCIL/COMMITTEE MEETING

FILE REF: 91A 1326

MEETING	COMMENTS	NOTED IN DEV. CONTROL	NOTED BY
BELGARD H+P 26-11-91	Noted & Cllr O Hallaran		

PLANNING APPLICATION FEES

Reg. Ref. 91A/1326 Cert. No. 26324

PROPOSAL Warehouse

LOCATION Site 14 Clearyordlord Industrial Estate, Ballyfermot

APPLICANT Heathcourt Ltd

CLASS	DWELLINGS/AREA LENGTH/STRUCT.	RATE	AMT. OF FEE REC.	AMOUNT LODGED	BALANCE DUE	BALANCE PAID
1	Dwellings	@£32				
2	Domestic	@£16				
3	Agriculture	@50p per m2 in excess of 300m2. Min. £40				
4	Metres 1241 m	@£1.75 per m2 or £40	£2171.75	2171.69	6p not sent	
5	x .1 hect.	@£25 per .1 hect. or £250				—
6	x .1 hect.	@£25 per .1 hect. or £40				
7	x .1 hect.	@£25 per .1 hect. or £100				
8		@£100				
9	x metres	@£10 per m2 or £40				
10	x 1,000m	@£25 per £1000m or £40				
11	x .1 hect.	@£5 per .1 hect. or £40				

Column 1 Certified:Signed: [signature] Grade SRA/C Date 16-8-91

Column 1 Endorsed:Signed: .... Grade .... Date ....

Columns 2,3,4,5,6 & 7 Certified:Signed: [signature] Grade S.O. Date 14/8/91

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

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

ASSESSMENT OF FINANCIAL CONTRIBUTION

EG. REF.: 91A/1326

CNT. REG.:

ERVICES INVOLVED: WATER/~~FOUL SEWER/SURFACE WATER~~

REA OF SITE:

LOOR AREA OF PRESENT PROPOSAL: 13355 Sq ft

EASURED BY: [signature] 15-8-91

HECKED BY:

ETHOD OF ASSESSMENT:

OTAL ASSESSMENT

ANAGER'S ORDERED NO: P/ /
DATED

NTERED IN CONTRIBUTIONS REGISTER:

(i) Standard and [illegible] in full on acreage basis

EVELOPMENT CONTROL ASSISTANT GRADE

(ii) Roads request contribution to be assessed on receipt of A/I.. NO Report from Roads on file setting out the amount

Assessed on new rate →

DUBLIN COUNTY COUNCIL
6 JAN 1992
ENVIRONMENTAL HEALTH

Register Reference : 91A/1326 Date : 13th November 1991

Development : Warehouse and water tank, linking to existing warehouse/offices

LOCATION : Site 14 Cherry Orchard Industrial Estate, Ballyfermot

Applicant : Heathercourt Limited

App. Type : Additional Information

Planning Officer : M.GALVIN

Date Recd. : 1st November 1991

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

Yours faithfully,

....

for PRINCIPAL OFFICER

The proposal is acceptable to this office subject to

(1) Compliance with the Food Hygiene Regulations 1950/89

(2) Compliance with the Health, Safety & Welfare at Work Act 1989

3) See attached noise condition

J.C. H...

Ita Devine
for John O'Reilly
SUPER.ENVIRON. HEALTH OFFICER,
33 GARDINER PLACE,
DUBLIN 1.
8/1/92

PLANNING DEPT.
DEVELOPMENT CONTROL SECT
Date 14.01.92
Time 3.00

HEATHERCOURT LTD.

SITE 14 CHERRY ORCHARD IND.EST

PLAN REG: REF: 91A/1326

It is required that the noise level from within the boundaries of the development shall not exceed 55DB(A) rated sound level at any point outside the boundary between the hours 0800 - 1800 hours Monday - Friday (inclusive) but excluding Bank Holidays. At all other times, including Bank Holidays, the noise level shall not exceed 35DB(A) rated sound level subject to the same recommendations as stated above for noise levels between 0800 - 1800 Monday - Friday.

For the purpose of determining compliance with the above, test procedures must be approved before tests take place.

John Healy,
Environmental Health Officer.
10 January 1992

PLANNING DEPT.
DEVELOPMENT CONTROL SECT
Date 14.01.92
Time 3.00

SS 4 CMo.

(1)

(2)

Register Reference : 91A/1326 Date : 13th November 1991

Development : Warehouse and water tank, linking to existing warehouse/offices

LOCATION : Site 14 Cherry Orchard Industrial Estate, Ballyfermot

Applicant : Heathercourt Limited

App. Type : Additional Information

Planning Officer : M.GALVIN

Date Recd. : 1st November 1991

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

Yours faithfully,

for PRINCIPAL OFFICER

DUBLIN Co. COUNCIL
19 NOV 1991
SAN SERVICES

DUBLIN CO. COUNCIL
SANITARY SERVICES
-2 JAN 1992
Returned

Date received in Sanitary Services .....

FOUL SEWER

No foul sewer requirement indicated.

PLANNING DEPT.
DEVELOPMENT CONTROL SECT
Date 03.01.92
Time 3.00

SURFACE WATER

Available to existing system, levels permitting, subject to applicant ~~submo~~ agreeing acceptable drain sizes with the B.B.L. Dept. The sizes indicated in this proposal are inadequate for the site.

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

J. Lee,
18/12/1991

Filed

PLANNING DEPT.
DEVELOPMENT CONTROL SECT.
Date 03.01.92
Time 3.00

Register Reference : 91A/1326

Date : 13th November 1991

....

ENDORSED ____________________ DATE ____________

WATER SUPPLY Refer to CFO for comment.
Water available. Metered supply to be fitted. 24hr storage required. All connections etc to be by DCC personnel at applicants prior expense.
[signature] 17/12/91 [signature] 10/12/91
....

ENDORSED [signature] DATE 19/12/91

Order No. P/5680/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

Donal W. Bergin & Associates,
19 Terenure Road West,
Dublin 6W.

Reg. Ref. 91A/1326
Appl. Rec'd: 9/8/91
Floor Area: 1241sq. m.
Site Area: 2550sq. m.
Zoning:

Report of the Dublin Planning Officer, dated 6 December 1991

This is an application for **PERMISSION** for a warehouse and water tank linking to existing warehouse/offices at Site 14 Cherry Orchard Industrial Estate, Ballyfermot, for Heathcourt Limited.

The proposed site is located to the north of the Cherry Orchard Industrial Estate in an area zoned 'E' - "to provide for industry and related uses" in the Dublin County Development Plan 1983.

The proposed site which has a (stated) area of 2550sq. metres adjoins the site of an existing double warehouse to the west. This site was inspected on 26th September, 1991. The adjoining site to the west (indicated as being within the applicants control) is bounded by palisade fencing. The proposed site is bounded by the boundary wall (c.2m.) to the north. The western boundary is open. There are existing warehouses/industrial buildings to the east. Oakcourt Park, a housing development of semi-detached bungalows is located to the rear (north).

From site inspection it is considered likely that the site location map submitted does not identify the site accurately.

Planning History:

The adjoining units to the west were constructed on foot of a grant of permission under Reg. Ref. No. RA.28, for alterations to previously approved factory, (Reg. Ref. M.1562). The applicants in this instance were Helly Hanson (Ireland) Ltd. and the site area indicated incorporated the site of the current application under Reg. Ref. No. 91A/1326 - this portion of the site was to allow for future expansion and carparking (92 spaces).

Contd/.........

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

Reg. Ref. No. SA.559 refers to a grant of permission to P.D.U. (Irl) Ltd., for an extension to the adjoining units to the east. The site for the purpose of this application extended to within 6 metres of the Helly Hanson premises incorporating the area indicated for car parking in the abovementioned grant of permission - Reg. Ref. No. RA.28. This issue was raised as additional information and the applicants responded by stating that the area in question had been purchased by P.D. U. and that Helly Hansen had purchased an additional area to the west to provide carparking. Condition No. 6 of this grant of permission required that parking be provided to Development Plan Standards for the entire factory and proposed extension. From site inspection it was noted that this extension has been completed but appears unoccupied. The carparking layout to the west of the units as indicated in lodged plans, has not been provided although portion of this area is laid out as hardcore. (Reg. Ref. 89A/1436 refers to a grant of permission for a warehouse on the above mentioned alternative parking area to west for Roshannal Ltd).

Reg. Ref. No. SA.1202 refers to a grant of permission for an underground storage tank for petrol for Helly Hanson (Ire) Ltd.

Reg. Ref. No. WA.1434 refers to a grant of permission for a single storey extension at the Helly Hanson Unit. Drawings submitted with both of these applications identify the location of the existing warehouse incorrectly.

Reg. Ref. No. WA.1496 refers to a grant of permission for additional extensions to the P.D.U. premises, i.e. adjoining that permitted under Reg. Ref. No. SA.559, (i.e. on part of the site of the current application).

Reg. Ref. No. WA/2057 refers to a subsequent grant of permission for a single storey extension to the side of the Helly Hanson premises.

Reg. Ref. No. 87A/441 refers to a grant of permission for the subdivision of Unit 13 into 2 warehouses and a truck maintenance depot (adjoining unit to east). The site for the subject of this application was smaller than that shown in previous applications, i.e. SA.559. It extended c.21 metres west of building and does encroach as on the subject site as shown on the site location map. However as stated this drawing may be incorrect. A lesser amount of carparking, i.e. c.87 spaces were shown to serve the proposed development. On site it was noted that the parking spaces to the front of the building have been marked out. The area to the west has a hardcore surface.

Contd/.....

Order No. P/5680/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

Reg. Ref. No. 90A/2063 refers to a grant of permission for a 2 metre wall forming an enclosure containing 2 condenser units at Unit 14 for Showcrest Services Ltd.

Reg. Ref. No. 90A/335 refers to a grant of permission for alterations to Unit 14A.

The current application provides for the construction of a 2550sq. metre warehouse and water tank. The proposed warehouse is to be linked to the adjoining unit and is to be used as a food storage and distribution depot. Correspondence lodged states that 10 no. people will be employed between this and the adjoining premises.

Lodged plans provide for warehouse building which will extend some 10.5 metres to eaves and 13 metres to ridge level. It exceeds the height of the adjoining building which is shown on drawings as being 6 metres at eaves and 6.7 metres at ridge level.

Lodged plans provide for a part brick/part clad finish to front elevation. The remaining elevations are to have a full clad finish.

Unsolicited additional information lodged on 19th August, 1991, included a site layout map identifying the adjoining houses to the rear. Drawings submitted also indicate the likely overshadowing affect of the proposed building per 19/8/91. This does not impact on adjoining gardens. However, it is considered that the proposed development might give rise to overshadowing of the rear gardens at Oakcourt Park during spring and autumn.

In any event, the proposed building because of its height and bulk is considered excessive. It exceeds the height of all other industrial buildings in the Cherry Orchard Industrial Estate and is considerably out of scale with the adjoining single storey housing development at Oakcourt Park. It is considered that the proposed development might adversely affect the amenities of residents at this location.

Contd/.....

Order No. P/5680/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

Lodged plans provide for an area of car parking for c.33 cars around the proposed warehouse. Furthermore no areas of car parking are identified for the existing building for Snowcrest (despite the fact that the proposed site was originally intended as a car parking area for this existing building).

The applicants were requested to clarify these matters by additional information of 7th October, 1991, with regard to the following:-

1. The applicant is requested to clarify whether the site location map submitted with the application is accurate. From site inspection and a review of the Planning History of the area, the site as indicated appears to encroach on the adjoining site to the east.
   If necessary, the applicant is requested to submit a revised site location map which accurately identifies the subject site, the Industrial Estate road network and the adjoining buildings.

2. From a review of the Planning History of the area, it is noted that the site the subject of the current application, was originally approved as a car parking area to serve the adjoining warehouse building to the west, (Reg. Ref. RA/28).
   The current application does not indicate any car parking provision for this adjoining premises which is indicated on drawings lodged as being within the applicants control. A total of 33 no. spaces are indicated at the proposed site. This is less than the no. spaces required to meet Development Plan Standards for the existing development for a development of this size, (1241sq. metres).
   The applicant is requested to clarify whether it is possible to provide car parking to Development Plan Standards to serve both the existing and proposed buildings at this location.

3. The proposed development is considered to be excessive. Lodged plans provide for the construction of a large warehouse which extends 13 metres to ridge level and 10.5 metres to eaves. This exceeds the height of existing industrial buildings at the Cherry Orchard Industrial Estate. It is considered that the proposed development because of its height and bulk would dominate the adjoining Oakcourt Park (bungalow) development and would adversely affect the amenities of residents therein.
   The applicant is requested to submit revised proposals which would rectify this situation. The applicant is requested to consult with the Planning Authority in this regard.

Order No. P/5680/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

Additional Information was submitted on 1st November, 1991.

This included a revised site location map which identified the subject site, the industrial estate road network and adjoining buildings.

With regard to car parking the applicant outlines the various arrangements made to provide parking for the adjoining Snowcrest building (as outlined earlier in report). The submission states that when the "Roshannah" site to the west was being developed it was necessary to arrange car parking with Snowcrest and plans lodged under Reg. Ref. No. 89A-1346 indicated some 46 no. car spaces to serve the Snowcrest building (although this site did not form part of the site of the application). Under that application some 36 no. spaces were approved in a similar layout for the 1491 sq. metre Roshannah building.

Drawings lodged as additional information identify a total of 83 no. car parking spaces to meet development plan standards for existing and proposed buildings onsite. This includes some 46 no. spaces at the Snowcrest building in a layout which corresponds to that illustrated under Reg. Ref. No. 89A/1346, and some 37 no. spaces at the proposed building. It is noted that the circulation areas around these car parking areas are poor and that many of the spaces ~~should could~~ may not be utilised. However, it is considered acceptable in view of the fact that projected employment levels are low i.e. 10 no.

Plans lodged as additional information also provide for revisions to the height and scale of the proposed building.
The building height has been reduced from 13 metres to 10 ~~sq.~~ metres at ridge level and from 10.5 sq. metres to 7.5 metres at eaves over the last two bays to the north of the building (9 metres). This will reduce the visual impact of the building or the bungalow development at Oakcourt Park and also will reduce overshadowing of these properties by the warehouse.

The proposed development is considered acceptable.

I recommend that a decision to **GRANT PERMISSION** be made under the Local Government (Planning and Development) Acts, 1963-1990 subject to the following (10) conditions:-

(conditions attached)

Order No. P/5680/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

CONDITIONS	REASONS FOR CONDITIONS
1. The development to be carried out in its entirety in accordance with the plans, particulars and specifications lodged with the application, as amended by additional information received on 1st November, 1991, save as may be required by the other conditions attached hereto.	1. To ensure that the development shall be in accordance with the permission and that effective control be maintained.
2. That before development commences, approval under the Building Bye-Laws be obtained and all conditions of that approval be observed in the development.	2. In order to comply with the Sanitary Services Acts, 1878-1964.
3. That the requirements of the Chief Fire Officer be ascertained and strictly adhered to in the development.	3. In the interest of safety and the avoidance of fire hazard.
4. That the requirements of the Supervising Environmental Health Officer be ascertained and strictly adhered to in the development.	4. In the interest of health.
5. That the water supply and drainage arrangements, including the disposal of surface water, be in accordance with the requirements of the County Council.	5. In order to comply with the Sanitary Services Acts, 1878-1964.
6. That no industrial effluent be permitted without prior approval from Planning Authority.	6. In the interest of health.
7. That off-street car parking facilities and parking for trucks be provided in accordance with the Development Plan Standards.	7. In the interest of the proper planning and development of the area.
8. That the area between the building and roads must not be used for truck parking or other storage or display purposes, but must be reserved for car parking and landscaping as shown on lodged plans.	8. In the interest of the proper planning and development of the area.

Order No. P/5680/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

CONDITIONS	REASONS FOR CONDITIONS
9. That details of landscaping and boundary treatment be submitted to and approved by Planning Authority and work thereon completed prior to occupation of units.	9. In the interest of amenity.
10. That no advertising sign or structure be erected except those which are exempted development, without prior approval of Planning Authority.	10. In the interest of the proper planning and development of the area.

Order No. P/5680/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

(MG/BB)

Endorsed:- _____
for Principal Officer

_____
For Dublin Planning 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 (10) conditions set out above is hereby made.

Dated: 23rd December, 1991.

_____
ASSISTANT ~~CITY &~~ COUNTY MANAGER

to whom the appropriate powers have been delegated by Order of the Dublin City and County Manager, dated 10th December 1991

DUBLIN COUNTY COUNCIL

REG. REF: 91A/1326.

DEVELOPMENT: Warehouse and water tank.

LOCATION: Cherry Orchard Ind. Estate, Ballyfermot.

APPLICANT: Heathercourt Ltd.

DATE LODGED: 1.11.91.

As the original file was not sent to Roads it is not possible to ascertain the location of site A and B. It appears that the car park for Snowcrest Ltd. had to be relocated in association with a land swap.

Clarification is required to show how this proposal and that of Snowcrest comply with Dublin County Council parking requirements.

It will be necessary for the applicant to make a financial contribution towards the cost of road improvements and traffic management. Amount to be ascertained on submission of the above additional information.

PLANNING DEPT.
DEVELOPMENT CONTROL SECT
Date 10.12.91
Time 3.00

TR/BMcC
9.12.91.

SIGNED: J. Rogers **ENDORSED:** [signature]

DATE: 10/12/91 **DATE:** 10/12/91

Order No. P/4639/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

Donal W. Bergin & Associates,
19 Terenure Road West,
Dublin 6W.

Reg. Ref. 91A/1326
Appl. Rec'd: 9/8/91
Floor Area: 1241sq. m.
Site Area: 2550sq. m.
Zoning:

Report of the Dublin Planning Officer, dated 2 October 1991

This is an application for **PERMISSION** for a warehouse and water tank linking to existing warehouse/offices at Site 14 Cherry Orchard Industrial Estate, Ballyfermot, for Heathcourt Limited.

The proposed site is located to the north of the Cherry Orchard Industrial Estate in an area zoned 'E' - "to provide for industry and related uses" in the Dublin County Development Plan 1983.

The proposed site which has a (stated) area of 2550sq. metres adjoins the site of an existing double warehouse to the west. This site was inspected on 26th September, 1991. The adjoining site to the west (indicated as being within the applicants control) is bounded by palisade fencing. The proposed site is bounded by the boundary wall (c.2m.) to the north. The western boundary is open. There are existing warehouses/industrial buildings to the east. Oakcourt Park, a housing development of ~~single storey~~ semi-detached bungalows is located to the rear (north).

From site inspection it is considered likely that the site location map submitted does not identify the site accurately.

Planning History:

The adjoining units to the west were constructed on foot of a grant of permission under Reg. Ref. No. RA.28, for alterations to previously approved factory, (Reg. Ref. M.1562). The applicants in this instance were Helly Hanson (Ireland) Ltd. and the site area indicated incorporated the site of the current application under Reg. Ref. No. 91A/1326 - this portion of the site was to allow for future expansion and carparking (92 spaces).

Contd/.....

Order No. P/4639/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

Reg. Ref. No. SA.559 refers to a grant of permission to P.D.U. (Irl) Ltd., for an extension to the adjoining units to the east. The site for the purpose of this application extended to within 6 metres of the Helly Hanson premises incorporating the area indicated for car parking in the abovementioned grant of permission - Reg. Ref. No. RA.28. This issue was raised as additional information and the applicants responded by stating that the area in question had been purchased by P.D. U. and that Helly Hansen had purchased an additional area to the west to provide carparking. Condition No. 6 of this grant of permission required that parking be provided to Development Plan Standards for the entire factory and proposed extension. From site inspection it was noted that this extension has been completed but appears unoccupied. The carparking layout to the west of the units as indicated in lodged plans, has not been provided although portion of this area is laid out as hardcore. (Reg. Ref. No. 89A/15.. refers to a grant of permission for a warehouse on the [illegible] alternative parking area to west)

Reg. Ref. No. SA.1202 refers to a grant of permission for an underground storage tank for petrol for Helly Hanson (Ire) Ltd.

Reg. Ref. No. WA.1434 refers to a grant of permission for a single storey extension at the Helly Hanson Unit. Drawings submitted with both of these applications identify the location of the existing warehouse incorrectly.

Reg. Ref. No. WA.1496 refers to a grant of permission for additional extensions to the P.D.U. premises, i.e. adjoining that permitted under Reg. Ref. No. SA.559, (i.e. on part of the site of the current application).

Reg. Ref. No. WA/2057 refers to a subsequent grant of permission for a single storey extension to the side of the Helly Hanson premises.

Reg. Ref. No. 87A/441 refers to a grant of permission for the subdivision of Unit 13 into 2 warehouses and a truck maintenance depot (adjoining unit to east). The site for the subject of this application was smaller than that shown in previous applications, i.e. SA.559, as It extended c.21 metres west of building and does ~~not~~ encroach on the subject site as shown on the site location map. However as stated this drawing may be incorrect. A lesser amount of carparking, i.e. c.87 spaces were shown to serve the proposed development. On site it was noted that the parking spaces to the front of the building have been marked out. The area to the west ~~is~~ has a hardcore surface.

Contd/.......

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

Reg. Ref. No. 90A/2063 refers to a grant of permission for a 2 metre wall forming an enclosure containing 2 condenser units at Unit 14 for Showcrest Services Ltd.

Reg. Ref. No. 90A/335 refers to a grant of permission for alterations to Unit 14A.

The current application provides for the construction of a 2550sq. metre warehouse and water tank. The proposed warehouse is to be linked to the adjoining unit and is to be used as a food storage and distribution depot. Correspondence lodged states that 10 no. people will be employed between this and the adjoining premises.

Lodged plans provide for warehouse building which will extend some 10.5 metres to eaves and 13 metres to ridge level. It exceeds the height of the adjoining building which is shown on drawings as being 6 metres at eaves and 6.5 metres at ridge level.

Lodged plans provide for a part brick/part clad finish to front elevation. The remaining elevations are to have a full clad finish.

Unsolicited additional information lodged on 19th August, 1991, included a site layout map identifying the adjoining houses to the rear. Drawings submitted also indicate the likely overshadowing affect of the proposed building per 11/8/91. This does not impact on adjoining gardens. However, it is considered that the proposed development ~~would~~ could give rise to overshadowing of the rear gardens at Oakcourt Park during spring and autumn.

In any event, the proposed building because of its height and bulk is considered excessive. It exceeds the height of all other industrial buildings in the Cherry Orchard Industrial Estate and is considerably out of scale with the adjoining single storey housing development at Oakcourt Park. It is considered that the proposed development ~~would~~ could adversely affect the amenities of residents at this location.

Contd/.....

Order No. P/4639/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

Lodged plans provide for an area of car parking for c.30 cars around the proposed warehouse. ~~It is noted that this does not provide for adequate circulation areas around the building~~. Furthermore no areas of car parking are identified for the existing building (despite the fact that the proposed site was originally intended as a car parking area for this existing building).

These matters should be clarified by Additional Information.

I recommend that **Additional Information** be requested from the applicant with regard to the following:-

(MG/CM)

Endorsed:- _____ for Principal Officer

_____ For Dublin Planning Officer

Order:-
I direct that ADDITIONAL INFORMATION be requested from the applicant for planning permission as set out in the above report and that notice thereof be served on the applicant.

Dated: 4th October, 1991.

_____ Asst. City & County Manager

to whom the appropriate powers have been delegated by Order of the Dublin City and County Manager, dated 4th October 1991.

Order No. P/4639/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

1. The applicant is requested to clarify whether the site location map submitted with the application is accurate.
From site inspection and a review of the Planning History of the area, the site as indicated appears to encroach on the adjoining ~~Industrial~~ site to the east.
If necessary, the applicant is requested to submit a revised site location map which accurately identifies the subject site, the Industrial Estate road network and the adjoining buildings.

2. From a review of the Planning History of the area, it is noted that the site the subject of the current application, was originally ~~intended~~ as a car parking area to serve the adjoining warehouse building to the west, (Reg. Ref. RA/28).
The current application does not indicate any car parking provision for this adjoining premises which is indicated on drawings lodged as being within the applicants control. A total of 32 no. spaces are indicated at the proposed site. This is less than the 80 no. spaces required to meet Development Plan Standards for a development of this size, (1241sq. metres). ~~Furthermore, circulation isles are of inadequate width~~.
The applicant is requested to clarify whether it is possible to provide car parking to Development Plan Standards to serve both the existing and proposed buildings at this location.

3. The proposed development is considered to be excessive. Lodged plans provide for the construction of a large warehouse which extends 13 metres to ridge level and 10.5 metres to eaves. This exceeds the height of existing industrial buildings at the Cherry Orchard Industrial Estate. It is considered that the proposed development because of its height and bulk would dominate the adjoining Oakcourt Park (bungalows) development and would adversely affect the amenities of residents therein.
The applicant is requested to submit revised proposals which would rectify this situation. The applicant is requested to consult with the Planning Authority in this regard.

SOUTH DUBLIN COUNTY COUNCIL
COMHAIRLE CHONTAE ÁTHA CLIATH THEAS

Bosca 4122,
Lár an Bhaile, Tamhlacht,
Baile Átha Cliath 24.

Telefon: 01-462 0000
Facs: 01-462 0111

PLANNING
DEPARTMENT
P.O. Box 4122,
Town Centre, Tallaght,
Dublin 24.

Telephone: 01-462 0000
Fax: 01-462 0111

Date : 10th November 1994

LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS,1963-1993

Register Reference : 91A/1326/C1

Development : Warehouse and water tank, linking to existing warehouse/ offices.

Location : Site 14 Cherry Orchard Industrial Estate, Ballyfermot.

Applicant : Heathercourt Ltd.,

App. Type : Compliance with Conditions

Dear Sir/Madam,

With reference to the above, I acknowledge receipt of your submission to comply with conditions received on 25/10/94.

Yours faithfully,

.....
for SENIOR ADMINISTRATIVE OFFICER

Donal W. Bergin & Associates,
19 Terenure Road West, Dublin 6W.

19 Terenure Road West,
Dublin 6W.
Telephone: 903360/8/9.
Fax: 903380.

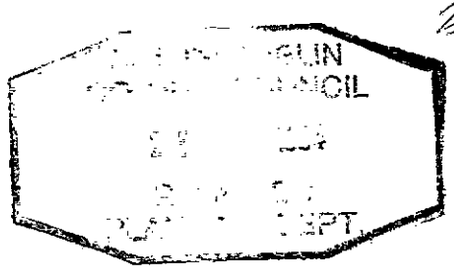
Donal W Bergin & Associates
Consulting Engineers

our reference

your reference

date 24th Oct.,1994.

South Dublin County Council,
Planning Dept.,
P.O.Box 4122,
Town Centre,
Tallaght, Dublin 24.



Re: HEATHCOURT LTD
Site 14, Cherry Orchard Industrial Estate,
Ballyfermot, Dublin.

Register Reference 91A/1326.

Dear Sirs,

Your letter of 13th October to Heathcourt Ltd. refers.

The application for planning permission which was lodged on 9th August 1991, included a set of drawings 9105, 1 - 7 inclusive, setting out the particulars of the proposed development. In particular, drawing no 9105 - 7, "Site Plan & Location Map" showed details of 9 No existing trees of different species both on the south west corner of the existing site and along the road verge frontage. This treatment was continued by the inclusion of one Ash tree on the verge and two ash trees in the south east corner of the proposed site. Due to the site coverage by buildings, parking spaces for car parking, access for fire fighting loading/unloading by goods vehicles and parking thereof, there is no further on-site space for landscaping, other than that which was indicated.

Boundary treatment of the new site was shown on drawing No 9105-7 and consisted of a pallisade fence to the eastern perimeter. Southern and western boundaries are existing. The northern boundary is the road frontage which is basically open plan, as is generally the case on this estate. One access opening was also indicated, leading on to the estate road.

Planning permission was granted on 28th January, 1992.

We enclose a copy of the Site Plan referred to above and trust that these proposals meet with your approval.

Yours faithfully,

D.W. Bergin
DONAL W. BERGIN & ASSOCIATES.

Enc: Drg 9105-7.

Dublin County Council
Comhairle Chontae Atha Cliath

~~Planning Application Form~~/
Bye - Law Application Form

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 (If none, give description sufficient to identify) Site 14 Cherry Orchard Industrial Estate Ballyfermot, Dublin 10.

3. Name of applicant (Principal not Agent) Heathcourt Ltd.
Address 25, Adelaide Street, Dunlaoghaire Co. Dublin Tel. No.

4. Name and address of person or firm responsible for preparation of drawings Donal W. Bergin & Associates 19 Terenure Rd West, Dublin 6W Tel. No 903368

5. Name and address to which notifications should be sent As in 4 above.

6. Brief description of proposed development Warehouse with outloading Docks, Water Tank etc.

7. Method of drainage Piped 8. Source of Water Supply Dublin Co. Council.

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. N/A
(b) Proposed use of each floor N/A

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 2550 Sq. m.
(b) Floor area of proposed development 1241 Sq. m.
(c) Floor area of buildings proposed to be retained within site None Sq. m.

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

BYE LAW APPLICATION
REC. No. N61046

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:
FULLY

£4343.40

15. List of documents enclosed with application. Specifications, Calculations Schedule of Areas, Cheque for £4343.40
2 Sets Drawings No's: 9105-1A,2B,3B,4B,5A,6B,7A,9,10,11,12.

16. Gross floor space of proposed development (See back) 1241 Sq. m.
No of dwellings proposed (if any) N/A Class(es) of Development
Fee Payable £ Basis of Calculation £3.50 /M²
If a reduced fee is tendered details of previous relevant payment should be given

Signature of Applicant (or his Agent) [signature] Date 5th MARCH 1992.

FOR OFFICE USE ONLY
Application Type
Register Reference 91A/1326
Amount Received £
Receipt No
Date 2-22-92
BBL

RECEIVED
06 MAR 1992
REG. S.

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 m² (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 m² (min. £70.00)
D	Agricultural Buildings/Structures	£1.00 per m² 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.

RECEIPT CODE

COMHAIRLE CHONTAE ÁTHA CLIATH

PAID BY — DUBLIN COUNTY COUNCIL

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

CASH
CHEQUE
M.O.
B.L.
I.T.

BYE LAW APPLICATION

REC. No. N 61046

£ 4343.40

Received this 6th day of March 19..

from Snowcrest Services Ltd,

the sum of four thousand three hundred & forty three Pounds

forty Pence, being fee for

bye-law application at [illegible] Cherry [illegible]

Ind Estate

[illegible] Cashier

S. CAREY
Principal Officer

RECEIPT C

COMHAIRLE CHONTAE ÁTHA CLIATH

PAID BY — **DUBLIN COUNTY COUNCIL**

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

BYE LAW APPLICATION

REC. NO. N 61046

CASH
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M.O.
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Received this 6th day of March 1992

from Snowcrest Services Ltd,

the sum of four thousand three hundred & forty three — Pounds

forty — Pence, being fee for bye-law application at Site 14 Cherry Orchard Ind. Estate

Noeleen Deane Cashier

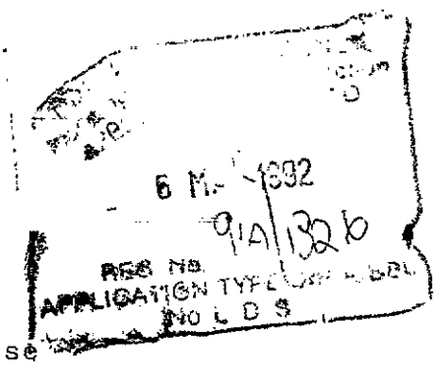
S. CAREY
Principal Officer

19 Terenure Road West,
Dublin 6W.
Telephone: 903360/8/9.
Fax: 903380.

Donal W Bergin & Associates
Consulting Engineers

our reference DWB/NB your reference date 4th March, 1992.

Dublin Co. Council,
Planning Dept.,
Irish Life Centre,
Lower Abbey Street,
Dublin 1.



RE: HEATHCOURT LTD
Building Bye Law Approval for Warehouse & Water Tank at Site 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10.

Dear Sirs,

We hereby formally apply to Dublin County Council for Building Bye Law Approval, under the Local Government (Planning & Development Acts 1963-1983).

A Grant of Permission was issued on 28th January 1992 Decision Order P/5680/91 - 20.12.91, Register Reference No 91A/1326.

Yours faithfully,

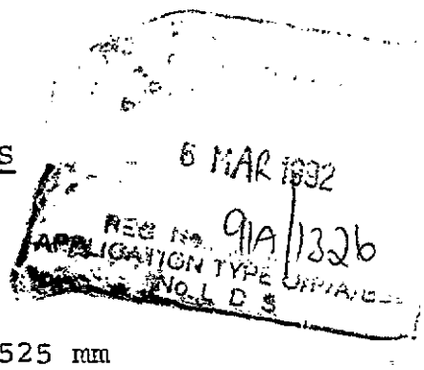
D.W. Bergin.

DONAL W. BERGIN & ASSOCIATES.

Encls:
1 Cheque for £4343.00.
2 Schedule of Areas.
2 Application Forms.
2 Specifications.
2 Calculations.
2 Sets Drgs Nos: 9105-1A, 2B, 3B, 4B, 5A, 6B, 7A, 9, 10, 11, 12.

WAREHOUSE FOR
HEATHCOURT LTD
SITE 14 CHERRYORCHARD IND. ESTATE
BALLYFERMOT DUBLIN 10

SCHEDULE OF FLOOR AREAS



MAIN BUILDING	Length:	43525 mm
	Width:	27850 mm
	Area:	1212.17 m^2
LINK BUILDING	Length	6500 mm
	Width	4430 mm
	Area	28.00 m^2
TOTAL AREA		1212.17 + 38.00 m^2
		1240.97 Sq.m.
PLANNING FEE		1240.97 x 3.50 = £4343.40.

HEATHCOURT LIMITED

WAREHOUSE AT CHERRY ORCHARD

INDUSTRIAL ESTATE

SPECIFICATION

Architect
D.W. Bergin,
19 Terenure Road W.,
Dublin 6W

Tele: 903369
Fax: 903380

Consulting Engineers
Molony & Millar,
19 Terenure Road W.,
Dublin 6W

Tele: 903368
Fax: 903380

SPECIFICATION FOR CONCRETE AND REINFORCED CONCRETE

1 GENERAL

1.1 The structural elements of the Contract have been designed in accordance with relevant Irish and British Standards and Codes of Practice.

2 MATERIALS

2.1 GENERAL:

All materials shall comply in all respects with the requirements of the appropriate Irish or British Standard.

Methods for Specifying Concrete:	BS.5328
Ordinary Portland Cement:	IS.1
Aggregates:	IS.5 or BS.882
Plain & deformed hot rolled mild steel bars:	BS.4449
Deformed hot rolled high-yield bars:	BS 4449
Cold Worked, Indented or Square Twisted:	BS.4461
Hard Drawn Steel Wire Fabric Mesh:	BS.4483

Materials used in the work shall be new, of the qualities and kinds specified herein and equal to approved samples. Delivery shall be made sufficiently in advance to enable further samples to be taken and tested if required. No materials shall be used until approved and materials not approved shall be immediately removed from the works at the Contractor's expense.

As far as is practicable materials of Irish origin or manufacture shall be used. Where it is intended to use non-Irish materials prior approval shall be received from the Engineer.

2.2 CEMENT:

The cement shall be normal setting Portland Cement of an approved brand and shall comply in all respects with IS.1:1987. The cement shall be delivered to the site of the works in 50 kgs paper bags with an unbroken seal fixed by the makers and marked with their brands. Alternatively, the cement may be delivered to the site in vehicles specially designed for bulk cement transport.

All cement shall be fresh when delivered. Cement of different types shall not be mixed one with another. Consignments shall be used in order of delivery. With each delivery the Contractor shall send the Engineer a memorandum of the quality delivered, its type and the Manufacturer's Test Certificate.

2.3 STORAGE OF CEMENT:

All cement shall be properly stored in a weatherproof shed with floor raised above ground level and having a clear space

of at least 300 mm between the underside of the floor beams and the ground surface. Bags shall not be stacked more than 1.50 M high.

The use of cement in bulk shall be subject to the Engineer's approval of the source, method of transport, method of unloading and storing the cement on site and arrangement for delivering the cement to the mixer. If the Engineer's approval is given for the supply and storage of cement in silos, the Contractor shall include in his rates for any additional costs as a result.

The Contractor shall keep and make available to the Engineer or his representative a record of the date, amount, storage and location of each delivery of cement and of the location in which it was used. He shall also similarly make available a record of the daily use of cement and of the store from which it was drawn so as to show the stock of cement at all times, and he shall provide facilities for checking the stock of cement when required.

Cement shall be delivered in quantities sufficient to ensure that there is no suspension or interruption of the work of concreting at any time. Cement which shall have become injuriously affected by damp or other causes shall be removed from the site immediately on the discovery of such damage.

2.4 TESTING CEMENT:

The Contractor shall, if required, supply and deliver at his own expense to a Nominated Testing Authority, samples of cement consisting of not less than 4.5 kgs. Each such sample shall be packed in a clean tin, the lid of the tin shall be securely sealed by soldering in such a manner as to prevent leakage of cement and ingress of moisture.

2.5 AGGREGATES GENERALLY:

The aggregates shall consist of fine and coarse aggregates respectively and shall comply with IS.5:1974.

Materials used as aggregates shall be chemically inert, strong, hard, durable, of limited porosity and free from adhering coatings, clay lumps, coal residues and organic or other impurities that may cause corrosion to the reinforcement or may impair the strength or durability of the concrete.

2.6 FINE AGGREGATES:

The fine aggregates shall be natural pit sand or freshwater sand free from clay, silt, shells, flat particles and organic matter, and shall pass through a sieve of square mesh 5 mm wide in the clear and shall be graded from the largest to the smallest size particles, to the satisfaction of the Engineer, the particles of the sand shall be sound and strong.

2.7 COARSE AGGREGATES:

The coarse aggregates may be either clean, hard, crushed stone or clean gravel free from dirt and impurities. In either case, all of it shall be coarser than 5 mm (retained on 5 mm screen) and shall be graded from this size to a maximum of 20 mm.

2.8 USE OF GRAVELS:

If specially suitable gravels are available, the Engineer, at his discretion, may allow the use of a gravel from which particles greater than the maximum specified size have been removed by a screen but from which the fines less than 5 mm have not been removed.

2.9 SHAPE OF PARTICLES:

The shape of the particles of coarse aggregate shall be as nearly cubical if of crushed stone, or spherical if of gravel, as possible.

2.10 GRADING OF AGGREGATES:

All coarse aggregates shall be graded to the satisfaction of the Engineer between the sizes specified above. The particles of the coarse aggregate shall be sound and strong. All or part of the coarse aggregate shall be washed if the Engineer decides that washing is necessary to free it from clay or dust or other deleterious matter.

The grading of the fine and coarse aggregates shall be such that when they are mixed in the proportions decided for each class of concrete, the grading of the mixed aggregate shall be suitable for making a dense concrete of appropriate workability with the proportions of cement and water with which the aggregate is to be used. The proportions of fine to coarse aggregate to be used in each class of concrete shall be decided by the Engineer.

2.11 STORAGE OF AGGREGATES:

The aggregates shall be stored on site so that:-

a) Intermingling of the materials in separate stockpiles is not possible.

b) Segregation of the stockpiles themselves does not occur.

c) The stockpiles are not contaminated in any way from the ground or rubbish or any other cause.

The Contractor shall submit his proposals for complying with this clause to the Engineer for approval and shall implement these on receipt of said approval before bringing aggregates onto site.

2.12 TESTING AGGREGATES:

The Contractor shall, if required, supply and deliver, at his expense, to a Nominated Testing Authority, samples of the aggregate which the Contractor proposes to use, consisting of not less than 23 kgs weight of fine aggregate, and not less than 46 kgs weight of coarse aggregate. It is the Contractor's responsibility to ensure that the subsequent deliveries of approved aggregate conform to the grading analysis of the approved samples.

2.13 WATER FOR MIXING:

The water used in making concrete shall be clean and fresh and free from deleterious amounts of organic or inorganic matter in solution of suspensions. Water shall be obtained from a public supply where possible or otherwise from a source approved by the Engineer. No sea-water, river-water or water from excavation shall be used. Only water of approved quality shall be used for washing out shuttering, curing concrete and similar purposes.

2.14 ADDITIVES:

Additives shall not be used unless specific approval is given by the Engineer.

3 CONCRETE MIXES

3.1 CONCRETE STRENGTH:

The three classes of concrete referred to on the Drawings or specified in the Bill of Quantities as mix grades C15, C20 and C30 shall be prepared in accordance with the following table:-

MIX GRADE	LOCATION	CHARACTERISTIC CRUSHING STRENGTH Works Test Cubes 7 Days	28 Days
C15	Blinding	10.0 N/mm	15.0 N/mm
C20	Where Specified	15.0 N/mm	20.0 N/mm
C30	All Reinforced Concrete	20.0 N/mm	30.0 N/mm

3.2 MIX DESIGN:

The preferred basis used for specifying the production of concrete mixes is the designed mix method. However, where a Contractor wishes to produce concrete on the basis of prescribed mixes, a specification will be given for this

purpose. Methods of specification are in accordance with BS.5328.

Grades of concrete to be C15, C20 and C30, having characteristic strengths of 15 N/mm , 20 N/mm and 30 N/mm respectively.

Nominal maximum size of aggregates to be 20 mm as described for different elements.

Minimum cement content to be 240 kg/M , 290 kg/M and 320 kg/M for concrete grades C15, C20 and C30 respectively.

Where waterproof concrete is specified, it shall be grade C30 with a minimum cement content of 360 kg/M .

Where mix 30N10 is to be used, it shall have a minimum cement content of 360 kg/M .

3.3 READY-MIXED CONCRETE:

The prior approval of the Engineer may be given to the Contractor to use concrete supplied from one particular depot of a ready-mixed concrete manufacturer. Concrete manufactured in this manner shall be made to the requirements of this specification and the Contractor shall make the requirements of the entire specification known to the supplier. The Contractor shall be responsible at all times for the standard and quality of the concrete placed within the formwork. Should the use of ready-mixed concrete result in a lower quality concrete than required, approval may be withdrawn at the discretion of the Engineer and the Contractor shall be responsible for any costs arising because of such action.

All reasonable opportunity and facility to inspect the constituent materials and the manufacture of concrete and to take any samples or to make any tests shall be afforded to the Engineer. All such inspection, sampling and testing shall be carried out with the minimum of interference with the process of manufacture and delivery.

The temperature of the concrete at the place and time of delivery shall be at least 5 C and shall not be greater than 30 C.

Delivery shall be accompanied by delivery dockets for each batch of concrete. Delivery dockets shall contain the following information, where relevant:-

a) Name of ready-mixed concrete plant

b) Serial number of delivery docket

c) Date

d) Delivery truck number

e) Name of purchaser

f) Name and location of point of delivery

g) Specified grade of concrete or such other information as will identify the concrete with the job specification.

h) Specified workability

i) Type of cement and aggregate

j) Maximum aggregate size

k) Amount of concrete in cubic metres

l) Time of introduction of cement to the aggregates and water

m) Type, name and quantity of admixture

n) Any other detail requirements as agreed

3.4 PRELIMINARY TRIALS:

These shall be entirely the Contractor's responsibility.

3.5 TRIAL MIXES:

The Contractor shall make up mixes using samples of aggregates and cement mixed in the plant proposed for concreting to demonstrate the adequacy of his proposed mix and shall submit four cubes for testing at seven days to a Nominated Testing Authority.

3.6 PUMPED CONCRETE:

Concrete may be pumped with the Engineer's permission. The allowable slump for pumped concrete shall not be greater than 60 mm at point of placement. The Engineer at his discretion may require a standby pump for critical pours.

Proposals for mix design to be submitted to the Engineer for approval.

3.7 WATER ADDITION:

No addition of water on site is allowed to ready-mixed concrete except with the explicit direction of the Engineer.

4 REINFORCEMENT

4.1 GENERAL:

Reinforcement should comply with the requirements of BS.4449, BS.4461, BS.4482 and BS.4483. Reinforcement shall be cut and/or bent in accordance with BS.4466.

The Contractor shall furnish for all steel reinforcement the Manufacturer's Certificate of Test and Certificates of Origin in advance of the steel being delivered to site.

4.2 STEEL FABRIC REINFORCEMENT:

Steel fabric reinforcement shall comply with the requirements of BS.4483 for hard drawn steel wire.

4.3 STORAGE OF REINFORCEMENT:

Reinforcement shall be stored in properly constructed racks at least 300 mm above the ground.

The Contractor shall ensure that all metal reinforcement be free from rust, oil, grease, or any other harmful matter whatsoever immediately before placing the concrete.

Reinforcement either damaged, contaminated or not complying with all the requirement of this specification, shall be rejected, removed from site and replaced immediately at the Contractor's expense.

4.4 TESTING REINFORCEMENT:

Samples from each consignment of steel reinforcement may be selected by the Engineer or his representative and sent to a Nominated Testing Authority at the Supplier's expense.

A minimum of one test shall be undertaken for each consignment of ten tonnes or less of reinforcement delivered to the site. One specimen length shall be cut from each diameter size and identification marks shall be put on each specimen before delivery is made to an approved Testing Station.

5 FORMWORK

5.1 CONTRACTOR'S RESPONSIBILITY:

In all cases the Contractor shall be responsible for the adequacy of any formwork to the purpose for which it is intended.

5.2 FORMWORK:

Formwork shall be constructed of sound, well-cleaned materials of such quality and strength as will ensure rigidity throughout the placing, ramming, vibration and setting of the concrete without deflection and maintain the tolerances specified. It shall be so constructed that it can be removed without shock or vibration to the concrete. All joints shall be made sufficiently tight to prevent any leakage of grout. Ties shall be subject to approval. Prior to the commencement of concrete construction the Contractor shall provide details of the formwork proposed for use in the different parts of the works.

Forms shall be thoroughly cleaned and free from sawdust, shavings, mud or other debris by hosing with water. Temporary

openings shall be provided in the forms to drain away water and rubbish.

Forms shall be removed in such a manner as will not injure the concrete and no formwork shall be removed before the concrete has sufficiently set and hardened to avoid any damage to it. The following minimum periods shall elapse before striking formwork for the different elements at the given temperatures:-

ELEMENT	TEMPERATURE 16 C	7 C	Below 7 C
Vertical Face of Columns Walls and Beams	1 Day	1 Day	2 Days
Soffit to Slabs	4 Days	7 Days	
Props to Slabs	11 Days	14 Days	
Soffit to Beams	8 Days	14 Days	
Props to Beams	15 Days	21 Days	

Where it is intended to use accelerated curing or slip forming, the periods shall be agreed with the Engineer. Compliance with the above requirements shall not relieve the Contractor of the responsibility for any damage caused by incorrect removal.

5.3 MATERIALS:

Formwork shall be constructed of timber, pressed metal or other approved material.

In general, all timber shall be new at the commencement of the work and shall be renewed where necessary or where directed by the Engineer.

5.4 FORMWORK TYING DEVICES:

The materials and position of any ties passing through the concrete shall be approved by the Engineer. The whole or part of the tie shall be capable of being removed so that no part remaining embedded in the concrete shall be nearer the surface of the concrete than the specified thickness of cover to the reinforcement. Any holes left after the removal of ties shall be filled with mortar or concrete of approved composition.

In the case of waterproof structures, clause 26 of BS.5337:1976 is to apply.

5.5 STRIKING:

Formwork shall be removed without shock or vibration that might damage the concrete. Before soffit forms and props are removed the concrete shall be exposed by removal of the side forms, or otherwise, in order to ensure that it has hardened sufficiently.

5.6 RECORDS:

The Contractor shall keep a record of the date on which each section is concreted and the date of removal of formwork.

The Contractor shall be responsible for any injury to the work and any consequential damages caused by or arising from the removal of formwork and supports. Any advice, permission or approval given relative to the removal of same shall not relieve the Contractor from the responsibility so defined.

5.7 EXPANSION JOINTING MATERIAL:

Expansion jointing material shall be approved bitumen impregnated cork based board or other approved material.

5.8 SEALING COMPOUND FOR EXPANSION JOINTS:

The joint sealing compound shall be 'hot-bitumen sealer' and two-part polysulphide sealing compound to BS.4255, or other approved material.

6 WORKMANSHIP - CONCRETE

6.1 QUALITY CONTROL:

The Contractor shall be responsible for the standard of quality control achieved over the production of concrete. However, the Engineer may order additional tests to be carried out at his absolute discretion for the proper control of quality and consistency. A copy of all test results shall be sent by the Testing Authority to the Engineer. If cube results do not comply with the specification the element to which they refer is to be assessed as directed by the Engineer, whose decision on the matter shall be final.

6.2 SLUMP TESTS:

The Contractor shall provide a standard cone with tamping rod (as clause 7 of BS.1881) for determining the consistency of the concrete. When a suitable mix to give good workability, the required strength and surface finish has been determined its consistency shall be maintained throughout the corresponding parts of the work by conducting from time to time a standard slump test.

Generally a slump of between 25 mm and 50 mm should prove satisfactory. However, an average slump of 25 mm maximum should be aimed at, particularly for normally reinforced concrete sections compacted by vibration such as in floors, columns, beams and roofs.

For pumped concrete clause 3.6 applies.

6.3 TESTING:

Testing of concrete shall comply with the requirements of BS.1881 and the conditions as set out in clauses 6.8.2.2 and 6.8.2.3 shall apply unless otherwise directed by the Engineer.

The Contractor shall provide a separate room or area, size about three metres square, to be used as a site laboratory. This shall be properly staffed and equipped with the following:-

12 no. 150 mm x 150 mm (6") steel cube moulds with base plates

1 no. Tamping Road for the above

2 no. Slump Cones with Tamping Rod

1 no. 28 lbs. Balance

Aggregate Water Content Estimating Apparatus

The Contractor shall be responsible for supplying this equipment and all necessary labour and materials in connection with the specified site tests.

The Contractor shall make the site laboratory and equipment available to the Engineer as required.

The Contractor shall cast 150 mm (6") test cubes in machined steel moulds. The cubes shall be removed from the moulds 24 hours after casting and sent to the laboratory of a Nominated Testing Authority. A minimum of four cubes shall be taken from the concrete poured each day, two for test at 7 days and two for test at 28 days. The cubes shall be stored on site in a heated water storage tank. The number of cubes may be reduced or increased as directed by the Engineer.

If the test results indicate that the specified requirements have not been or may not be complied with, the Contractor shall advise the Engineer accordingly and shall submit for his approval proposals for improving the standard of quality control before proceeding with concreting.

6.4 PROPORTIONING OF CEMENT AND AGGREGATES:

Cement shall be proportioned by weight and unless approved weighing equipment is provided the batches shall contain one or more whole 50 kgs. bag. The quantities of fine and coarse aggregate shall be determined separately by weight.

6.5 BULKING OF FINE AGGREGATE:

The Contractor shall supply suitable equipment for determining the bulking effect of moisture on the fine aggregate. Frequent tests of the bulking of the sand shall be made and the mixes adjusted as required. All proportioning shall be carried out in such a manner that the proportions of the materials may be checked easily.

6.6 MIXING:

The concrete shall be thoroughly mixed in an approved mechanical mixer of the batch type, having a minimum capacity of one bag batch. The water shall not be admitted to the drum of the mixer until all the cement and aggregate constituting the batch are in the drum.

Mixing shall continue until the concrete is uniform in colour and for not less than two minutes after all the materials and water are in the drum. The entire contents of the drum shall be discharged before recharging. On ceasing mixing for any considerable length of time the drum shall be thoroughly cleaned by flushing with water.

Subsequent to mixing being completed no further water is to be added.

6.7 PARTLY SET CONCRETE:

Partly set or retempered concrete shall not be used. All partly set or excessively wet concrete shall not be used and shall be immediately removed from the site. On ceasing mixing concrete must be placed before the lapse of 20 minutes.

6.8 TRANSPORTING:

Concrete shall be transported from the mixer to the place of final deposit as rapidly as possible by methods which will prevent the segregation or loss of the materials. It shall be placed in its final position before setting has commenced and shall not subsequently be disturbed. In no case shall concrete be placed after 20 minutes have lapsed since the addition of water to the mix. Where concrete is conveyed by chuting the plant shall be of such size and design as to ensure practically continuous flow in the chute. Chutes shall be of metal or metal lined and the slope shall be such as will allow the concrete to flow slowly and without segregation of the materials. The delivery end of the chute shall be as close as possible to the point of deposit. When the operation is intermittent the chute shall discharge into hopper. The chute shall be clean and free from adhering materials and shall be thoroughly flushed with water before and after each run.

6.9 SPECIAL METHODS:

The Contractor may consider that the use of special equipment or plant may be necessary to enable him to convey the concrete from the mixing point to where it is to be finally deposited. The Engineer shall be advised of these requirements and his written approval shall be obtained to the proposals.

Where these proposals include the use of concrete pumping equipment the Contractor shall provide satisfactory proof that the concrete mix as specified for its position in the works can be satisfactorily handled by this method without harm to its workability during placing and to its final strength. The Contractor shall also ensure that the equipment is adequate for the needs of the Contract and that suitable alternatives are available in case of accidental breakdown or other stoppage. He shall also provide information concerning washing out and cleaning of the equipment in use on the works.

6.10 PLACING:

Special care shall be taken in filling the forms to work the coarser material away from the face of the form and to force the concrete under and around the reinforcement. The concrete shall be worked with a spade, pointed steel rod, or other satisfactory implement, or vibrated in such a manner as to bring a layer of mortar in contact with the forms and reinforcement and to prevent the formation of pockets of air.

No concrete shall be placed in forms or on work in or on which water is lying without the permission of the Engineer. A record shall be kept on the site of the date and time of placing the concrete in each portion of the structure. Where plain or reinforced concrete foundations of floors are founded on earth, a concrete screed of mix grade C15 and not less than 50 mm thick shall first be spread on the ground.

Concrete while being placed shall be rammed, tamped, or mechanically vibrated to form a dense material with all surfaces free from honeycombing and other blemishes. The concrete shall be placed directly in its permanent position and shall not be worked along the shuttering to that position. A competent steel fixer shall be in attendance during all concrete pours to correct any reinforcement displaced by the concreting operation.

6.11 SURFACE FINISHES:

The surface finishes of all in situ concrete members shall be left free from voids, honeycombing, stains, fins, lippings, lining joint marks, nail and screw marks, raised grain marks, air holes or any other imperfections and shall be of a uniform colour tone and surface texture.

Honeycombed surfaces shall be made good immediately upon removal of shuttering, and superficial water and air holes shall be filled in to maintain a uniform texture throughout,

fins and other irregularities are to be rubbed down immediately after removal of shuttering.

The top surface of a slab which it is intended to screed, shall be levelled and floated while unset to a smooth finish at the levels or falls as shown on the Drawings. The floating shall be done so as not to bring an excess of mortar to the surface of the concrete.

Where screeding is not intended, the surface shall be smooth finished with a scraping straight edge bull float and when the concrete has stiffened sufficiently, it shall be power-floated by a skilled operator using machinery approved by the Engineer.

The accuracy of floor construction and surface finishing operations shall be such that it shall be possible to place floor covering materials without providing any special making up for underlaiment.

Samples of surfaces of adequate sizes (preferably incorporating a horizontal and vertical joint) shall be made available and agreed before work commences.

Surface Finishes:-

Type A Concealed concrete faces shall be left as from the shuttering. The concrete surfaces shall be smooth with true, clean arrises, and shall be free from honeycombing, voids and other blemishes.

Type B This finish is for concrete which it is intended to leave exposed. After removal of forms all imperfections shall be made good, the surface shall be thoroughly washed down and all blemishes shall be filled and finished to produce a surface matching the concrete in colour and texture.

Type C Concrete which it is intended to render shall be Type A with the surface roughened up by approved means to form a key.

Type D This finish is obtained by producing a Type B finish on thoroughly compacted high quality concrete cast in properly designed forms. The surface is then improved by carefully removing all fins and other projections, thoroughly washing down and then filling noticeable surface blemishes with a cement and fine aggregate paste. The finished concrete surface is not to be permanently stained or discoloured.

Type E A high aesthetic quality finish is to be obtained by the use of specially prepared formwork constructed to the requirements of detailed drawings. Concrete surfaces are to be worked as described on the Drawings.

Sample panels are to be prepared for all surface types in advance of construction.

6.12 COMPACTION:

All reinforced concrete shall be thoroughly compacted by mechanical compaction. Particular care shall be taken to ensure that successive layers of fresh concrete are well knitted together.

The Contractor shall supply mechanical vibrators and unless otherwise specified by the Engineer shall deploy them in sufficient number on all structural concrete work. The number and type shall be approved by the Engineer and shall be operated at a frequency of not less than 6000 cycles per minute. Vibrators shall not be used to work the concrete along the forms, or in such a way as to damage formwork or other parts of the structure, or displace the reinforcement or other embedded items. Immersion vibrators shall be withdrawn slowly to prevent the formation of voids. Vibrators attached to the formwork will not be allowed unless authorised in writing by the Engineer prior to the operation.

6.13 CONSTRUCTION JOINTS:

The Contractor shall make due allowance for providing all necessary construction joints and for shuttering as may be required, including all cutting of shuttering to accommodate protruding reinforcing bars.

Construction joints shall be formed where shown on the Drawings or in positions agreed with the Engineer prior to commencement of concrete construction works. Concrete shall not be allowed to run to a feathered edge and vertical joints shall be formed against a stop board. Top surface of concrete layers shall be reasonably flat. Kickers shall be not less than 150 mm high and construction of kickers shall be incorporated with a lower pour.

The details and positions of all movement joints and special requirements in relation to construction joints shall be shown on the Structural Drawings.

The position and arrangement of construction joints shall be predetermined and agreed with the Architect and the Engineer and shall be formed at right angles to the general direction of the member and provided with joggles where possible.

Vertical construction joints shall be formed by the insertion of rigid forms.

At construction joints the surface film of the first placed concrete shall be removed whilst the concrete is still green to expose the aggregate by either:-

a) a fine water spray, or
b) air and water assisted by light brushing where necessary.

Before concreting is resumed, the joint surface shall be either:-

a) cleaned without re-wetting, or
b) washed down with clean water and left damp.

The concrete shall then be placed and thoroughly compacted against the joint surface either:-

a) without the addition of mortar, or
b) after a thin layer of cement grout or sand and cement mortar has been well brushed into the joint surface.

6.14 EXPANSION JOINTS:

Expansion joints, contraction joints, hinges or other permanent structure joints shall be provided in the positions and of the form described in the Drawings and elsewhere.

6.15 CUTTING HOLES, ETC:

No tampering with finished concrete, whether by cutting holes or otherwise, by other trades shall be allowed without the written approval of the Engineer, or unless otherwise specified. In places where pipes, channels, and the like are required to pass through floors, walls, etc., the Contractor shall put suitable forms in place during the work of concreting. After the pipes and channels have been placed in position, all such openings shall be properly filled, closed and finished with concrete grade C30.

6.16 CURING:

Freshly placed concrete is to be kept moist for 7 days during normal weather.

Concrete which is not protected by formwork shall be covered with a layer of sacking, canvas, sand, polythene sheeting or other approved material.

During cold weather, when the temperature is below 5.6 C (42 F) all concrete shall be protected against frost damage for a period of time and in a manner to be agreed with the Engineer.

The Contractor may, with written approval from the Engineer, make use of surface sealers which prevent evaporation of the contained water.

6.17 PROTECTION:

No walking, wheeling traffic or shock shall be allowed on the concrete until the Engineers gives permission.

Concrete placed below ground shall be protected from falling earth/debris during and after placing. Concrete placed in ground containing deleterious substances shall be kept free from contact with such ground and with water draining therefrom during placing and for a period of 3 days or as otherwise instructed thereafter. The ground water around a structure below the ground shall be kept to an approved level by pumping or other approved means to prevent flotation.

Approved means shall be taken to protect immature concrete from damage by debris, ice, excessive loading, vibration, deleterious ground water, mixing with earth or other materials, flotation and other influences that may impair the strength and durability of the concrete.

6.18 COLD WEATHER CONCRETING:

No concrete work shall be carried out when the temperature is below 2.2 C (36 F) on falling thermometer or below 1.1 C (34 F) on a rising thermometer except in special circumstances with the approval of the Engineer. No concrete shall be made from frozen materials.

In such circumstances, the aggregate must be unfrozen and free of ice and the mixing water heated and all precautions taken to the satisfaction of the Engineers to ensure that the temperature of the concrete when placed is not less than 4 C (40 F) and that the temperature shall be maintained above 0 C (32 F) until the concrete has set and is thoroughly hardened.

No salt or other chemicals shall be used to prevent freezing of concrete aggregates.

Any concrete which has been damaged by frost shall be removed and replaced by sound concrete at the Contractor's expense.

Any concrete not adequately protected against frost or suspected to be damaged by frost shall not have fresh concrete placed on or against it until permission in writing is given by the Engineer.

The placing of concrete may be prohibited at any time if, in the opinion of the Engineer, conditions are unsuitable or the proper precautions are not being taken.

The Contractor shall supply an accurate maximum and minimum thermometer and hang it in an approved position on site. Aggregates that have been exposed to frost shall not be used until completely thawed. All concrete placed during cold weather or when a frost is predicted or is likely to occur or occurs contrary to expectation shall be protected from freezing by approved means.

If any concrete is found to be defective by reason of frost, faulty quality, poor workmanship, or reinforcing bars omitted or not in their correct place or faulty shutters or from any other cause whatsoever, it shall be at the sole discretion of the Engineer to have it removed and replaced by sound concrete or otherwise dealt with as he may consider reasonable and at the Contractor's expense.

6.19 WATER REPELLENT CONCRETE:

When the use of water repellent concrete is specified, it shall be the Contractor's responsibility to ensure that the resulting construction is watertight. If it is not, the Contractor shall carry out at his own cost all necessary

remedial measures which the Engineer requires. All construction joints shall be made with an approved water-bar and in positions previously agreed with the Engineer.

7 WORKMANSHIP - REINFORCEMENT

7.1 BENDING:

Steel reinforcement shall be carefully formed to dimensions indicated on the Drawings. Cold bends shall be made around a pin having a diameter or size of four times the least dimension of the reinforcing bars. Steel reinforcement shall not be bent or strengthened in a manner which would injure the material. Bars with kinks or bends not shown on the Drawings shall not be used. Heating of reinforcement will not be permitted except when the entire operation is approved. No addition has been made to reinforcement schedules for tying wire or spacers, which are deemed to be included in the rates.

7.2 PLACING:

Steel reinforcement shall be accurately placed in the positions shown on the Drawings and secured against displacement by using annealed iron wire or not less than No.18 gauge or suitable clips at intersections, and shall be supported by concrete or metal spacers or metal hangers. Bars parallel to the faces of any part of the structure shall be embedded a clear distance of not less than 50 mm from the face except where otherwise shown on the Drawings.

The Contractor shall take particular care to ensure that the arrangement of reinforcing bars is correct in every respect and that bars are temporarily fixed in position and so wired together to prevent displacement during the process of concreting. The binders, stirrups, or spacing bars shall be so taut that the main bars shall be properly braced in every direction and all main reinforcement shall be temporarily supported during the process of concreting so that requisite cover may always be obtained. No reinforcement shall be placed unless cut and marked strictly in accordance with the Engineer's Drawings and Schedules.

7.3 ENGINEER TO APPROVE REINFORCEMENT BEFORE POURING:

Concrete must not be placed until the reinforcement has been checked and approved by the Engineer or his representative.

7.4 SPLICING:

Splices of reinforcement shall not be made at points of maximum stress without approval. Splices where permitted shall provide sufficient lap to transfer the stress between bars in bond and shear, and in no case shall the lap be less than fifty times the diameter of the bars being spliced, unless otherwise shown on the Drawings.

7.5 WELDING:

No welding of reinforcement will be permitted unless first approved by the Engineer.

8 WORKMANSHIP - FORMWORK

8.1 DESIGN OF FORMWORK:

If the Engineer so requires, the designs for the formwork shall be submitted for approval before construction.

8.2 REQUIREMENTS FOR FORMWORK GENERALLY:

The formwork shall be true to the required shapes and sizes, location, levels, alignments and strong enough to withstand without appreciable deflections all wind loads and the operations incidental to placing and maturing of the concrete. All joints shall be sufficiently tight to prevent loss of liquid from the concrete.

Formwork faces in contact with the concrete shall be free from adhering grout, projecting nails, splits or other defects. Joints shall be sufficiently tight to prevent the formation of fins or other blemishes.

Faulty joints shall be caulked. Where described on the Working Drawings or elsewhere, the position and direction of the joints shall be as so described. Openings for the inspection of the inside of formwork and for the escape of water used for washing shall be formed so that they can be conveniently closed before placing the concrete.

Connections shall be constructed to permit easy removal of the formwork and shall be either nailed, screwed, bolted, clamped, wired or otherwise secured so as to be strong enough to retain the correct shape during consolidation of the concrete. Bolt holes in concrete shall be made good after removal of the bolts. Wire ties passing through the concrete shall be used only where approved and the ends of the wires shall be concealed and measures taken to prevent rust stains on the concrete.

Formwork shall be true to line and braced and strutted to prevent deformation under the weight and pressure of the wet concrete constructional loads, wind and other forces. The deflections shall not exceed 3 mm. Bottoms of beam boxes shall be erected with an upward camber of 6 mm for each 3 metres of span. The formwork for beams and slabs shall be erected so that the formwork on the sides of the beams and of the soffits of slabs can be removed without disturbing the beam bottoms. Repropping of beams used shall not be done except when, with the approval of the Engineer, props be reinstated in anticipation of loads in excess of the design load. Vertical props shall be supported on wedges, or other measures shall be taken whereby the props can be gently lowered vertically when commencing the remove all formwork.

Props for an upper storey shall be placed directly over those in the storey immediately below and the lowest props shall bear upon work sufficiently strong to carry the load.

If the formwork for a column is erected to the full height of the column, one side shall be left open and shall be built up in sections as placing of the concrete proceeds. Before placing the concrete, bolts and fixings shall be in position, and cores and other devises used for forming openings, holes, pockets, recesses and other cavities shall be fixed to the formwork. No holes shall be cut in any concrete unless approved.

An approved mould oil or other material shall be applied to faces of formwork in contact with wet concrete to prevent adherence of the concrete. Such coatings shall be insoluble in water, non-staining and not injurious to the concrete and shall not become flaky or be removed by rain or wash-water. Liquids that retard the setting of concrete shall be used only when approved. Mould oil, retarding liquid and similar coatings shall be kept from contact with the reinforcement.

Forms shall be cleaned out and thoroughly wetted immediately before placing concrete. Formwork shall be thoroughly cleaned before re-use.

Unless otherwise specified, suitable mouldings or bevels shall be placed in the angles of forms to round or bevel the edges of the concrete.

9 TOLERANCES

9.1 TOLERANCES:

The Contractor shall be responsible for ensuring that the concrete structural works are carried out within the degree of accuracy imposed by subsequent architectural or building works.

Permissible deviations shall be in accordance with the recommendations given for acceptable standards of workmanship as set out in PD.6440:Part 2:1969.

SPECIFICATION FOR STRUCTURAL STEELWORK

1 DEFINITIONS:

The 'Sub-Contractor' shall mean the Sub-Contractor appointed for the supply, fabrication and erection of the structural steelwork.

The 'Main Contractor' shall mean the Main Contractor for the project, who will be instructed to accept the appointed 'Sub-Contractor' as a Nominated Sub-Contractor under the terms of the Main Contract.

The term 'Engineer' shall mean Molony and Millar, 19 Terenure Road West, Dublin 6W.

The term 'Main Contract' shall mean 'General Conditions of Contract and Form of Tender, with Quantities, under the RIAI Conditions of Contract 1977'.

The term 'Lump Sum Contract' shall mean that tenders shall be based on the work shown on the Drawings and described in the Specification. The Tenderer shall be responsible for preparing his own quantities and must include in his tender for everything necessary for the proper completion of the work as shown and described in the Contract Documents.

The terms 'approved' or 'directed' shall mean to the approval or direction of the Engineer.

The term 'allow' shall mean that the cost of the item shall be at the risk of the Sub-Contractor.

The terms 'necessary' or 'adequate' shall mean that the work shall be carried out to the extent and by the method which is considered to be necessary or adequate by the Engineer.

2 SPECIAL DETAIL:

If a Sub-Contractor considers that sufficient information is not available on the Drawings concerning a particular detail and that such a detail would materially affect his price he shall submit to the Engineer his interpretation of such detail at the time of tendering.

3 SHOP DETAILS:

Duplicate copies of all shop details shall be submitted to the Engineer for approval at least 7 days before fabrication is to commence. The steelwork Sub-Contractor shall obtain from the Engineer a set of drawings showing the setting out of the work and shall check the steelwork details against the setting out dimensions. He shall also check the steelwork drawings and shall notify the Engineer of any errors or discrepancies in the drawings supplied for the steelwork Sub-Contractor and shall note the necessary corrections on the drawings or obtain corrected drawings. Thereafter the Sub-Contractor shall be

responsible for all errors in the setting out and detailing of the steelwork and shall rectify any errors in the steelwork at his own expense.

Before fabricating any part of the steelwork the Sub-Contractor shall provide the Engineer with two sets of shop drawings for the work to be fabricated. The Engineer shall make any alterations necessary on one set and return this set to the Sub-Contractor. The shop drawings shall be altered as indicated by the Engineer and a set of the revised shop drawings shall be sent to the Engineer for approval. On receipt of approval fabrication may be commenced but no alterations may be made to the shop drawings without the Engineer's approval. The approval of the shop drawings by the Engineer does not relieve the Sub-Contractor of any responsibility for errors on the shop drawings.

4 INSPECTION:

The Contractor shall notify the Engineer when steelwork is ready for inspection. No fabricated steelwork may be delivered to the site unless inspected and passed by the Engineer or instructions to the contrary have been issued for the particular part of the steelwork by the Engineer.

5 SITE:

Steelwork Sub-Contractors tendering for the work should visit the site and acquaint themselves of any difficulties likely to arise during the delivery, storage on site and erection of the steelwork. Any particular provisions to be made by the Main Contractor to facilitate the execution of the sub-contract should be described in the tender.

6 SITE CONNECTIONS:

Any site connections which the Sub-Contractor may require to facilitate erection which are not indicated on the Engineer's drawings shall be deemed to have been allowed for in his Tender. The position and details of such additional connections must be approved by the Engineer.

7 SITE MEASUREMENTS:

The Sub-Contractor shall visit the site and take all measurements necessary for the preparation of the shop drawings.

8 SETTING OUT:

The Main Contractor shall be responsible for setting out the principal gridlines, but the Sub-Contractor must check this setting out and notify the Engineer of any discrepancies.

The Sub-Contractor shall be responsible for the setting out of the steelwork in accordance with the drawings. It is the Sub-Contractor's responsibility to ensure that the setting out of the steelwork is in turn checked and approved by the Main Contractor. The steelwork shall be erected under the supervision of a competent site engineer in accordance with the programme specified by the Sub-Contractor in his Tender.

Any assistance given by the Engineer in setting out or any approval of the setting out shall in no way relieve the Sub-Contractor of his responsibility for the accuracy of the work.

9 QUALITY OF LABOUR:

The Sub-Contractor shall employ for the fabrication and erection of the steelwork only such persons as are careful, skilled and experienced in the execution of the work required for the expeditious and satisfactory completion of the Contract. All welding operatives shall hold current Grade B Certificates as issued by the Irish Welding Association. The Engineer may require the dismissal of any person engaged on the work deemed to be incompetent.

10 WELD DETAILS:

Complete details of joint preparation, size and sequence of individual runs of weld and of welding jigs, temporary erection cleats, erection holes, etc. submitted either with or on the Sub-Contractor's shop drawings must be approved by the Engineer.

Butt welding of members shall not be undertaken by the Sub-Contractor except with the express written permission of the Engineer and all non-destructive tests or other tests shall be at the sole cost of the Sub-Contractor.

11 FABRICATION PROCESS:

The Sub-Contractor shall be responsible for keeping the Engineer informed as to fabrication progress and as to when individual pieces will be ready for inspection. The Sub-Contractor shall give a minimum of 3 working days' notice to the inspector of the readiness of individual pieces for inspection. The Sub-Contractor shall include in his price and programme for the necessary time taken in inspection.

12 DISTORTION:

The Sub-Contractor shall arrange his welding sequence, jigging, etc. so as to eliminate distortion. The Sub-Contractor shall draw the Engineer's attention to any excessive distortion which despite his precautions may occur.

13 DOWNHAND WELDING:

The Sub-Contractor shall organise his fabrication so that welding the downhand position is kept to a minimum.

14 NON-DESTRUCTIVE TESTING:

The Engineer may require certain welds to be subjected to inspection by gamma-radiography, ultrasonic or other non-destructive methods. Where inspection is by gamma-radiography the Sub-Contractor shall make available sufficient space around the part being radiographed for proper observance of the safety precautions against radiation, and shall include in his price and programme for so doing.

15 FAULTY WORK:

Where a weld is, in the opinion of the Engineer, faulty, it shall be cut out in such a way as not to impair the subsequent strength of the structure and replaced with sound weld to the requirements of the Drawings and Specification.

16 QUALITY OF STEELWORK:

The quality of the materials, fabrication and erection of the steelwork in the contract shall comply entirely with the requirements set in the following British Standards and all other Standards therein referred to, except for all clauses dealing with the training and certification of welders. The date of issue of each Standard shall be the most recent date of issue. All amendments to the Standards shall be deemed to be parts of the relevant Standards:-

BS.449	Use of Structural Steel in Building
BS.4360	Weldable Structural Steels
BS.968	High Yield Stress Steel
BS.1775	Steel Tubes for Structural Engineering Purposes
BS.4 (Part 1)	Structural Sections
BS.4 (Part 2)	Structural Sections
BS.2708	Unified Black Square and Hexagon Bolts and Nuts
BS.1768	Unified Precision Hexagon Bolts and Nuts
BS.3139	High Strength Friction Grip Bolts
BS.3410	Metal Washers
BS.3294	Use of High Strength Friction Grip Bolts

BS.1719	Classification of covered Electrodes
BS.639	Covered Electrodes
BS.938	Metal Arc Welding of Tubes
BS.1856	Metal Arc Welding of Mild Steel
BS.2642	Metal Arc Welding of Steel to BS.968

The Sub-Contractor shall keep a copy of each of the above Standards in his shop for reference.

17 TEST PIECES AND TESTING:

The Sub-Contractor shall supply such test pieces as may be required by ordering such extra lengths as may be directed by the Engineer. Test pieces shall not exceed eighteen inches in length and in the case of beams the test pieces may be taken from the webs or flanges at the discretion of the Engineer. All test pieces shall be cut from material as delivered on site or to the Sub-Contractor's works. Copies of certificates from the rolling mills for each rolling from which consignments are sent shall be sent to the Engineer on request and the lengths from each rolling identified to the Engineer's satisfaction. Standard tensile test specimens for butt welds and for fillet welds shall be made up and tested in accordance with BS.1856 and such other test specimens as may be directed shall be made up and tested prior to the commencement of the fabrication and during the progress of the work as may be directed by the Engineer.

18 SITE WELDING:

No site welding may be carried out except at such locations of the work as are indicated on the Drawings or at such other locations as may be approved by the Engineer. After each section of the structure has been plumbed, levelled and aligned the Sub-Contractor may site weld the vertical and roof bracing in position. Electric power will not be available for site welding. Touch up all damaged paint surfaces after site welding (see clause 28).

19 HOLDING DOWN BOLTS:

The Sub-Contractor shall provide all holding down bolts and deliver same to the site, and shall be responsible for checking and setting out of the holding down bolts by the Main Contractor.

The Main Contractor shall set out the holding down bolts and fix same in position, and shall make use of such templates as are supplied by the Sub-Contractor in accordance with the requirements shown on the Drawings for the Steelwork Contract.

BS.1719	Classification of covered Electrodes
BS.639	Covered Electrodes
BS.938	Metal Arc Welding of Tubes
BS.1856	Metal Arc Welding of Mild Steel
BS.2642	Metal Arc Welding of Steel to BS.968

The Sub-Contractor shall keep a copy of each of the above Standards in his shop for reference.

17 TEST PIECES AND TESTING:

The Sub-Contractor shall supply such test pieces as may be required by ordering such extra lengths as may be directed by the Engineer. Test pieces shall not exceed eighteen inches in length and in the case of beams the test pieces may be taken from the webs or flanges at the discretion of the Engineer. All test pieces shall be cut from material as delivered on site or to the Sub-Contractor's works. Copies of certificates from the rolling mills for each rolling from which consignments are sent shall be sent to the Engineer on request and the lengths from each rolling identified to the Engineer's satisfaction. Standard tensile test specimens for butt welds and for fillet welds shall be made up and tested in accordance with BS.1856 and such other test specimens as may be directed shall be made up and tested prior to the commencement of the fabrication and during the progress of the work as may be directed by the Engineer.

18 SITE WELDING:

No site welding may be carried out except at such locations of the work as are indicated on the Drawings or at such other locations as may be approved by the Engineer. After each section of the structure has been plumbed, levelled and aligned the Sub-Contractor may site weld the vertical and roof bracing in position. Electric power will not be available for site welding. Touch up all damaged paint surfaces after site welding (see clause 28).

19 HOLDING DOWN BOLTS:

The Sub-Contractor shall provide all holding down bolts and deliver same to the site, and shall be responsible for checking and setting out of the holding down bolts by the Main Contractor.

The Main Contractor shall set out the holding down bolts and fix same in position, and shall make use of such templates as are supplied by the Sub-Contractor in accordance with the requirements shown on the Drawings for the Steelwork Contract.

20 ERECTION:

The Sub-Contractor shall be responsible for stability and safety of the steelwork throughout the progress of the work and until the steelwork has been grouted in position and until as much of the permanent building has been completed as is deemed jointly by the Main Contractor and the Sub-Contractor to be adequate to provide all necessary support for the permanent safety and stability of the steelwork. The Sub-Contractor shall provide, fix and maintain all erection bracing shown on the Drawings and such other struts, ties and other bracing as he deems necessary for the safety and stability of the steelwork throughout the period of his responsibility for the steelwork.

21 DRIFTING:

The holes in the various parts of the steelwork to be connected shall be sufficiently concentric that no drifting is necessary to insert the bolts connecting the parts together. No drifting or reamering of holes during the erection of the steelwork will be allowed except with the permission of the Engineer.

22 TIGHTENING OF BOLTS:

All bolts shall be fully tightened by the use of standard spanners of good fit and patterns appropriate to the part of the work for which they are to be used. Special spanners of appropriate kinds shall be used where High Tensile Bolts are specified, the patterns of special spanner depending on the type of indicating device used to determine the correct tightness of the bolts.

23 APPROVAL OF ERECTION:

The steelwork shall be erected, plumbed, levelled and lined in accordance with the Steelwork Drawings to a tolerance of one-quarter of an inch in line or in the vertical. These tolerances may not be exceeded except with the permission of the Engineer. The Engineer shall be notified when the plumbing, levelling and alignment of the steelwork has been carried out. Whatever corrective work the Engineer may deem necessary shall be undertaken without delay by the Sub-Contractor.

24 ROLLING MARGIN, ETC:

The unit weight of each rolled section specified on the Steelwork Drawings is that listed in BS.4 for the appropriate section. No allowance may be made for rolling margin or waste. For the purposes of computing quantities for omissions or additions, lengths of rolled sections shall be measured overall, and gussets shall be measured nett.

25 BOLTS:

All shop and site bolts with the exception of anchor bolts and H.S.F.G. bolts shall be sheradised or spun galvanised.

26 TOLERANCES:

Structural members consisting primarily of a single rolled shape shall be straight within the appropriate tolerances allowed by ASTM Specification A6.

27 ERECTION TOLERANCES:

a) Position of first erected column 10 mm

b) Linear Dimensions:

Up to 8 M	10 mm
From 8 M to 15 M	15 mm
From 15 M to 25 M	20 mm
Over 25 M	25 mm

c) Plumb of columns in 30 M height 5 mm

d) Level of base of first erected column 15 mm

e) Level of beam at junction with column measured from transferred bench mark of storey in which beam is located 10 mm

f) Levels of upper and lower surfaces of two or more beams meeting at column 5 mm

g) Differences in level of ends of a beam:

Up to 8 M long	5 mm
From 8 M to 15 M long	10 mm
From 15 M to 25 M long	15 mm
Over 25 M long	20 mm

28 PAINTING:

Painting and surface preparation shall comply with BS.5493.

Within two hours of blast cleaning apply one coat of 2-pack Epoxy Zinc Rich Primer to a dry film thickness of 25 microns.

After fabrication carefully remove all weld flux and spatter rough edges by grinding to smooth surface. Remove any unsound scorched primer around weld areas together with all dust, dirt and grease. Spot prime all bare metal with blast primer and allow to dry overnight.

Before delivery to site, apply one coat of 2-pack Epoxy Zinc Rich Primer to a dry film thickness of 50 microns in order to give a total D.F.T. of 75 microns. Allow to dry hard before despatch.

After erection all damaged areas and bolts to be touched up using primer.

Where cleaning by automatic ball blasting is specified, it refers to all structural steelwork, ie. rolled sections, cleats, end-plates, stiffeners, etc. and it is required that all structural steel surfaces in the final fabrications shall be so treated.

All contact surfaces joined using H.S.F.G. bolts shall not be painted before assembly but shall receive full cleaning specification.

29 SUB-LETTING:

No element of the Sub-Contract, ie. supply, fabrication, cleaning or erection shall be sub-let except with the express written permission of the Engineer, which permission shall not be given except in exceptional circumstances and at the sole discretion of the Engineer.

SPECIFICATION FOR MAIN DRAINAGE

(EXTERNAL TO BUILDINGS)

1 EXCAVATION FOR PIPELINES AND MANHOLES:

The ground shall be excavated to the lines and depths shown on the Drawings, or to such other lines and depths as the Engineer may direct. Excavations taken out to a greater depth than is necessary shall be filled in to the required level with concrete of the appropriate grade at the Contractor's own cost. Trenches shall be of sufficient width to enable the pipes to be properly laid and jointed. Special care shall be taken to provide a solid and even bed for the barrels of the pipes.

The Contractor shall take all precautions necessary for the safety of adjoining structures and buildings by shoring and timbering during the time the trenches are open, or by opening trenches in short lengths.

2 SUPPORTS FOR PITS, TRENCHES AND OTHER EXCAVATIONS:

The sides of pits, trenches and other excavations shall, where necessary, be adequately supported to the satisfaction of the Engineer by timber or other approved means, and all such excavations shall be of sizes sufficient to enable the pipes and concrete to be laid accurately and proper refilling and compacting to be carried out.

Where directed by the Engineer, the supports shall be left in trenches or other excavations, and any such supports to be left in will be measured and paid for at the price entered in the Bill of Quantities except where in the opinion of the Engineer the necessity for leaving in the supports has arisen from carelessness or neglect on the part of the Contractor.

3 ROCK CUTTING IN TRENCHES:

Where solid rock is met within trenches, it shall be excavated and trimmed to prescribed level of underside of concrete bed to pipeline. In measuring such rock excavation the Contractor will be allowed a width of 600 mm more than the internal diameter of the pipe to the underside of the bed. The price per cubic metre inserted in the Bill of Quantities shall be held to cover all expenses in connection with excavating the rock and disposing of surplus material.

4 UNSUITABLE MATERIAL IN EXCAVATIONS:

Where unsuitable material is met within trenches below the level of the pipe bedding, it shall be removed to such depths and over such an area as the Engineer may direct and it shall be disposed of in the tiphead. The resultant excavation shall be backfilled to the level of the trench floor with concrete Grade C15.

5 WATER IN TRENCHES:

Trenches shall be kept free from water until, in the opinion of the Engineer, any concrete or other works therein are sufficiently set and the Contractor shall construct any sumps or temporary drains that the Engineer may deem necessary.

6 CONCRETE PIPES:

Concrete pipes complying with IS.6:1974 for sewers and surface water drainage shall be laid in straight lines from manhole to manhole on a prepared bed to the line and level as shown on the Drawings. All pipes shall be carefully examined before being placed in position. Pipes shall be spigot and socket type and laying shall start from the low end of the sockets facing the flow. Pipes shall be centred, boned into position and wedged. Concrete pipes shall be placed on a 150 mm thick bed of concrete of characteristic strength of C15 which shall be on a prepared and levelled trench. After testing pipes shall be packed up and haunched in concrete C15. Pipes shall be completely surrounded in concrete where indicated on the Drawings. Alternatively, concrete pipes may be bedded and surrounded in granular material Type B where shown on the Drawings. All pipes shall be laid to the alignments shown on the Drawings.

Special care shall be taken to see that any excess of cement mortar etc. is neatly cleaned off while each joint is being made and any earth, cement or other material thoroughly cleaned out of the pipes by drawing a tight-fitting wad through them as the work proceeds, or by other approved means. A properly fitting plug shall be well secured at the end of the last laid pipe and shall be removed only when the pipe laying is proceeding. The trenches, pipes and joint holes shall be kept free from water until the joints are thoroughly set. The pipes shall be bedded, haunched and surrounded in concrete as indicated on the Drawings or as directed. Where the cover to pipes is less than 1200 mm a concrete surround of not less than 150 mm thickness shall be provided.

7 uPVC PIPES:

The uPVC pipes and fittings shall be in accordance with the requirements of IS.424:1990. Hard PVC pipes shall be placed on granular bed of 150 mm thickness, well compacted and similar granular material shall be placed around the pipes and lightly compacted to a depth of 150 mm over the crown of the pipes. Materials for the granular bedding shall comply with IS.5. Hard PVC pipes shall not be used under paved surface areas where the cover to the crown of the pipe is less than 900 mm.

8 CAST IRON PIPES:

Cast iron pipes shall comply with BS.1211 and BS.4772 and shall be Class B. Pipes shall be placed between manholes

where drainage lines pass under buildings and shall be surrounded in concrete for a minimum thickness of 150 mm. Where pipes pass through concrete or wall construction an annulus of not less than 50 mm shall be made around the pipe.

9 CLAYWARE PIPES:

Clayware pipes shall be in accordance with the requirements of IS.106 salt glazed clayware pipes shall be used in locations shown on the Drawings. Fittings for clayware pipes shall be in accordance with BS.539.

10 JOINTS:

Joints for concrete pipes shall be made with jointing mortar consisting of one part of Portland cement to two parts of sand freshly gauged. Two strands of tarred yarn shall be caulked into the socket when the spigot has been placed properly in position. The joint space shall then be filled with jointing mortar and properly finished with a trowelled face all round.

Joints for cast iron pipes shall be of the flexible type fitted in accordance with the directions of the manufacturer.

Joints for clayware pipes shall be made using two strands of tarred yarn jarred into the socket when the spigot has been properly placed in position and completed by filling with jointed mortar finished with a trowel all around.

Alternative methods of jointing may be used where approval of the system is given by the Engineer.

All joints shall be made under entirely dry conditions.

11 MANHOLES:

Manholes shall be constructed in the positions and at the levels indicated on Drawings. A 50 mm screed of concrete grade C15 shall be placed under all manhole floors before concreting the base. Floors shall be constructed in concrete grade C30. Walls shall be in concrete blockwork type A5 solid blocks to IS.20 to a thickness of 215 mm finished internally in two coat plasterwork. Where depth of manhole exceeds 5.0 metres walls shall be in concrete grade C30 of 225 mm thickness and containing reinforcement as shown on Engineer's Drawings. Roof slabs shall be in concrete grade C30 having a thickness of 225 mm and containing reinforcement as shown on Engineer's Drawings. External back drop manholes shall be formed as indicated on Drawings at all locations where incoming pipes are above the level of the channel in the manhole. The benching channels shall be formed accurately in concrete grade C20 and rendered two coats 1:2 cement:mortar. Branches and junctions shall be formed in a similar manner. Channels shall be formed by fixing vitrified clay unglazed half channels to BS.65:1966. Manhole covers and frames shall be to IS.261 for heavy duty in roadways and footpaths or light type for use in unpaved areas. Step irons

to BS.1247 shall be provided in all manholes where depth exceeds 600 mm and shall be fixed at intervals of 215 mm vertically and staggered horizontally 300 mm apart. Access ladder in structural steel shall be used where indicated on Drawings.

12 TESTING DRAINS:

Where joints in pipes have been set, pipelines shall be tested in sections in accordance with the requirements of clauses 5.2.1 and 5.2.2 of BS.301.

13 REFILLING TRENCHES:

Trenches shall be refilled with imported granular fill or approved excavated material but not before the work has been measured and approved by the Engineer. For pipes which are not surrounded with concrete, the first layer of filling material shall be free from stones, shall not be thrown directly onto pipes, but shall be placed and packed with care under and around them. All filling shall be deposited and compacted in layers not exceeding 225 mm loose depth to a dry density not less than that of the adjoining soil. Timber and framing shall be withdrawn ahead of the layer to be compacted, care being taken to keep the sides of the trenches solid and to fill all the spaces left by the withdrawn timber.

14 COMPLETION OF DRAINAGE WORKS:

All drainage works shall be completed in advance of the construction of the carriageway and footpaths and in the order required to ensure that existing services which are required to remain operational can be so maintained.

The drainage pipeline and manholes shall be thoroughly flushed from end to end with water and left clean and free from obstructions.

PROJECT No: 9105

PROJECT TITLE:

REFERENCE:

SHEET:

MOLONY & MILLAR
CONSULTING ENGINEERS
19 Terenure Road West
Dublin 6. Tel. 01-903368

REF.	CALCULATIONS	OUTPUT

HEATHCOURT Ltd

WAREHOUSE AT CHERRY ORCHARD

INDUSTRIAL ESTATE.

PRELIMINARY CALCULATIONS

FOR

BUILDING BYE LAWS.

PREPARED SG.

CHECKED

PROJECT No: 9105

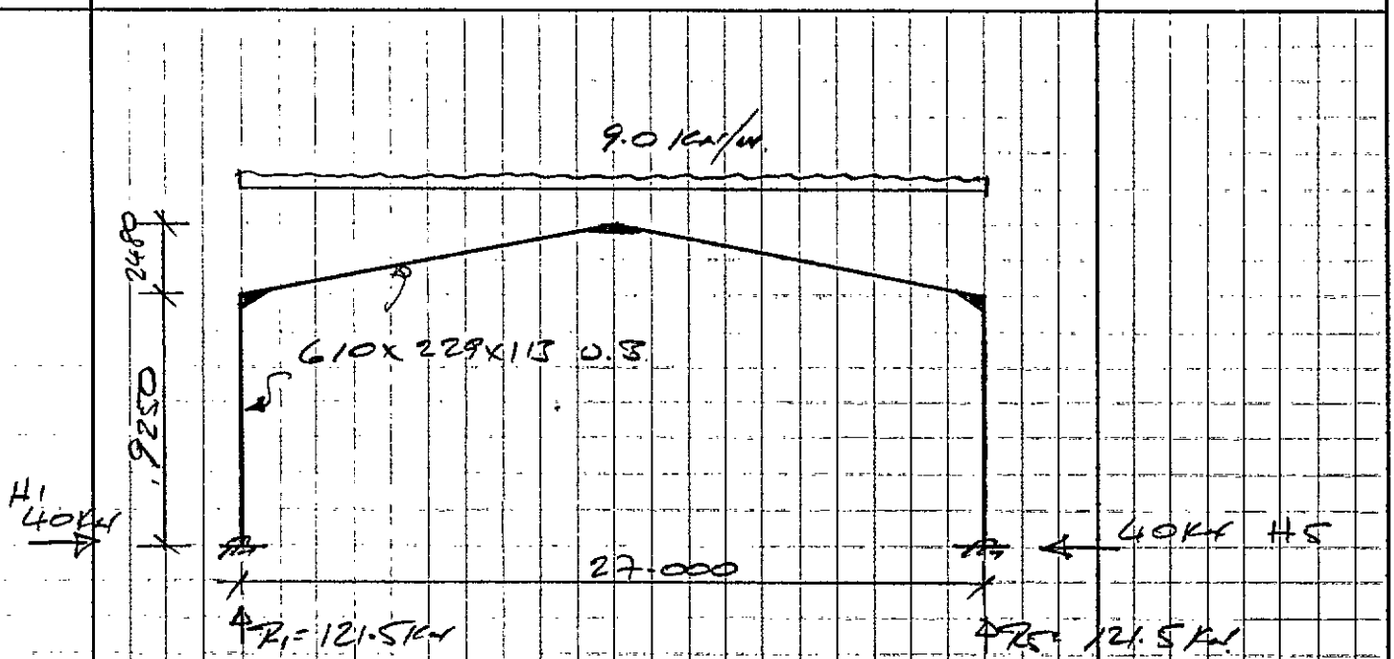
PROJECT TITLE: Heathcourt Ltd.

REFERENCE:

SHEET: 1.

MOLONY & MILLAR
CONSULTING ENGINEERS
19 Terenure Road West
Dublin 6. Tel. 01-903368

REF.	CALCULATIONS	OUTPUT



D.L. 0.75 KN/M²
L.L. 0.75
1.50 KN/M².

PURLIN CENTRES 1.80M SPAN = 6.0M.

Multi Beam 203/200 (203/250 END SPANS)

→ 1.43 KN/M² (D.L. EXCLUDING SELF WT OF FRAMES)

SHEETING RAILS.

WIND: 46 M/S x 1.0 x .74 x 1.0 = 34 M/S.

W = 34 x .618 = .72 KN/M².

CENTRES: 2.20M L = 6.0M.

Mult. Beam JR 165/175 (JR 165/225 END BAY)

→ 0.91 KN/M² O.K.

PREPARED

CHECKED

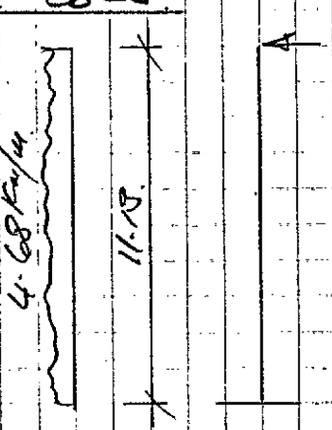
PROJECT No: 9105
PROJECT TITLE: Heathcourt Ltd.
REFERENCE:
SHEET: 2.

MOLONY & MILLAR
CONSULTING ENGINEERS
19 Terenure Road West
Dublin 6. Tel. 01-903368

REF.	CALCULATIONS	OUTPUT

SEE COMPUTER PROGRAM FOR ANALYSIS & DESIGN.

GABLE COLS.



w = 0.72 Kn/m² x 6.5 = 4.68 Kn/m

M = 4.68 x 11.13²/8 = 72.46 Kn/m

305 x 165 x 40 U.B.

fbc = 72.46 x 10⁶ / 561 x 10³ = 129 N/mm² O.K.

H = 11.13 - 1.2 = 9.93 m.

M = 4.68 x 9.93²/8 = 57.68 Kn/m

254 x 146 x 31 U.B.

fbc = 57.68 x 10⁶ / 353 x 10³ = 163 N/mm² O.K.

PREPARED Z.G

CHECKED

PROJECT No: 9105
PROJECT TITLE: Heathcourt Ltd.
REFERENCE:
SHEET: 8.

MOLONY & MILLAR
CONSULTING ENGINEERS
19 Terenure Road West
Dublin 6. Tel. 01-903368

REF.	CALCULATIONS	OUTPUT

Front Gable Cols:

$\hat{w} = .72 \times \frac{9}{2} = 3.24$ kN/m.

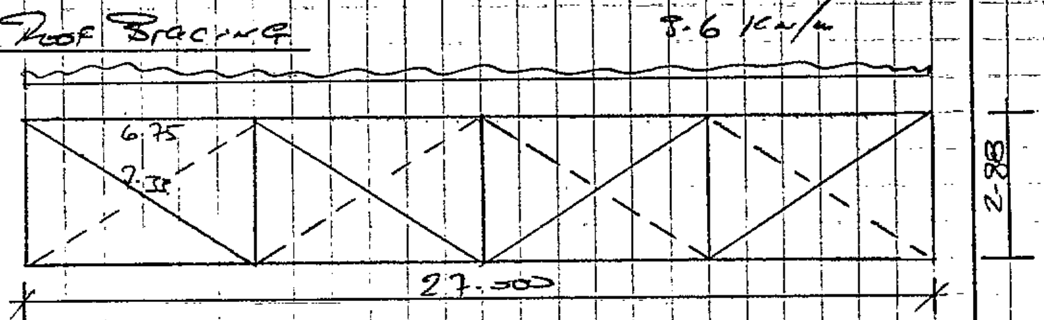
$\hat{L} = 11.0$ m

$M = 3.24 \times \frac{11^2}{8} = 49$ kNm

254x146x31 UB

$f_{bc} = \frac{49 \times 10^6}{353 \times 10^3} = 139$ N/mm² o.k.

Roof Bracing



↑ 48.6 kN

$w = .72 \times \frac{10}{2} = 3.6$ kN/m

$R_A = 3.6 \times \frac{27.0}{2} = 48.6$ kN

100x75x8 L → 55 kN strut 2.80 m.

Tie Force $= 48.6 \times \frac{7.33}{2.88} = 124$ kN

100x75x8 L → 153 kN. O.K.

PREPARED

CHECKED

PROJECT No: 9105

PROJECT TITLE: Heathcourt Ltd.

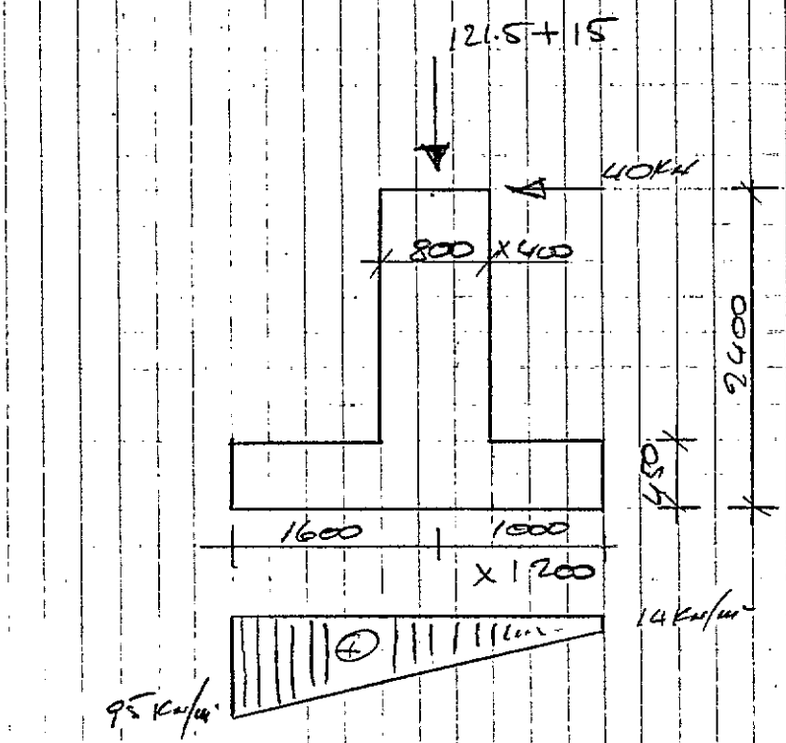
REFERENCE:

SHEET: 4.

MOLONY & MILLAR
CONSULTING ENGINEERS
19 Terenure Road West
Dublin 6. Tel. 01-903368

REF.	CALCULATIONS	OUTPUT

FOUNDATIONS.



STUB : .800×.400×1.950×24 = 15 KN.

BASE : 2.60 × 1.2 × .45 × 24 = 84 KN.

$$e = \frac{136.5 \times 1.6 + 34 \times 1.3 - 40 \times 2.4}{170.5}$$

$$= .977 \Rightarrow e = 1.300 - .977 = .323$$

$$q_1, q_2 = \frac{170.5}{1.2 \times 2.6}\left(1 \pm \frac{6 \times .323}{2.6}\right)$$

$$= 95 \text{ KN/m}^2, \quad 14 \text{ KN/m}^2.$$

PREPARED

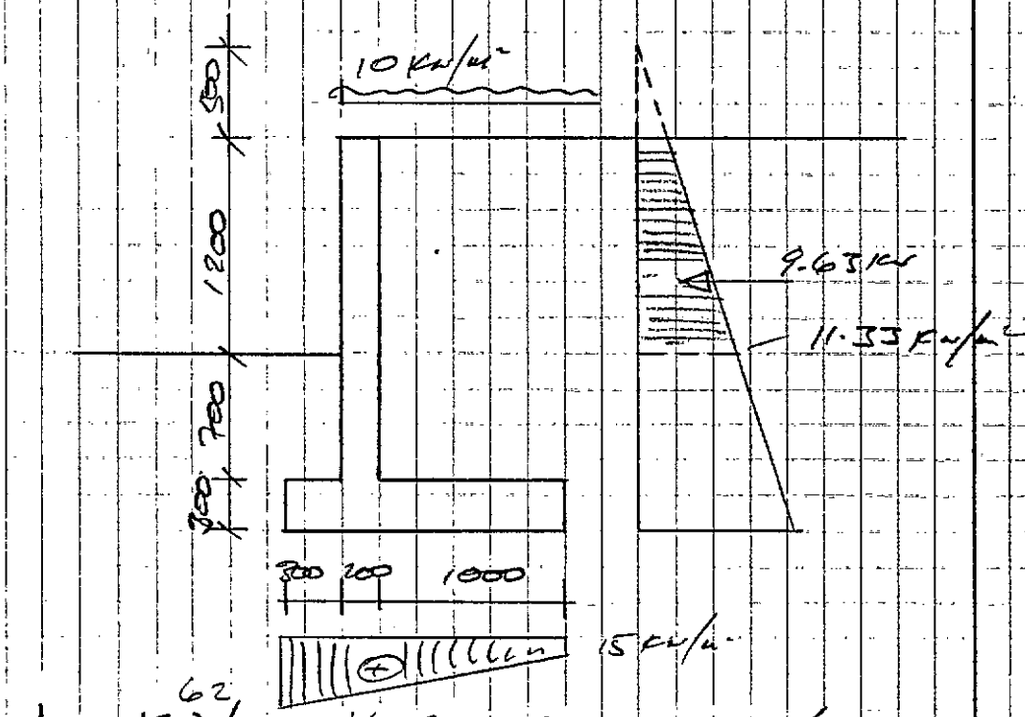
CHECKED

PROJECT No: 9105
PROJECT TITLE: HEATHCOURT Ltd.
REFERENCE:
SHEET: 5

MOLONY & MILLAR
CONSULTING ENGINEERS
19 Terenure Road West
Dublin 6. Tel. 01-903368

REF.	CALCULATIONS	OUTPUT

RETAINING WALLS.



$\phi_1 = K_a \gamma h_1 = \frac{1}{3} \times 20 \times 1.70 = 11.33 \text{ KN/m}^2$

$H_1 = \frac{1}{2} \times 11.33 \times 1.70 = 9.63 \text{ KN}$

O.T.M. $9.63 \times (1.70 \times \frac{1}{3} + 1.0) = 15.0 \text{ KNm}$

WALL: $.200 \times 1.90 \times 24 = 9.12 \text{ KN} \times .400 = 3.64 \text{ KNm}$
STAIR: $.300 \times 1.50 \times 24 = 10.8 \times .75 = 8.10$
EARTH: $1.0 \times 1.90 \times 20 = \frac{38}{58 \text{ KN}} \times 1.0 = \frac{38}{50 \text{ KNm}}$

$e = \frac{50 \text{ KNm} - 15}{58} = .600$

$e = .75 - .600 = .15$

$\phi_1 + \phi_2 = \frac{58}{1.0 \times 1.5}\left(1 \pm \frac{6 \times .15}{1.5}\right) = 62, 15$

62

PREPARED
CHECKED

* MOLONY & MILLAR	* Heathcourt	* JOB : portal *
* CONSULTING ENGINEERS	* portal frame	* DATE: 12 02 92 *
* 19 TERENURE RD. WEST	* 1	
* DUBLIN 6W (01)903368	* I N P U T D A T A	*SHEET: 1 *
* ANALYSE (C)1983-90 (Computer And Design Services Ltd)		* FILE: RG3 *

FRAME GEOMETRY

No. of Joints = 5

MEMBERS

Mem: No.	Jt.:C: no.:	End 1 Details X coord (m)	Y coord (m)	Jt.:C: no.:	End 2 Details X Coord (m)	Y Coord (m)	Length (m)	Slope (deg)
1:	1:F:	0.000	0.000	2:F:	0.000	10.450	10.450	90.00
2:	2:F:	0.000	10.450	3:F:	13.500	12.930	13.726	10.41
3:	3:F:	13.500	12.930	4:F:	27.000	10.450	13.726	-10.41
4:	5:F:	27.000	0.000	4:F:	27.000	10.450	10.450	90.00

TABLE OF SECTIONS

Section Number	Area: (cm2):	Inertia: (cm4):	Rectangular Elements (if specified) No: D (mm): B (mm): Y (mm)	
1	144.00:	87400.0:	22. 610x229 UB 113	(Major)
2	144.00:	87400.0:	22. 610x229 UB 113	(Major)
3	144.00:	87400.0:	22. 610x229 UB 113	(Major)
4	144.00:	87400.0:	22. 610x229 UB 113	(Major)
5	144.00:	87400.0:	22. 610x229 UB 113	(Major)

SUMMARY OF MEMBER PROPERTIES

Member 1 - 4 PRISMATIC : Section Number 1 : Modulus E = 210000.0 N/mm2

SUPPORTS

No. of Supports = 2

Joint Number	X Restraint (kN/mm)	Y Restraint (kN/mm)	Angular Restraint (kN.m/radian)
1	FULL	FULL	ZERO
5	FULL	FULL	ZERO

APPLIED LOADS AND MOMENTS

MEMBERS 2 - 3

LOAD CASE No : Name	LOAD: Type:	POSITION Start:	Length:	LOAD / MOMENT Start Value:	End Value
1:dl ll	UV :			9.000 kN/m:	

COMBINATIONS

L O A D C A S E No : Name	: TABULATED VALUES OF PARTIAL SAFETY FACTORS : Combination Number : 1
1:dl ll	:1.000
2:Imposed Load	:
3:	:

RESULTS FOR COMBINATION 1

Joint Displacements and Reactions

Joint No.	dx(mm)	dy(mm)	O(rad)	Px (kN)	Py (kN)	M (kN.m)
1	0.00	0.00	0.0057	39.774	121.500	0.000
2	-18.51	-0.42	-0.0061			
3	0.00	-102.45	0.0000			
4	18.51	-0.42	0.0061			
5	0.00	0.00	-0.0057	-39.774	121.500	0.000

Summation of Forces and Moments

	Px (kN)	Py (kN)	Mo (kN.m)
Member Loads	0.000	-243.000	-3280.500
Joint Loads	0.000	0.000	0.000
Total Loads	0.000	-243.000	-3280.500
Reactions	0.000	243.000	3280.500
Summation	0.000	0.000	0.000

Maxima for Member 1

Load Comb.	Shear (kN) (Abs. Max.)	Maximum Axial (kN) (Compression)	(Tension)	<------- Bending Moment (kN.m) -------> Max.+ve	Pos. (m)	Max.-ve	Pos. (m)
1	-39.774	121.500	0.000	0.000	0.000	-415.638	10.450

Maxima for Member 2

Load Comb.	Shear (kN) (Abs. Max.)	Maximum Axial (kN) (Compression)	(Tension)	<------- Bending Moment (kN.m) -------> Max.+ve	Pos. (m)	Max.-ve	Pos. (m)
1	112.314	61.072	0.000	308.813	12.900	-415.638	0.000

Maxima for Member 3

Load Comb.	Shear (kN) (Abs. Max.)	Maximum Axial (kN) (Compression)	(Tension)	<------- Bending Moment (kN.m) -------> Max.+ve	Pos. (m)	Max.-ve	Pos. (m)
1	-112.314	61.072	0.000	308.813	0.825	-415.638	13.726

Maxima for Member 4

Load Comb.	Shear (kN) (Abs. Max.)	Maximum Axial (kN) (Compression)	(Tension)	<------- Bending Moment (kN.m) -------> Max.+ve	Pos. (m)	Max.-ve	Pos. (m)
1	39.774	121.500	0.000	415.638	10.450	0.000	0.000

RESULTS FOR COMBINATION 1 MEMBER 1

	Position (m) from End 1	Shear Force (kN)	Axial Comp. (kN)	Bend.Moment (kN.m)	dx (mm)	dy (mm)	Slope (deg)
Jt. 2	10.450	-39.774	121.500	-415.638	-18.5	-0.4	89.650
0.75L	7.837	-39.774	121.500	-311.729	-27.4	-0.3	89.946
0.50L	5.225	-39.774	121.500	-207.819	-24.7	-0.2	90.158
0.25L	2.613	-39.774	121.500	-103.910	-14.3	-0.1	90.285
Jt. 1	0.000	-39.774	121.500	0.000	0.0	0.0	90.327

Maximum +ve Bending Moment 0.000 kN.m at 0.000m from joint 1
Maximum -ve Bending Moment -415.638 kN.m at 10.450m from joint 1

Maximum Bending Stress = 144.403 N/mm2
Maximum Axial Stress (Compression) = 8.438 N/mm2

RESULTS FOR COMBINATION 1 MEMBER 2

	Position (m) from End 1	Shear Force (kN)	Axial Comp. (kN)	Bend.Moment (kN.m)	dx (mm)	dy (mm)	Slope (deg)
Jt. 3	13.726	-7.186	39.119	305.847	0.0	-102.4	10.409
0.75L	10.294	22.689	44.608	279.249	-1.7	-92.8	10.087
0.50L	6.863	52.564	50.096	150.136	-6.6	-66.1	9.848
0.25L	3.431	82.439	55.584	-81.493	-13.1	-30.4	9.802
Jt. 2	0.000	112.314	61.072	-415.638	-18.5	-0.4	10.059

Maximum +ve Bending Moment 308.813 kN.m at 12.900m from joint 2
Maximum -ve Bending Moment -415.638 kN.m at 0.000m from joint 2

Maximum Bending Stress = 144.403 N/mm2
Maximum Axial Stress (Compression) = 4.241 N/mm2

RESULTS FOR COMBINATION 1 MEMBER 3

	Position (m) from End 1	Shear Force (kN)	Axial Comp. (kN)	Bend.Moment (kN.m)	dx (mm)	dy (mm)	Slope (deg)
Jt. 4	13.726	-112.314	61.072	-415.638	18.5	-0.4	-10.059
0.75L	10.294	-82.439	55.584	-81.493	13.1	-30.4	-9.802
0.50L	6.863	-52.564	50.096	150.136	6.6	-66.1	-9.848
0.25L	3.431	-22.689	44.608	279.249	1.7	-92.8	-10.087
Jt. 3	0.000	7.186	39.119	305.847	0.0	-102.4	-10.409

Maximum +ve Bending Moment 308.813 kN.m at 0.825m from joint 3
Maximum -ve Bending Moment -415.638 kN.m at 13.726m from joint 3

Maximum Bending Stress = 144.403 N/mm2
Maximum Axial Stress (Compression) = 4.241 N/mm2

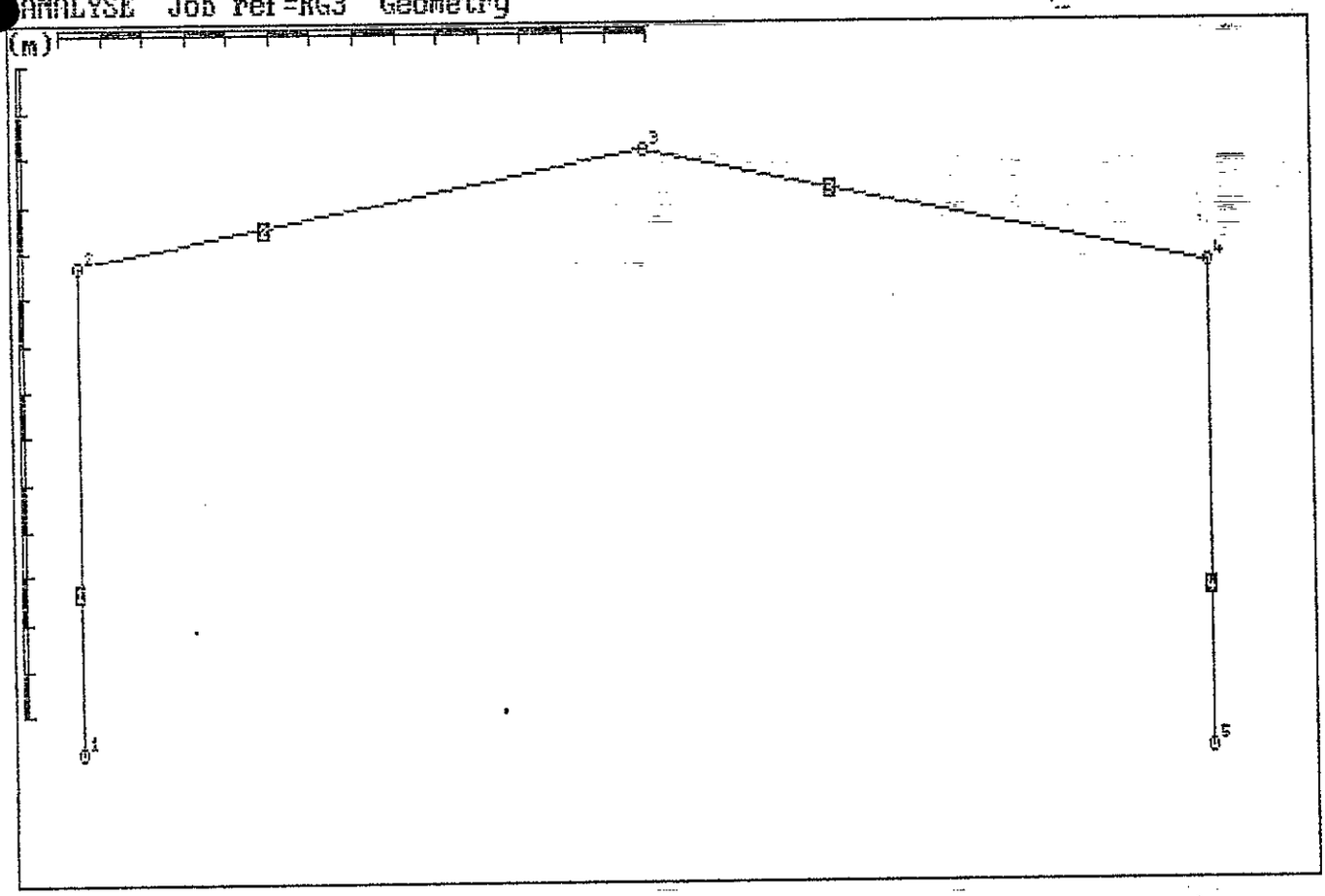
RESULTS FOR COMBINATION 1 MEMBER 4

	Position (m) from End 1	Shear Force (kN)	Axial Comp. (kN)	Bend.Moment (kN.m)	dx (mm)	dy (mm)	Slope (deg)
Jt. 4	10.450	39.774	121.500	415.638	18.5	-0.4	90.350
0.75L	7.837	39.774	121.500	311.729	27.4	-0.3	90.054
0.50L	5.225	39.774	121.500	207.819	24.7	-0.2	89.842
0.25L	2.613	39.774	121.500	103.910	14.3	-0.1	89.715
Jt. 5	0.000	39.774	121.500	0.000	0.0	0.0	89.673

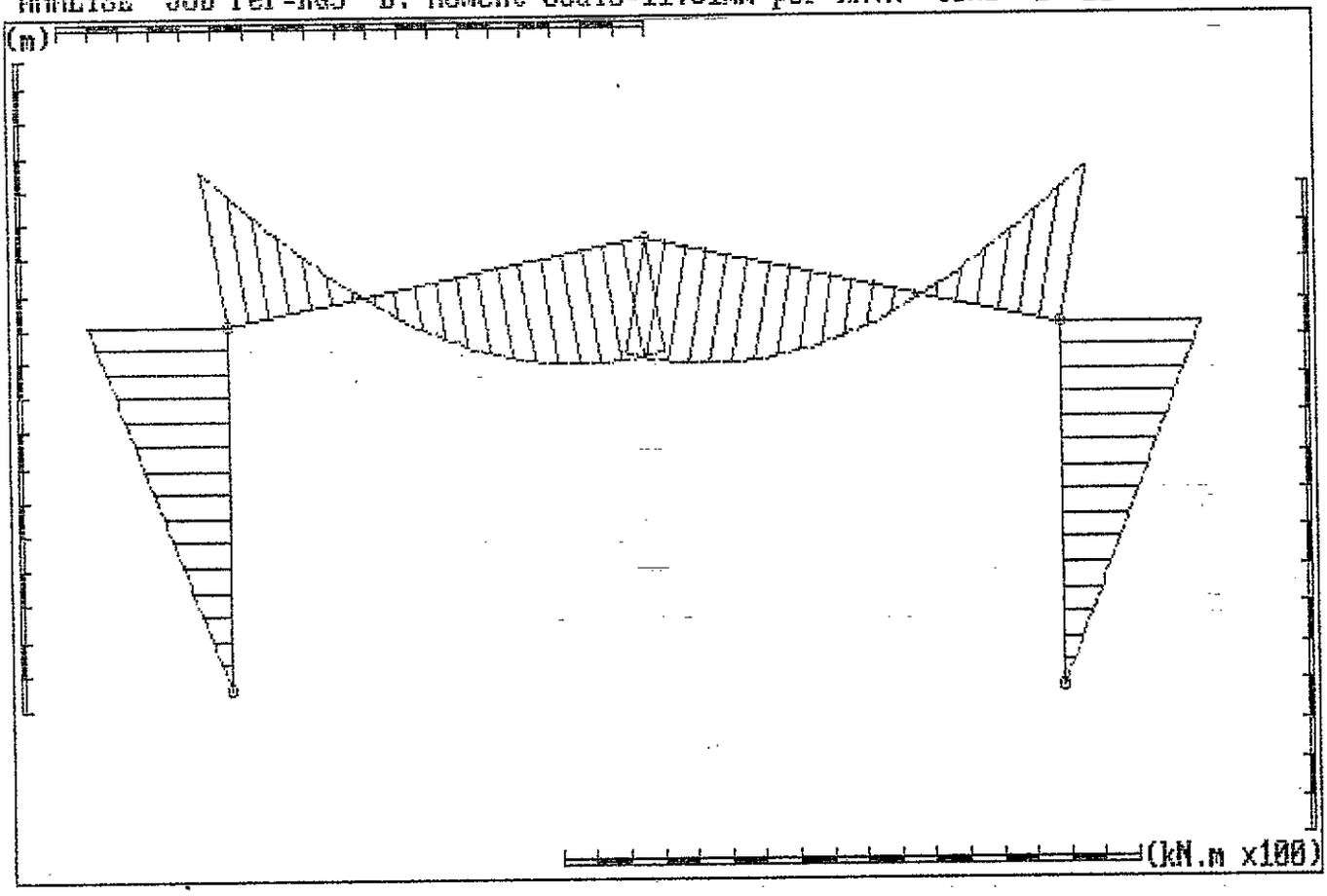
Maximum +ve Bending Moment 415.638 kN.m at 10.450m from joint 5
Maximum -ve Bending Moment 0.000 kN.m at 0.000m from joint 5

Maximum Bending Stress = 144.403 N/mm2
Maximum Axial Stress (Compression) = 8.437 N/mm2

ANALYSE Job ref=RG3 Geometry



ANALYSE Job ref=RG3 B. Moment Scale=11.01mm per kN.m Comb= 1 20 ord's



DUBLIN COUNTY COUNCIL

Tel. 724755 (ext. 262/264)

PLANNING DEPARTMENT,
BLOCK 2,
IRISH LIFE CENTRE,
LR. ABBEY STREET,
DUBLIN 1.

Notification of Decision to Grant Permission/[redacted]

Local Government (Planning and Development) Acts, 1963-1983

To Donal W. Bergin & Assocs.,
19 Terenure Road West,
Dublin 6W.

Decision Order Number and Date P/5680/91 - 20.12.1991

Register Reference No. 91A/1326

Planning Control No.

Application Received on 09.08.1991

Applicant Heathcourt Ltd., 25 Adelaide St., Dun Laoire.

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/[redacted] for:-

Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10.

SUBJECT TO THE FOLLOWING CONDITIONS

CONDITIONS	REASONS FOR CONDITIONS
1. The development to be carried out in its entirety in accordance with the plans, particulars and specifications lodged with the application, as amended by additional information received on 1st November, 1991, save as may be required by the other conditions attached hereto.	1. To ensure that the development shall be in accordance with the permission and that effective control be maintained.
2. That before development commences, approval under the Building Bye-Laws be obtained and all conditions of that approval be observed in the development.	2. In order to comply with the Sanitary Services Acts, 1878-1964.
3. That the requirements of the Chief Fire Officer be ascertained and strictly adhered to in the development.	3. In the interest of safety and the avoidance of fire hazard.
4. That the requirements of the Supervising Environmental Health Officer be ascertained and strictly adhered to in the development.	4. In the interest of health.

Signed on behalf of the Dublin County Council [redacted]

For Principal Officer

Date 20th December, 1991.

IMPORTANT: Turn overleaf for further information

CONDITIONS	REASONS FOR CONDITIONS
5. That the water supply and drainage arrangements, including the disposal of surface water, be in accordance with the requirements of the County Council.	5. In order to comply with the Sanitary Services Acts, 1878-1964.
6. That no industrial effluent be permitted without prior approval from Planning Authority.	6. In the interest of health.
7. That off-street car parking facilities and parking for trucks be provided in accordance with the Development Plan Standards.	7. In the interest of the proper planning and development of the area.
8. That the area between the building and roads must not be used for truck parking or other storage or display purposes, but must be reserved for car parking and landscaping as shown on lodged plans.	8. In the interest of the proper planning and development of the area.
9. That details of landscaping and boundary treatment be submitted to and approved by Planning Authority and work thereon completed prior to occupation of units.	9. In the interest of amenity.
10. That no advertising sign or structure be erected except those which are exempted development, without prior approval of Planning Authority.	10. In the interest of the proper planning and development of the area.

NOTE:

If there is no appeal to An Bord Pleanala against this decision PERMISSION/APPROVAL will be granted by the Council as soon as may be after the expiration of the period for the taking of such appeal. If every appeal made in accordance with the Acts has been withdrawn, the Council will grant the PERMISSION/APPROVAL after the withdrawal.

An appeal against the decision may be made to An Bord Pleanala. The applicant may appeal within one month from the date of receipt by him of this notification. ANY OTHER PERSON may appeal within twenty-one days beginning on the date of the decision.

An appeal shall be in writing and shall state the subject matter and grounds of the appeal. It should be addressed to:—

An Bord Pleanala, Blocks 6 and 7, Irish Life Centre, Lower Abbey Street, Dublin 1.

(1) An appeal lodged by an applicant or his agent with An Bord Pleanala will be invalid unless accompanied by a fee of £36 (Thirty-six Pounds). (2) A party to an appeal making a request to An Bord Pleanala for an Oral Hearing of an appeal must, *in addition* to (1) above, pay to An Bord Pleanala a fee of £36 (Thirty-six Pounds). (3) A person who is not a party to an appeal must pay a fee of £10 (Ten Pounds) to An Bord Pleanala when making submissions or observations to An Bord Pleanala in relation to an appeal.

Approval of the Council under Building Bye-Laws must be obtained and the terms of the approval must be complied with in the carrying out of the work before any development which may be permitted is commenced.

FUTURE PRINT LTD.

Dublin County Council Comhairle Chontae Atha Cliath **Planning Department**

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

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

Register Reference : 91A/1326

Date : 4th November 1991

Our Ref.

Your Ref.

Date

LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS 1963 TO 1990

Dear Sir/Madam,

DEVELOPMENT : Warehouse and water tank, linking to existing warehouse/offices

LOCATION : Site 14 Cherry Orchard Industrial Estate, Ballyfermot

APPLICANT : Heathercourt Limited

APP. TYPE : Additional Information

With reference to the above, I acknowledge receipt of additional information received on 1st November 1991.

Yours faithfully,

.....

for PRINCIPAL OFFICER

Donal W. Bergin & Associates,
19 Terenure Road West,
Dublin 6W.

19 Terenure Road West,
Dublin 6W.
Telephone: 903360/8/9.
Fax: 903380.

Donal W Bergin & Associates
Consulting Engineers

our reference DWB/NB your reference date 30th October, 1991.

Dublin Co.Council,
Planning Dept.,
Block 2,
Irish Life Centre,
Lower Abbey Street,
Dublin 1.

91A/1326
1.32.0
A.1

Re: Reg. Ref: 91A/1326 - ADDITIONAL INFORMATION.

Proposed warehouse & watertank, linking to existing warehouse/offices at site no.14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Ltd, 25, Adelaide St., Dun Laoire, Co. Dublin.

Dear Sirs,

We refer to your letter dated 7th October 1991, requesting further information, in connection with the above planning application, to which we reply as follows. Drawings 9105 - 1A to 8A inclusive are enclosed in quadruplicate in support of this letter.

1. The site location map on drawing 7A, and the block plan on drawing 2A have been amended to reflect the location of the site, the Industrial Estate road network and adjoining buildings. The space to the east of the subject site which is reserved for parking for the adjoining building to the east measures 22 meters from the side of that building to the boundary line whereas 21.4 m has been confirmed to us as being sufficient.

2. At the time of our submission, we understood that Planning Reg. Ref 89A/1346 covering the building to the west, superceeded RA/28 and incorporated the agreed car parking requirement for the Snowcrest Services building to which you referred. The subject site was originally allocated as car

RECEIVED
- 1 NOV 1991
SEC.

Cont'd....

parking for the Snowcrest building and known as site 'B'. Subsequently site 'B' was exchanged for site 'A', immediately to the west and accordingly when site 'A' was being developed, it was necessary to agree car parking with Snowcrest before proceeding. Reg.Ref 89A/1346 indicated 46 parking spaces allocated to the Snowcrest building.

As a point of clarification we have measured this building and have showed car parking to correspond as closely as possible to the 89A/1346 layout on our drawing 2A. Provision for 44 parking spaces is shown. The building comprises 160 square meters as offices and 1387 square meters as warehouse.

The subject building comprising warehouse and link building measures 1241 square meters requiring 37 parking spaces. These are now provided for instead of the original 33 spaces by reducing the number of loading bay door access points at the front of the building thus creating 4 additional spaces.

3. Following our meetings and discussions with you on 18th October 1991 we have reduced the height of the building from 13 meters at ridge level to 10 meters, and from 10.5 meters at eaves level to 7.5 meters over the last two bays to the north of the building.

This will reduce the impact of the building on the adjoining bungalow development at Oakcourt Park, and considerably reduce or eliminate any overshadowing of these properties by the warehouse.

We trust that these amendments to the proposal have met your stated objectives accurately and we look forward to an early and favourable decision.

Yours faithfully,

D.W. Bergin.

DONAL W. BERGIN & ASSOCIATES.

Encl: 4 Copies of Drgs 9105-1A to 8A inclusive.

A1.

Dublin County Council Comhairle Chontae Atha Cliath **Planning Department**

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

Donal W. Bergin & Assocs.,
19 Terenure Road West,
Dublin 6W.

Reg. Ref.: 91A/1326

7 October 1991

Re: Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

I, the undersigned, hereby acknowledge receipt of Notification of Decision, dated 7 October 1991, in connection with the above.

Signed: _____

On behalf of: (Name) D.W. BERGIN

(Address) 19/21 Terenure Rd. W.,
Dublin 6W.

I hereby certify that the above Notification, dated 7 October 1991, was handed by me to the above signed today.

SIGNED: Mary Murphy

DATED: 07.10.91

Donal W. Bergin & Assocs.,
19 Terenure Road West,
Dublin 6W.

Reg. Ref. No. 91A/1326

7 October 1991

Re: Proposed warehouse and water tank, linking to existing warehouse/offices at site no. 14, Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

Dear Sir,

With reference to your planning application, received here on 9th August, 1991, in connection with the above, I wish to inform you, that before the application can be considered under the Local Government (Planning and Development) Acts, 1963-1990, the following additional information must be submitted in quadruplicate:-

1. The applicant is requested to clarify whether the site location map submitted with the application is accurate. From site inspection and a review of the Planning History of the area, the site as indicated appears to encroach on the adjoining site to the east.
   If necessary, the applicant is requested to submit a revised site location map which accurately identifies the subject site, the Industrial Estate road network and the adjoining buildings.

2. From a review of the Planning History of the area, it is noted that the site the subject of the current application, was originally approved as a car parking area to serve the adjoining warehouse building to the west, (Reg. Ref. RA/28).
   The current application does not indicate any car parking provision for this adjoining premises which is indicated on drawings lodged as being within the applicants control. A total of 33 no. spaces are indicated at the proposed site.

Continued...../

This is less than the no. spaces required to meet Development Plan Standards for the existing development for a development of this size, (1241sq. metres). The applicant is requested to clarify whether it is possible to provide car parking to Development Plan Standards to serve both the existing and proposed buildings at this location.

3. The proposed development is considered to be excessive. Lodged plans provide for the construction of a large warehouse which extends 13 metres to ridge level and 10.5 metres to eaves. This exceeds the height of existing industrial buildings at the Cherry Orchard Industrial Estate. It is considered that the proposed development because of its height and bulk would dominate the adjoining Oakcourt Park (bungalow) development and would adversely affect the amenities of residents therein. The applicant is requested to submit revised proposals which would rectify this situation. The applicant is requested to consult with the Planning Authority in this regard.

Please mark your reply "ADDITIONAL INFORMATION" and quote the Reg. Ref. No. given above.

Yours faithfully,

for Principal Officer.

19 Terenure Road West,
Dublin 6W.
Telephone: 903360/8/9.
Fax: 903380.

Donal W Bergin & Associates
Consulting Engineers

our reference DWB/NB your reference date 16th August,1991.

Ms Mary Galvin,
Dublin Co.Council,
Planning Dept.,
Irish Life Centre,
Lower Abbey Street,
Dublin 1.

Your register ref: 91A/1326.

Re: Permission for Warehouse & Watertank, linking to existing warehouse/offices.

Dear Ms.Galvin,

Following our discussions last week we have prepared a drawing to show the relationship between the proposed development and the adjoining housing estate to the north. This shows in plan and in section to a scale of 1:200 the proximity of the proposed warehouse to the houses and the location in plan of existing factory premises on site 13 to the same housing estate.

Observed shadows of the latter were noted at 3 p.m August 11th,1991. This factory is approximately 3 meters lower at eaves level to the proposed development, but it is also closer to the boundary of the housing estate by 4 meters. Projected shadows from the proposed building for this time are also show shaded.

It has to be said however that there are no mandatory requirements for direct sunlight penetration of a window and no right to daylight in a garden. Also there is no right to a view or prospect.

The 45 degree rule, if one were to apply it leaves the proposed building well beyond the minimum required distance separating it from the houses.

Marked #I.
91A/1326
1.4.0.

Cont'd.....

The Draft Building Regulations K4 describes the requirements for zones of open space outside of windows, based on certain parameters. The outer plane of this zone does not extend beyond 15 m from the window of the houses which is the worst case. This plane is still 8 m short of the northerly face of the proposed building. Even by projecting the 30 degree base plane beyond the outer plane, the zone is not obstructed by the proposed building.

Taking all these considerations into account we are satisfied that the proposed building with the adjoining open car park, which extends as far as the next factory building, will not consitute a problem because of the proposed height or width or proximity to Oakcourt Park.

Yours sincerely,

D.W. Bergin.

DONAL W. BERGIN & ASSOCIATES.

Encls: 4 x Drg 9105-8.

Dublin County Council Comhairle Chontae Atha Cliath **Planning Department**

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/1326 Date : 12th August 1991

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

Dear Sir/Madam,

DEVELOPMENT : Warehouse and water tank, linking to existing warehouse/offices

LOCATION : Site 14 Cherry Orchard Industrial Estate, Ballyfermot

APPLICANT : Heathercourt Limited

APP. TYPE : PERMISSION

With reference to the above, I acknowledge receipt of your application received on 9th August 1991.

Yours faithfully,

.....

for PRINCIPAL OFFICER

Donal W. Bergin & Associates,
19 Terenure Road West,
Dublin 6W.

Dublin County Council
Comhairle Chontae Atha Cliath

Planning Application Form/ Bye - Law Application Form

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 Site 14, Cherryorchard Industrial Estate
(If none, give description sufficient to identify) Ballyfermot, Dublin 10.

3. Name of applicant (Principal not Agent) Heathcourt Ltd

Address 25 Adelaide St, Dun Laoire Tel. No

4. Name and address of person or firm responsible for preparation of drawings Donal M. Bergin + Assoc. 19 Terenure Rd West Dublin 6W Tel. No 903368

5. Name and address to which notifications should be sent As in 4 above

£ 2171.69 9/8 N47492.

6. Brief description of proposed development Warehouse with outloading docks, water tank etc.

7. Method of drainage Piped 8. Source of Water Supply Dublin Corporation

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. N/A
(b) Proposed use of each floor N/A

10 Does the proposal involve demolition, partial demolition or change of use of any habitable house or part thereof? N

CO. DUBLIN. Cherry Orchard Industrial Estate, Ballyfermot, Dublin 10. — Planning permission is hereby sought from Dublin County Council for warehouse and water tank, linking to existing warehouse/offices at site no. 14, for Heathcourt Limited, 25 Adelaide St., Dun Laoire, Co. Dublin.

11.(a) Area of Site 2550 Sq. m.
(b) Floor area of proposed development 1241 Sq. m.
(c) Floor area of buildings proposed to ba retained within site N Sq. m.

J. Independent 8/8/91

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

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:
FULLY

15. List of documents enclosed with application. IRISH INDEPENDENT 8TH AUGUST 1991
CHEQUE, SCHEDULE OF AREA
4 SETS DRAWINGS No's 9105, 1-7 inclusive.

16. Gross floor space of proposed development (See back) 1241 Sq. m.
No of dwellings proposed (if any) N/A Class(es) of Development
Fee Payable £ 2171.69 Basis of Calculation £1.75 / M²
If a reduced fee is tendered details of previous relevant payment should be given

Signature of Applicant (or his Agent) Date 9th August 1991

FOR OFFICE USE ONLY

Application Type P.
Register Reference 91A/1326
Amount Received £ 9/8
Receipt No 17-12 2.284
Date

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 accordence 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.

RECEIPT CODE

COMHAIRLE CHONTAE ÁTHA CLIATH

DUBLIN COUNTY COUNCIL

46/49 UPPER O'CONNELL STREET
DUBLIN 1

This receipt is not an application for

PAID BY
CASH
CHEQUE
M.O.
B.L.
I.T.

N 47492

£2171.69

Received this 9th day of August 19 91

from Smurfit Services Ltd

the sum of two thousand one hundred and seventy one Pounds

sixty nine Pence, being Co Co planning

application at Site 14 Clonshaugh Industrial Estate

Michael O'Hea Cashier

S. CAREY
Principal Officer

Class 4

19 Terenure Road West,
Dublin 6W.
Telephone: 903360/8/9.
Fax: 903380.

Donal W Bergin & Associates
Consulting Engineers

our reference | your reference | date 9th Aug.,1991.

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

Re: HEATHCOURT LTD.
Planning permission for Warehouse & Water Tank at Site 14 Cherry Orchard Ind. Est. Ballyfermot, Dublin 10.

Dear Sirs,

We hereby formally apply to Dublin County Council for planning permission for the above development under the Local Government (Planning & Development) Acts 1963- 1983.

These premises will be used for the storage and distribution of food products. The building will be connected by a link access to an adjoining premises which is engaged in the same business under the title of Snowcrest Services Ltd. The total number of employees between the two sites is not expected to exceed 10.

Yours faithfully,

D.W. Bergin.

DONAL W. BERGIN & ASSOCIATES.

Encl:
1 No. copy Irish Independent 8th August 1991 Planning Notice.
4 No. Schedule of Areas.
1 No. Cheque for £2171.69.
4 No. Application Forms.
4 No. Drawings No's: 9105, 1-7 inclusive.

SCHEDULE OF FLOOR AREA

N BUILDING: Length: 43525 mm

Width : 27850 mm

Area : 1212.17 m²

: BUILDING: Length: 6500 mm

Width : 4430 mm

Area : 28.80 m²

L AREA = 1212.17 + 28.80 M²

= 1240.97 Sq.m.

NING FEE = 1240.97 X £1.75 = £2171.69