

REF. NO.: 91A/0702

CERTIFICATE NO.: 14837-3

PROPOSAL: House

LOCATION: Athgol North Newcastle

APPLICANT: Tom Bishop

	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	/\$55	/\$55	—		
B	Domestic Ext. (Improvements/Apts.)	\$ 500					
C	Building for office or other comm. purpose	\$ 20.50 per sq. m. or \$70					
D	Building or other structure for purposes of agriculture	\$ 10 per sq. m. or \$300					
E	Fuel filling Station	\$ 2000					
F	Dev. of prop. not coming within any of the foregoing classes	\$70 or \$20 per sq. m. or \$1000 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: [Signature] Grade: 8.0 Date: 7/5/91

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

9/A/0702

CERTIFICATE NO. 25177

House

PROPOSAL :

LOCATION :

*Althoe North Newcastle
Tom Bishop*

APPLICANT :

1	2	3	4	5	6	7
DWELLINGS/AREA LENGTH/STREET	RATE	PRT. OF FEE REC.	AMOUNT LOANED	BALANCE DUE	REMARKS	DATE RECORDED
Dwellings	3232	32	32	-		

Turkel

6-0

6/5/91

Witness 2, 3, 4, 5, 6 & 7 Certified Signatures
Witness 2, 3, 4, 5, 6 & 7 Endorsed Signatures

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

ASSESSMENT OF FINANCIAL CONTRIBUTION

REG. REF.:

CONT. REG.:

SERVICES INVOLVED: WATER/FOUL SEWER/SURFACE WATER

AREA OF SITE:

FLOOR AREA OF PRESENT PROPOSAL:

MEASURED BY:

CHECKED BY:

METHOD OF ASSESSMENT:

TOTAL ASSESSMENT

MANAGER'S ORDERED NO: P/ /
DATE

ENTERED IN CONTRIBUTIONS REGISTER:

DEVELOPMENT CONTROL ASSISTANT GRADE

P/2830/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Register Reference : 91A/0702

Date Received : 2nd May 1991

Correspondence : Desmond Bellew,
Name and : Buildtech Ltd,
Address : Raynestown,
Dunshaughlin,
Co. Meath.

Development : Change of house type

Location : Athgoe North, Newcastle

Applicant : Mr T. Bishop

App. Type : Permission

Zoning : B

(MG/BB)

Report of Dublin Planning Officer dated 17th June, 1991.

This is an application for planning permission for change of house type at Athgoe North, Newcastle, Co. Dublin for Mr. T. Bishop.

The proposed site which has a stated area of 0.9 acres is located on Athgoe Hill in an area zoned B, the objective of which is "to protect and provide for the development of agriculture. It is a prominent L shaped site which slopes away from the public road. It is surrounded by high and mature hedgerows at the road frontage. Boundaries to the east and west at the front of the site comprise conifer hedging. The remaining boundaries comprise low wire fencing. There are existing housing opposite, and on adjoining site to the north east and southwest.

There have been various applications for planning permission for housing development at this site. The most recent include:-

Reg. Ref. ZA 1286 - a refusal of permission for a bungalow and septic tank for T. Bishop (the site of this application varied slightly from the current site).

Reg. Ref. No. 88A 152 refers to an application for planning permission for a house at this site for John Birmingham. The applicant was requested to submit additional information on this application. This information was never submitted.

Reg. Ref. No. 85A 479 refers to a refusal of planning permission for a bungalow

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

and septic tank at Athgoe North for H. Glynn. The site in this instance differed slightly from the site of the current application.

Reg. Ref. No. 85A 1197 refers to a grant of planning permission (on foot of a Section 4 motion) for a bungalow at this location for T. Bishop. In that instance the applicant was requested to submit additional information concerning inter alia an indication as to how the proposed development was compatible with the agricultural zoning objective. This additional information request was not responded to *according to our files*.

No development other than regrading of the site took place on foot of this grant of permission. An application to extend the permission which was to expire on the 20th December, 1990, was lodged on 19th December, 1990. This was rejected on the basis that substantial works had not been carried out *by letter dated 14/12/91*.

Despite the fact that the grant of permission under Reg. Ref. No. 85A/1197 has now expired the applicants have submitted the current application for 'change of house type' only.

Lodged plans provide for the construction of a large 2 storey 4 bedrooomed house of floor area of 270.8 sq. metres. This is to be located on the north eastern portion of the site and oriented towards the north west i.e. away from the public road. Drawings identify a 2 storey house finished in brick (with the exception of the rear elevation). The main portion of the house is to have a ridge roof. Projections to the front at first and ground floor level are to have a hipped roof profile. Lodged plans indicate a single storey kitchen/porch annex to the side. The proposed house is to be set back some 12 metres from the public road.

Lodged plans note that the boundary at the road frontage is to be set back. This would involve removing the existing mature hedgerow at this location.

The proposed house type is considered unsuitable and inappropriate for this location. The proposed site is a prominent one and the proposed house would be visually dominant when viewed from surrounding roads etc.

In addition, no details are included regarding the existing ground levels or proposed finished floor levels. The applicants merely note on drawings that 'levels are to be determined'.

As stated the proposed site is located in an area zoned B for agriculture. However, no details have been submitted by the applicants regarding their need to reside at this location as required by Council's Policy under paragraph 2.3.9. It is noted that the applicant has an address in Drimnagh, Dublin 12!

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Roads Department report not received.

Environmental Health Officers report (received 17 June, 1991) notes that:

1. The proposed percolation areas are outside the site boundary and no sterilisation/wayleave agreement has been submitted.
2. The location of the water supply, septic tank and percolation areas serving the house across the road are not shown on drawings.
3. The reserve percolation area is too close to the adjoining boundary.
4. No evidence of adequacy and potability of proposed water supply submitted.

I recommend that a decision to REFUSE PERMISSION be made under the Local Government (Planning and Development) Acts, 1963-1990 for the following (L) Reasons:-

1. The site is located in an area zoned "to protect and provide for the development of agriculture" in the Dublin County Development Plan, 1983. It is the policy of the County council as set out in Para. 2.3.9 to permit housing development in rural areas only "where the applicants can show a need to reside in proximity to their employment and/or in close proximity with the rural community and/or the area in question". The applicant has not satisfactorily demonstrated the above. It is considered that the proposed development does not comply with Council Policy regarding housing in rural areas. *The proposed development would, therefore, materially contravene the above-mentioned zoning objective, would militate against the preservation of the rural environment and as such would not be in accordance with the proper planning and development of the area.* *as development in rural areas is intended to be for the use of the rural community for agricultural purposes.*
2. The proposed development would constitute ^a further extension of ribbon development on a substandard rural road which would set an undesirable precedent for other similar developments and would lead to a demand for an uneconomic provision of resources which would not be in accordance with the proper planning and development of the area.
3. The newspaper advertisement submitted with this application is incorrect. This refers to the fact that planning permission is being sought for a 'change of house type' when in fact the grant of permission for housing development at this site under Reg. Ref. No. 85A/1197 has expired.

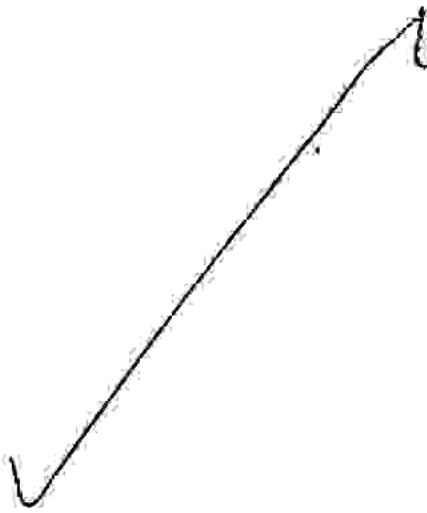
Over

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

4. The proposed house because of its height and bulk would be visually dominant and would militate against the preservation of the rural environment at this location and as such would be contrary to the proper planning and development of the area.
5. No evidence has been submitted to indicate whether the proposed well has an adequate and potable water supply.
6. No evidence has been submitted as to whether the applicant can provide a wayleave entitling him to locate the percolation and the reserve percolation areas outside his site in lands which appear to be outside his control.

MS (MG/AC)



Endorsed:- *[Signature]*
for Principal Officer

[Signature]
For Dublin Planning Officer

Order:- Pursuant to Section 26(1) to the Local Government (Planning and Development) Acts, 1963-1990 a decision to REFUSE PERMISSION for the above proposal is hereby made by the Council for the (6) reasons set out above and PERMISSION is REFUSED accordingly.

Dated: 28 June, 1991.

[Signature]
APPROVED OFFICER

to whom the appropriate powers have been delegated by Order of the Dublin City and County Manager, dated 19 June 1991.

MC

P.C. _____ Reg. Ref. 91A/0702

PROPOSED: Change of house type

AT: Althage North Newcastle

FCR: MR T. Bishop

PLANS LODGED: _____

Observations and recommendations of Env. Health Officers and/or Supervising Env. Health Officer.

Refusal recommended because

1. The proposed percolation areas are outside the site boundary (A sterilisation/wayneau agreement has not been submitted).
2. Locations of water supply and septic tank/percolation areas serving the house across the road are not shown on the drawings submitted.
3. Evidence of adequacy and potability of proposed water supply have not been submitted.
4. The reserve percolation is too close to the adjoining boundary. A minimum of 3m is required.

Ora Devine
for John O'Keilly SEHO
13/6/91

Gretta Kelly
SEHO 11/6/91
PLANNING DEPT.
DEVELOPMENT CONTROL SECT
Date... 17.06.91
Time... 3.45

DUBLIN COUNTY COUNCIL

tel. 724755 (ext. 262/264)

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

NOTIFICATION OF A DECISION TO REFUSE:

~~OUTLINE PERMISSION~~: PERMISSION: ~~APPROVAL~~

LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS, 1963-1983

To..... Desmond Bellew,..... Register Reference No. 91A/0702 28.06.91
..... Buildtech Ltd., Raynestown,..... Planning Control No.
..... Dunshaughlin,..... Application Received 02.05.91
..... Co. Meath...... Additional Information Received.....
Applicant..... Mr. T. Bishop.....

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, P/ P/2830/91 dated 28.06.91 decided to refuse:

~~OUTLINE PERMISSION~~

PERMISSION

~~APPROVAL~~

For..... Proposed change of house type at Athgoe North, Newcastle......

for the following reasons:

1. The site is located in an area zoned "to protect and provide for the development of agriculture" in the Dublin County Development Plan, 1983. It is the policy of the County council as set out in Para. 2.3.9 to permit housing development in rural areas only "where the applicants can show a need to reside in proximity to their employment and/or in close proximity with the rural community and/or the area in question". The applicant has not satisfactorily demonstrated the above. It is considered that the proposed development does not comply with Council Policy regarding housing in rural areas. The proposed development would, therefore, materially contravene a development objective indicated in the County Dublin Development Plan for the use primarily of the site for agricultural purposes, would militate against the preservation of the rural environment and as such would not be in accordance with the proper planning and development of the area.
2. The proposed development would constitute ^a further extension of ribbon development on a substandard rural road which would set an undesirable precedent for other similar developments and would lead to a demand for an uneconomic provision of resources which would not be in accordance with the proper planning and development of the area.

Over

Signed on behalf of the Dublin County Council

J. de Bantock
for PRINCIPAL OFFICER

Date 28 June 1991

IMPORTANT:

NOTE: (1) 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. The appeal shall be in writing and shall state the subject matter of the appeal and grounds of appeal and should be addressed to *An Bord Pleanala, Irish Life Centre, Lower Abbey Street, Dublin 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 in relation to an appeal. When an appeal has been duly made and has not been withdrawn, An Bord Pleanala will determine the application for permission as if it had been made to them in the first instance.

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/0702

Date : 3rd May 1991

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

Dear Sir/Madam,

DEVELOPMENT : Change of house type
LOCATION : Athgoe North, Newcastle
APPLICANT : Mr T. Bishop
APP. TYPE : PERMISSION/BUILDING BYE-LAW APPROVAL

With reference to above, I acknowledge receipt of your application received on 2nd May 1991.

Yours faithfully,

.....
PRINCIPAL OFFICER

Desmond Bellew,
Buildtech Ltd,
Raynestown,
Dunshaughlin,
Co. Meath.

REF: DB/pr

DATE: 2nd May 1991

To Planning Officer,
Dublin Co. Council,
Abbey Street,
Dublin 1.

Buildtech,
Raynestown,
Dunshaughlin,
Co. Meath.

RE: Change House Design Type at Atgoe

Dear Sir,

We the above, on behalf of Mr. T. Bishop wish to apply for Planning Permission to erect a different house design to the house type granted Planning Permission REF:-P/4900/85,20/12/85 85A/1197.

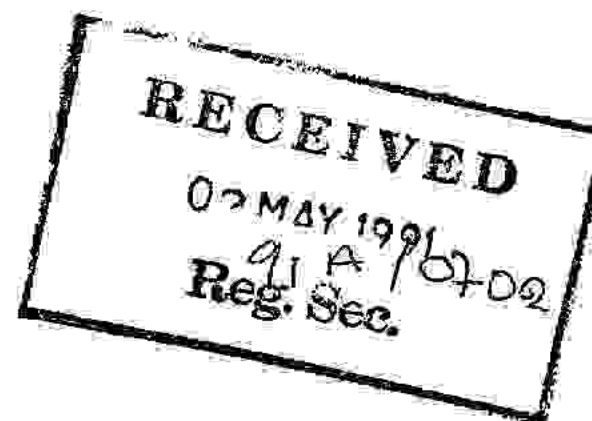
The reasons for so little work being carried out was mainly financial, as the clearing and levelling of the site was extremely expensive (being rock base). Also the new house type is much more suited to the nature of the site ie. views falls etc. We are advising a building program of 14 months from time of obtaining Planning Permission as the client wishes to move into the new house as soon as possible.

If you have any queries please contact the writer.

Yours faithfully,



Desmond J. Bellew





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 ATHGOE NORTH,
(If none, give description sufficient to identify) NEWCASTLE, Co. DUBLIN.

3. Name of applicant (Principal not Agent) TOM BISHOP.
Address 18 SLIVEBLOOM ROAD, DRIMNASH D. 12. Tel. No. N 37045

4. Name and address of person or firm responsible for preparation of drawings BUILDTECH. LTD. RAYNESTOWN,
..... DUNSHAUGHLIN, Co. MEATH. Tel. No. 259748

5. Name and address to which notifications should be sent DESMOND BELLEN, BUILDTECH LTD.
..... RAYNESTOWN, DUNSHAUGHLIN, Co. MEATH.

6. Brief description of proposed development 2 STORE DOMESTIC HOUSE, 2 LEVEL GROUND & FIRST FLOORS
..... SITE (CUT OUT) (STONE) TO TAKE HOUSE PARTLY LABELLED

7. Method of drainage SEPTIC TANK & PERCOLATION AREA. 8. Source of Water Supply WELL

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 NONE

(b) Proposed use of each floor

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

11.(a) Area of Site91 ACRES. 3684.2 m² Sq. m.

(b) Floor area of proposed development 270.8 m² Sq. m.

(c) Floor area of buildings proposed to be retained within site Sq. m.

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

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

14.Please state the extent to which the Draft Building Regulations have been taken in account in your proposal:
99%.

15.List of documents enclosed with 4 NO SETS PLANS 4 NO SPECIFICATIONS
..... NEWSPAPER NOTIFICATION, FORMS

CO. DUBLIN - Planning permission sought from Dublin County Council for change of house type at Athgoe North, Newcastle, for Mr T. Bishop.

16.Gross floor space of proposed development (See back) 270.8 m² Sq. m.

No of dwellings proposed (if any) 1 No Class(es) of Development DOMESTIC HOUSE A.

Fee Payable £ £87 Basis of Calculation PLANNING PERMISSION £32 +

If a reduced fee is tendered details of previous relevant payment should be given
Bye-Laws £55 = £87.00

Signature of Applicant (or his Agent) [Signature] Date 24-4-91

Application Type P/BBL FOR OFFICE USE ONLY

Register Reference 91A/0702

Amount Received £ 20-12 2,18.6

Receipt No 2/5

Date

Shirley James 26/4/91

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

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

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

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

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

INDUSTRIAL DEVELOPMENT:

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

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

PLANNING APPLICATIONS

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

BUILDING BYE-LAW APPLICATIONS

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

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

Gross Floor space is to be taken as the total floor space on each floor measured from the inside of the external walls.

For full details of Fees and Exemptions see Local Government (Planning and Development) (Fees) Regulations 1984.

COMHAIRLE CHONTAE ÁTHA CLIATH

PAID BY DUBLIN COUNTY COUNCIL

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

Issue of this receipt is not a
knowledge that the
tendered is the prescribed

N 39045

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

£32.00

Received this

2nd day of May 1951

from

Tom Bishop
to Slieve Donard road

the sum of

£32.00

Pounds

Pence, being

to the pence

application at Allsee North, Newcastle

Class 1

Michael O'Keefe

Cashier

S. CAREY
Principal Officer

11/51

RECEIPT CODE

COMHAIRLE CHONTAE ATHA CLIATH

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

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

BYE LAI
REC. No. N 39118

£55.00

Received this 2nd day of May 19...

from Tom Bishop
16 Slieve Bloom road

the sum of £55.00 Pounds

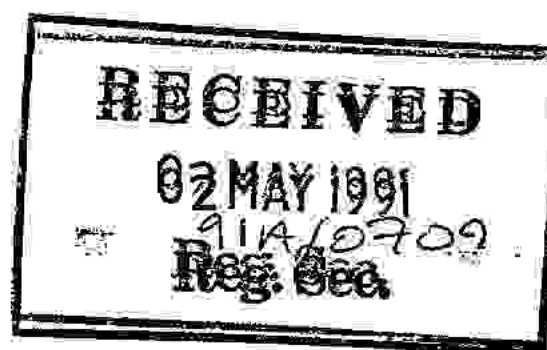
Pence being 00/11
application at Rathgoe North, Newcastle

Michael O'Hara Cashier

S. CAREY
Principal Officer
Class A

HOUSE AT ATHGOE NORTH,
NEWCASTLE,
CO. DUBLIN.

Specification



Buildtech,
Raynestown,
Dunshaughlin,
Co. Meath.

Section 1 EXCAVATIONS AND SUB-STRUCTURES

- 1.1 Site**
The site shall be adequately drained and have no features likely to render the house unstable or uninhabitable.
- 1.2 Preparing Site**
Clear and grade site for new building and remove or divert existing drains as required. The entire site of buildings and paved areas shall be cleared of all vegetable soil to a depth of at least 150 mm. Where the bearing quality of the ground is suspect special care shall be taken in the design of the foundations.
- 1.3 Excavation**
- 1.3.1** The trenches shall be excavated to the depths and widths required to accommodate foundations or to such further depths or widths as may be necessary to ensure the stability of the structure. Trench bottoms and foundations shall be levelled off in horizontal benches. The bottom of trenches shall be not less than 450 mm below the finished ground level and kept clear of water before concreting.
- 1.3.2** Where other excavations close to or under the foundations are unavoidable care shall be taken to ensure the stability of the structure.
- 1.4 Foundations**
Shall be concrete mix A, to widths and depths indicated and reinforced as necessary. Where foundations are stepped they shall over lap at least 500 mm.
- 1.5 Floor Level**
The height of the finished floor over the highest point of the finished ground level shall be not less than 350 mm in the case of joisted floors and not less than 175 mm in the case of concrete floors. See also 2.24.
- 1.6 Rising Walls**
Rising walls shall be of solid blockwork bedded in cement mortar, or of mass concrete, mix A to widths and heights indicated. See also 2.4.
- 1.7 Cement and cement-based products**
Normal Portland cement used in concrete and other cement based products shall be certified by the Institute for Industrial Research and Standards under the Irish Standard Mark Licensing Scheme as complying with I.S.I.: 1963 "Portland cement", and shall bear the Irish Standard Mark.
- 1.8 Lime**
Hydrated lime to be to I.S.8.
- 1.9 Water**
Water shall be clean and free from harmful impurities.
- 1.10 Sand and Aggregates**
Fine aggregates shall be clean, sharp pit or river sand free from all impurities and in accordance with I.S. 5. Coarse aggregates shall be suitably graded hard clean pit gravel or crushed stone in accordance with I.S. 5 and to sizes set out below.

1.11 Concrete Mixes

Concretes	Aggregates	Nominal Mix			28 day Strength (Newtons) Per mm ²
		Cement	Fine Aggregate	Graded Coarse Aggregate	
Mix	Maximum Size				
A	40 mm	1	3	6	14
B	20 mm	1	2	4	21
C	14 mm	1	3	6	—

The water-cement ratio shall be kept to the minimum needed to ensure reasonable workability, but should not exceed 35 litres per 50 Kg of cement.

- 1.12 Cement Mortar**
Shall be 1 part cement to 3 parts sand.
- 1.13 Lime Mortar**
Shall be 1 part hydrated lime to 6 parts sand.
- 1.14 Gauged Mortar**
Shall be 10 parts lime mortar mixed with 1 part cement just before use.
- 1.15 Strong Gauged Mortar**
Shall be 5 parts lime mortar mixed with 1 part cement immediately before use.
- 1.16 Additives**
Plasticisers, waterproofers, sealers and bonding agents if used, shall be used in accordance with manufacturer's instructions.

Section 2 BLOCKLAYING AND CONCRETING

- 2.1 Thermal Insulation**
Attention is drawn to the need to insulate walls, floors and roofs to meet the requirements set out in Section 14.
- 2.2 Mixes**
See Section 1 for concrete and mortar.
- 2.3 Blockwork**
Concrete blocks shall be in accordance with I.S. 20 and bricks, if clay, in accordance with I.S. 91. All blockwork and brickwork shall be properly coursed and bonded and bedded in gauged mortar. All walls shall be carried up regularly not leaving any part 1 m lower than another.
- 2.4 Cavity Walls**
Walls shall be formed of two solid 112 mm leaves of blocks or bricks with 50 mm cavity between. Outer and inner leaves to be tied together by accepted wall ties, not less than four per square metre with extra ties at opes. Care to be taken that mortar dropping into the cavity or lying on ties, is cleaned out, through openings left for the purpose, head of cavities to be closed in the solid. All window, door and other opes in cavities to be sealed and so arranged as to prevent the passage of moisture. The cavity is to extend at least 150 mm below the level of the D.P.C. and shall provide for drainage of moisture to the outside, at the base.
- 2.5 Hollow Block Walls**
225 mm hollow blocks shall be plastered externally. Bedding mortar shall be confined to abutting surfaces, and shall not enter the cavities of the block.
- 2.6 Solid Block Walls**
225 mm solid concrete blocks shall be plastered externally.
- 2.7 Solid Brick Walls**
Solid brick walls shall be 337 mm thick, and weather-pointed.
- 2.8 Masonry Walls**
Masonry walling, where used, must not be less than 500 mm thick.
- 2.9.1 Facings**
Where stone or other decorative external facing is used, care must be taken to ensure adequate structural stability, thermal insulation and absence of damp penetration.
- 2.9.2 Opes in External Walls**
Where any duct, pipe, etc., is required to penetrate through an external wall it shall be so arranged as to prevent the passage of moisture inwards.

- 2.10 Pointing**
All wall faces finished without plastering shall be pointed in the building mortar as the work proceeds, or the joints may be taken out 20 mm deep and pointed in cement mortar.
- 1.11 Party Walls**
All party walls shall be 225 mm solid blockwork of density not less than 1,500 kg/m³, plastered both sides and carried up in the solid to the plane of the upper surface of the rafters. See also 5.7.
- 2.12 Solid Partition**
Solid partitions shall be 112 mm thick brick or block work, laid to break joint, in gauged mortar, bonded 112 mm at junctions.
- 2.13 D.P.C.**
The damp-proof courses shall be polythene in accordance with B.S. 743 or bitumen sheeting on hessian or canvas base in accordance with I.S. 57 laid to prevent the passage of moisture and lapped adequately at joints, all as described below.
- 2.13.1** In all ground floor walls and breasts to full width and stepped as necessary, in cavity walls in both outer and inner leaves separately, and shall be laid not less than 150 mm over finished ground level or paved area or highest ground within one metre of house.
- 2.13.2** At sides of opes in cavity walls and over all opes 250 mm longer than opes and stepped down and outward all to prevent passage of moisture from outer to inner leaf.
- 2.13.3** Under the turned up at ends and back of all cills and external room ventilation grids and recessed edges of all concrete roof slabs.
- 2.13.4** In all chimney stacks immediately above the level of the flashing and under all cappings and copings.
- 2.13.5** Under lowest ground floor timbers and not lower than wall D.P.C.
- 2.13.6** Where the waterproofing membrane in a concrete floor is not level with the wall D.P.C. care shall be taken to ensure continuity of damp proofing by stepping, turning up and lapping as necessary.
- 2.14 Concrete Under Barges**
Concrete barges, if used, shall be under slates or tiles, full width of walls and at least 75 mm thick and projecting 100 mm beyond the face of the wall, throated on the underside, suitably reinforced and tied back as necessary. See also 5.7.
- 2.15 Concrete Copings**
Concrete copings in lengths of not more than 1 metre, shall be weathered and throated, bedded in gauged mortar on D.P.C. and pointed in cement mortar.
- 2.16 Lintels**
Concrete lintels mix B cast in situ shall be 225 mm deep with 225 mm bearing at each side of the ope, and shall be reinforced for full length with one 10 mm mild steel for every foot of span. Bars are to be placed 25 mm from bottom of lintel. Lintels for opes greater than 2.5 m shall be specially designed. precast concrete lintels to be as above and in addition to have 2 No. 10 mm mild steel bars at the top with 25 mm cover and to be clearly marked for correct placing. Accepted patent or proprietary lintels to B.S. 1239 to be used in accordance with manufacturer's instructions.
- 2.17 Window Cills**
Concrete window cills shall be to I.S. 89, 65 mm thick on front face, 120 mm thick at back, and 225 mm wider than ope; reinforced adequately, seated, rebated, weathered and throated and set in gauged mortar on D.P.C. as previously specified. Care to be taken that the throating is clear of the finished wall face.
- 2.18 Reinforced Concrete Annexe Roofs**
2.18.1 Concrete roofs, mix B shall be 40 mm thick for each metre of span, with minimum thickness of 100 mm, fine screeded and laid to falls. Where roof is recessed into a wall, form 150 mm upstand on D.P.C. properly flashed over. The roof shall be projected 150 mm and throated at verges, with a raised fillet as necessary to prevent overspill of surface water.

Insulate underside of roof. Waterproofing additives or sealants, if used, shall be applied in accordance with manufacturer's instructions.

2.18.2 Concrete roofs shall be reinforced adequately. For example, an area 5 m x 3 m should have 12 mm mild steel bars at 150 mm centres across the short span and 6 mm bars at 300 mm centres on the 5 m span. Steel to be placed 25 mm above underside of slab and carried over bearing walls to within 25 mm of edge of slab. Reinforcing bars should not normally be lapped, but where unavoidable, the lap shall be not less than 500 mm.

2.18.3 Proprietary steel reinforcing mesh may also be used, in accordance with manufacturer's instructions.

2.19 Chimney Breasts and Stacks

2.19.1 Chimney breasts shall be built of solid concrete blocks or decorative blocks or bricks or stone, all to a thickness of not less than 112 mm bedded in gauged mortar with splayed R.C. lintel over fire ope. Each fireplace recess shall have 200 mm solid incombustible material to sides and back excluding any fireback, carried up to full height of recess. Each fireplace shall have an independent flue, separated by not less than 100 mm of solid incombustible material (excluding the thickness of any flue liner) from any other flue. Each flue shall be lined with fireclay liners to I.S. 51 not less than 200 mm internal diameter, backed with weak mortar and carried 150 mm above capping. Splayed liners shall be used in forming bends to flues. Chimney stacks over roof shall be built of 112 mm solid concrete blocks bedded in gauged mortar and plastered or, where special precautions are taken, of decorative blocks, bricks or natural stone. Due to the exceptional exposure of stacks the use of decorative blocks, bricks or natural stone in stacks may cause dampness. Special care in construction and in the design and placing of the D.P.C. is necessary.

2.19.2 Capping to stack shall be of reinforced concrete, mix C, weathered and throated, not less than 75 mm thick at edge and flanching up around pots. Top of stack, excluding chimney pots, to be 600 mm over ridge where stack is within 600 mm of the ridge.

2.19.3 Care should be taken that construction and height of stack is such as to ensure adequate structural stability and satisfactory drawing of smoke.

2.20 Fireplaces, Heating Units, Cookers

Fireplaces to have a fireclay back and incombustible surround and to be properly gathered into flue. Enclosed cookers and heating units to be fitted to manufacturer's instructions, with incombustible flue, ventilated as necessary and shall stand on a concrete hearth projecting 150 mm from face of appliance all round.

2.21 Hearths

First floor hearths shall be 125 mm thick reinforced concrete, mix B, finished fine carried on suitable formwork on 44 mm x 22 mm battens spiked to floor joists.

Ground floor hearths shall be 125 mm, finished fine, on hardcore as necessary.

All hearths to be 150 mm wider than fire ope on each side and to project 500 mm from face of breast.

2.22 Paved Yard

Provide 10 m² of impervious paved area laid to falls on suitably prepared base and adjacent to back door e.g. 100 mm concrete, 50 mm tarmacadam or 50 mm paving slabs.

2.23 Concrete Floors

All concrete ground floors shall be laid on a bed of clean hardcore not less than 150 mm thick and well consolidated. Soft material shall not be used in making up level under floors. Concrete ground floor shall be 150 mm thick mix B finished fine, laid on a continuous damp proof membrane on a layer of fine sand and turned up at edges of slab as necessary to meet and seal with wall D.P.C. Polythene sheeting where use shall be not less than 1000 gauge.

2.24 Sub Floors

Concrete sub-floors to joisted timber floors shall be laid on 100 mm of hardcore as described in 2.23. Concrete shall be mix A, 100 mm thick, and finished to a level not lower than the highest adjoining ground.

2.25 Dwarf Walls

Dwarf walls 112 mm thick concrete block or brick, honeycombed for through ventilation shall be built on sub-floors, at centres not greater than 2 metres.

2.26 Suspended Concrete Floors

Where concrete suspended floors or stair landings or balconies are used, they should be finished fine and capable of carrying a superimposed load of 1.44 KN/m². Exposed soffits shall be insulated where necessary.

2.27 Screen and Garden Walls

Screen or garden walls shall not abut main walls of house.

Section 3 CARPENTRY AND JOINERY

3.1 Timber

Timber shall be sound, free from disease and infestation and large loose knots or waney edges, with a moisture content within the limits set out in I.S. 96. Timber for carpentry to be white deal. Timber for joinery to be red deal, hard wood or other timber suitable for the purpose and free from all defects.

3.2 Preservative

Soft wood used externally, to be pressure impregnated with coloured preservative. Softwoods in contact with concrete to be treated with coloured preservative. Frames, barge-boards, fascias to be primed before fixing.

3.3 Roof Timbers

3.3.1 Wall plates 75 mm x 100 mm fully treated with preservative, halved and spiked at headings and angles, set level and bolted down at 1 m intervals.

3.3.2 Rafters 35 mm x 115 mm minimum at 400 mm centres, treated at feet with preservative, and cut to angles, checked and twice spiked to wall plates, properly aligned to back and spiked to ridge and purlin.

3.3.3 Trimming rafters 44 mm thick around roof light and dormer opes and around chimney shafts and 50 mm clear of shaft.

3.3.4 Hip and valley rafters 44 mm x 225 mm treated at feet with preservative and fixed as for rafters above.

3.3.5 Valley and gutter boards 22 mm x 225 mm wrot, to take gutter, treated with preservative and secured to rafters.

3.3.6 Ridge board 32 mm x 175 mm set level, kept 50 mm clear of chimney shaft.

3.3.7 Purlins 75 mm x 175 mm adequately supported at intervals of approximately 2 m. Joints, where necessary, shall be half lapped over a support.

3.3.8 Struts 75 mm x 100 mm properly supporting purlins from solid bearing, or from spreaders not more than 500 mm from load bearing partitions. Where such bearing support cannot be provided, suitably trussed rafters or purlins shall be used to ensure stability.

3.3.9 Spreaders and thrust pieces 44 mm x 115 mm under struts, spiked to ceiling joists to distribute load.

3.3.10 Collar ties 35 mm x 115 mm to every rafter. Where purlins are provided, fix collars to every fourth rafter. All collars to be twice spiked to rafters.

3.3.11 Hangers and runners 35 mm x 75 mm where necessary to support ceiling joists.

- 3.3.12 Soffit bearers 35 mm x 75 mm to every rafter, treated with preservative.
- 3.3.13 Soffit at least 200 mm wide 16 mm wrot softwood, pressure impregnated or other material suitable for external use and secured to bearers.
- 3.3.14 Fascia 32 mm x 175 mm wrot deal, well secured to roof timbers and pressure treated.
- 3.3.15 Ceiling joists 35 mm x 115 mm at 400 centres, cut to angles and twice spiked to rafters. Where not in one length, form 500 mm securely spiked lap over partition walls.
- 3.4 Roof Trusses**
Roof trusses to I.S. 193 (P), adequately braced diagonally, may be used at centres not greater than 600 mm. See also 5.2.
- 3.5 Floor Joists**
- 3.5.1 First floor joists 35 mm x 175 mm at 350 mm centres for spans up to 3 m, 35 mm x 225 mm at 350 mm centres for spans up to 5 m. All to have one row 35 mm x 44 mm herring-bone bridging or 35 mm x depth of joist solid bridging. Joist to be doubled where carrying partition.
- 3.5.2 Trimmers and trimming joists 75 mm thick x depth of joist to opes and chimney breasts and kept 50 mm clear of breasts. Trimming and trimmed joists to be supported by approved fittings or to be checked on to battens spiked to supporting joist.
- 3.5.3 Ground floor joists 35 mm x 115 mm at 350 mm centres, to be spiked to wall plates (tassels). Trimming timbers to be 44 mm thick x depth of joist.
- 3.5.4 Ground floor tassels 44 mm x 75 mm treated with preservative set level and bearing solidly on D.P.C.
- 3.6 Ventilation**
Provide through ventilation under timber ground floors by means of 225 mm x 150 mm metal or concrete louvred ventilators in external walls. Sealed ducts to be formed through cavities in external walls. Openings to be left in tassel walls and in rising walls of partitions and piped ducts to be formed under intervening concrete floors to ensure through ventilation. Space from surface of sub-floor to underside of bottom of ground floor joists to be not less than 125 mm.
- 3.7 Flooring**
- 3.7.1 Remove all debris from sub-floors before flooring. Flooring 22 mm T & G well cramped, twice nailed with 60 mm cut brads, in narrow widths to minimise the effects of cupping and shrinkage or 18 mm flooring grade chipboard, density 700 kg/m³ on joists at 400 mm centres with 44 mm x 44 mm noggins to support cross joints. Long joints shall be made along the centre of a joist. Adjacent sheets shall have an expansion gap of 3 mm between them, with 20 mm gap between edges of sheet and adjoining walls, the edges being treated with fungicide. Sheets should be fixed at 300 mm centres and not nearer than 12 mm to edge of sheet. Exposed chipboard floor surfaces to be sealed with resinous sealer.
- 3.7.2 Suspended floors. Where soffit of suspended floor is exposed externally insulate as necessary and sheet with material suitable for external use and having half hour minimum fire rating.
- 3.8 Grounds**
Pretreated timber grounds shall be securely built in, to provide means of fixing frames and trimmings.
- 3.9 Stud Partitions**
Studs, head and sole pieces, and bridging 35 mm x 75 mm. Studs at 350 mm to 400 mm centres. Sole piece to be well spiked to floor and if parallel to joists, shall be carried on doubled joist. Provide 2 No. rows of noggings. Where a partition is load bearing increase timber sections as required. For finish see 6.6.
- 3.10 Proprietary Partitions**
Accepted proprietary partitions, erected to manufacturer's instructions, may be used.

3.11 Stairs

Stairs shall have 2 m headroom measured vertically from the pitch line and 1.5 m clearance measured at right angles to the pitch line; width 860 mm, going 220 mm minimum, rise 200 mm maximum.

3.12 Lighting to Stairs and Landings

3.12.1 Lighting to stairs, landings, halls and corridors shall be provided by a suitably placed window or roof-light or borrowed lighting from rooms.

Rest of Stairs

3.12.2 Stairs shall have 32 mm red deal round nosed treads and 22 mm risers all glued blocked and bracketed checked and wedged into 44 mm strings. Newel posts, balusters and hand rails to be standard machine prepared sections or suitable steel/timber combination. Open treads shall be not less than 44 mm hardwood, and may be used in accepted special construction with timber, steel or reinforced concrete.

3.12.3 Every flight shall be adequately protected on each side and have at least one handrail, secured at a height not less than 840 mm and not more than 1 m measured vertically from the pitch line. Closed string stairs shall be to I.S. 158.

3.13 Windows

Sliding, hung or pivoted timber sashes and frames to be made from standard machine-prepared sections pressure impregnated with preservative.

Wood casement windows shall be to I.S. 63.

Galvanised steel casement windows shall be to I.S. 60.

Aluminium or P.V.C. windows of accepted make may also be used, in accordance with manufacturer's instructions.

NOTE: Glazed area to be not less than 10% of floor area of room.

Opening area to be not less than 5% of floor area of the room.

Window boards shall be 32 mm wrot, moulded on edges and corners and secured to grounds.

3.14 External Door Frames

External door frames shall be machine prepared 75 mm x 115 mm in wrot deal, rebated in the solid, secured to grounds and dowelled at foot to heel blocks.

NOTE: Under no circumstances should feet of external door frames rest on, or be set into, concrete paving or step.

3.15 Internal Door Frames

Internal door frames shall be 35 mm thick wrot deal with 16 mm planted stops or 44 mm thick wrot deal rebated in the solid, secured to grounds.

3.16 External Door

External doors shall be to I.S. 48 or I.S. 52, hung on 1½ pair 100 mm steel butt hinges.

3.17 Internal Door

Internal doors to habitable rooms shall be to I.S. 48 or I.S. 52 hung on 1 pair 100 mm steel butt hinges. Sliding doors to be not less than 44 mm thick and hung on acceptable proprietary track.

3.18 Trap Door

Form trap door 500 mm square or half hour fire rating suitably located to give access to roof space.

3.19 Hot Press

Hot press to have not less than 2m² of spar shelving, 22mm x 44mm wrot, at 75mm centres supported on 22mm x 44mm battens. Where necessary, the cylinder shall be carried on 22mm T and G on 35mm x 75mm framed bearers. Hang suitable door, framed to prevent warping and fitted with suitable catch. Holes for pipes etc. to be neatly made good.

NOTE: Hot press doors are very liable to distort due to temperature difference. Consideration should be given to insulating the inner face of the door.

3.20 Fitments

All fitments and built-in units shall be of such design, material and workmanship so as to satisfy completely the demands of normal usage.

3.21 Trimmings

3.21.1 Skirtings 16mm x 100mm wrot deal to all floors well fixed to grounds. Plastic skirting may be used where appropriate.

3.21.2 Architraves may be 16mm x 75mm wrot deal or as necessary to form neat joint, mitred at angles and securely fixed to grounds.

3.21.3 Saddles shall be hardwood, cut of 22mm x 150mm splayed, scribed to door frames and secured to floor. For external doors accepted proprietary thresholds may be used.

Section 4 IRONMONGERY AND GENERAL

4.1 Eave Gutters and Rain Water Pipes

Eave gutters and rain water pipes shall be to relevant I.S.S. and may be:-

GUTTERS	I.S.	PIPES
125 mm	42	75 mm Cast Iron
125 mm	59	75 mm 14 SWG galvanised pressed steel
125 mm	71	75 mm Asbestos cement
125 mm		75 mm Aluminium
115 mm		65 mm P.V.C.

Metal and A.C. gutters to be supported on suitable brackets at not more than 2m centres, joisted with mastic compound (and gaskin washers in the case of asbestos cement) and bolted with galvanised gutter bolts and nuts. P.V.C. gutters to be supported on suitable brackets at not more than 1m centres and jointed in accordance with manufacturers instructions. Gutters to be set to falls. At least two stacks of rain water pipes shall be provided secured by holder brackets and kept clear of wall. Provide and fit all necessary matching stop ends, angles and drop nozzles, swannecks, hopper heads and toes. Rainwater pipes to discharge approximately 50mm above gully grid.

4.2 Windows
See 3.13.

4.3 Sash Fittings
All opening sashes shall be fitted with strong metal fasteners. Centre pivoted, top, side or bottom hung sashes to have suitable stay gear. Up and down sashes shall be hung on brass bushed and faced steel sash pulleys with suitable sash cords and weights or on accepted patent hanging gear.

4.4 Door Fittings
Internal doors shall be hung on one pair 100mm steel butt hinges and fitted with suitable mortice type lock or catch and complete with furniture. Provide bolt or locking device to bathroom and toilet doors.

External doors shall be hung on 1½ pair of 100mm steel butt hinges. Entrance door shall be fitted with cylinder night latch and external pull handle. Provide and fit letter place on or near door. Other external doors shall be fitted with bolt and rim or mortice lock suitable for external use. See 12.1.3.

4.5 Ventilation Grids
External openings to ventilators shall be fitted with galvanised cast iron, aluminium, concrete, or accepted P.V.C. louvred grids. See 2.13.3.

Section 5 ROOFING

5.1 Sarking Felt

Untearable sarking felt to I.S. 36 shall be laid under all slates and tiles, lapped horizontally not less than 75 mm for pitches greater than 25° and 150 mm for lesser pitches, carried down into eave gutters. Side lap shall not be less than 150 mm for pitches over 25° and 500 mm for lesser pitches. Felt to be carried fully over ridge board.

5.2 Laths or Battens

Laths or battens shall be 44 mm for rafter spacings not greater than 400 mm. For spacing up to 600 mm battens not less than 44 mm x 44 mm shall be used. Tilting fillet to be provided at eaves where necessary.

5.3 Quarry Slates

Quarry slates shall be laid to a minimum pitch of 30°, lap 100 mm fixed with 2 No. 10 gauge galvanised slating nails double course at eaves, and slate and a half at verges, with slate slip under.

5.4 Asbestos Cement Slates

Asbestos cement slates shall be to I.S.7. The normal pitch for asbestos cement slates shall be 30°, lap 100 mm. Each slate shall be fixed with 2 No. 10 gauge 35 mm galvanised nails and copper crampion at bottom. Provide double course at ridge and treble course at eaves.

Asbestos cement slates may be laid at a pitch lower than 30° in special circumstances.

5.5 Concrete Roofing Tiles (normal pitch — 30° and over)

Concrete roofing tiles (normal pitch) shall be to I.S.3 laid to a pitch of not less than 30°. Every tile in every alternative course to be fixed with 1 No. 50 mm 10 gauge galvanised nail. Lap 75 mm clear of nail hole. Pantiles shall be closed at eaves with a course of plain tiles or slate underclock and suitably coloured sand/cement pointing. Alternatively patent eave closer and filler clip may be used.

5.6 Concrete Tiles (low pitch — under 30°)

Low pitch concrete tiles shall be laid in accordance with manufacturers instructions and to the minimum pitches accepted by the Department which may not be as low as those recommended by the manufacturers.

5.7 General

Slates and tiles to be neatly trimmed where necessary. Part tiles and slates to be adequately secured.

Drip overhang to be provided at eave and valley gutters.

At verges slates or tiles shall oversail wall face or barge, by at least 25 mm in the case of slates and 50 mm in the case of tiles, and shall be neatly pointed in suitably coloured sand/cement mortar.

Ridge and hip tiles shall be bedded in gauged mortar and pointed with cement mortar, suitably coloured; bedding and pointing to be done in one operation.

Provide suitable hip hooks, screwed to end of hip rafters. In industrial atmospheres special nails may be necessary. Over party walls the space between battens shall be filled with mortar to complete fire stop.

5.8 Flashings

Valley gutters, cover flashings and flashings to chimneys shall be

- (1) No. 5 lead to B.S. 1178
- (2) 22/24 gauge medium hard copper
- (3) 20 gauge super-purity aluminium. (18 gauge to valleys and parapet gutters).
- (4) accepted proprietary systems.

To chimney, flashing shall consist of aprons, soakers and cover flashings. The latter shall be secured in a chase in concrete block chimneys, wedged and pointed in with cement fillet formed over. To brick chimneys cover flashings shall be stepped, wedged and pointed into brick joints. Saddle pieces shall be provided at all ridges and roof intersections. Valley gutters shall be laid on felt on 20mm x 225mm wrot boarding treated with wood preservative, and turned up at edges under roof felt tiles or slates.

5.9 Felted Flat Roofs

Wall plates 44mm x 75mm fixed as described. Joist sizes according to span, spaced to suit decking and pitched or firmed to fall of 1 to 80. Roof to project 200mm beyond face of wall, or finish with a parapet with 150mm upstand, suitably capped and flashed. Fascias and soffits as previously described. Decking 22mm T & G laid as for floors, plywood, or chipboard not less than 600 kg/m³ of thickness.

12 mm for joists (rafters)	at 300 mm centres
15 mm for joists (rafters)	at 400 mm centres
18 mm for joists (rafters)	at 500 mm centres

or proprietary decking to manufacturers instructions. Angled wood fillets at upstands and verges out of 75 mm x 75 mm.

Plywood, chipboard or wood wool decking must be kept dry at all times and should be felted immediately after fixing. Any sheets which have been allowed to get wet must be replaced, as their strength has been seriously impaired.

First layer of felt 1 ply, close random nailed all over with galvanised clout nails. Second layer 2 ply stuck down all over with special mastic solution or hot bitumen.

Final layer as for second. Each layer in reverse directions, final layer parallel to eave carried over 22mm x 44mm batten (on fascia) at eaves and down into gutter. Felt at verges to be properly finished with welted apron dressed back over camphered verge fillet. Final layer shall be mineral surfaced, or alternatively covered with light coloured pebbles or chippings stuck on suitably, or as required by local authority. On pitched roof the final layer of felt shall be laid at right angles to eave and lapped away from the prevailing wind. The pitch shall not exceed 20° and the timbers shall be as described in 3.1 and 3.2. Insulate as necessary.

Section 6 PLASTERING

6.1 External Plastering

225mm hollow block, 225mm solid block and chimney stacks:-
scud walls in 3:1 sharp sand and cement. Apply 2 coats of plaster (1 cement: 1 lime: 6 sand). The total thickness of plaster shall be 20mm minimum. The second coat to be finished nap or smooth or combed for rough cast or pebbledash; or prepared for proprietary finish.

275mm cavity walling may be scud and one coat 1:1:6 plaster approximately 13mm thick and finished as above.

6.2 Rough Cast

Rough cast shall consist of 5-6 parts washed sand and pebbles: 1 part lime: 1 part cement.

6.3 Reveals

Plaster reveals to opes shall be 20mm thick and finished smooth with scored drip groove to soffit of head. All arrises shall be neatly finished.

6.4 Plinths

Plaster plinths to be finished smooth, and neatly cut off or weathered at top edge.

Plaster finish to extend below finished ground level.

6.5 Internal Plastering

Scud walls and plaster one coat 12mm thick, 1 cement: 1 lime: 6 sand. Finish with neat gypsum plaster skim, or a grey coat of gauged mortar applied with wood float. Alternatively proprietary finishes may be used to manufacturers instructions.

6.6 Stud Partitions and Ceilings

6.6.1 Stud partitions and ceilings to be covered with 10mm plaster boards or slabs with skimmed plaster finish or alternatively 12mm patent plaster sheets, all erected, jointed and finished to manufacturers instructions.

6.6.2 All wall plastering should be carried behind skirtings and architraves. All internal wall and ceiling finishes, including decorative finishes, shall comply with the relevant local fire requirements.

6.7 General

Precautions shall be taken to protect floors and surrounding work during plastering. Make good neatly to holds for pipework etc.

Plasticisers, water proofers, sealers, and bonding agents shall be used in accordance with manufacturers instructions.

Section 7 PLUMBING

7.1 Service Pipe

Incoming service pipe to be 15mm diameter laid in trench 600mm deep, or otherwise suitably protected against frost, and connected to internal stopcock.

7.2 Cold Water Supply

From stopcock take 15mm cold supply direct to sink with branch to high pressure ball valve in service tank, capacity 225 litres, for 3 bedroom houses or 360 litres for 4 or more bedrooms or as required by local authority. Tank to be covered and adequately supported over a partition where possible and at such height as to ensure proper working of the system. Provide 22mm overflow from tank to discharge externally. Connect to service tank 50mm over bottom of tank and take 22mm feed to 150 litre hot water cylinder to IS 161 with 22mm branch over top of cylinder to bath and 15mm connections off wash hand basin and W.C.

7.3 Hot Water Supply

An adequate water heating apparatus must be provided and fitted in accordance with manufacturers instructions. Flow and return pipes, where appropriate, shall be as recommended by the manufacturer of the heating apparatus. A 22mm copper or stainless steel expansion pipe to be taken from top of cylinder to discharge over service tank, with a 22mm do. branch to bath and 15mm connections off for wash hand basin, sink etc.

7.4 General

7.4.1 Fit full way stopcock on cold feeds from service tank and fit draw off cock at lowest convenient point of system. On no account should a stop-cock be fitted on an expansion pipe.

7.4.2 Copper tubes shall be certified as complying with Irish Standard Specification I.S. 238 — 1980 in accordance with the Irish Standard Mark Licensing Scheme of the Institute for Industrial Research and Standards and shall bear the Irish Standard Mark,

- 7.4.3 Plastic pipes to I.S. 123, 134, or 135 where used shall be fixed at least 75mm clear of hot pipe runs. Pipes shall be fixed in straight lines as far as possible, properly jointed with patent fittings and adequately supported and secured with proper pipe clips.
- 7.4.4 Storage tanks and pipes to be insulated against frost where necessary.
- 7.4.5 Where other domestic water heating systems are used they shall be competently designed and installed.
- 7.4.6 **Compression tube fittings of copper alloy**
Compression tube fittings of copper and copper alloy shall be certified by the Institute for Industrial Research and Standards under the Irish Standard Mark Licensing Scheme as complying with I.S. 239:1980 "Compression tube fittings of copper and copper alloy", and shall bear the Irish Standard Mark.
- 7.5 **Sink**
Provide and fit in kitchen or scullery stainless steel sink and drainer to I.S. 132 suitably supported, or alternatively white glazed fireclay sink 600mm x 400mm x 250mm supported on 2 No. iron or steel brackets and fitted with suitable drainer. Sink to be provided with adequate overflow. Top of sink to be not less than 850mm over floor level. Form enclosed press, with raised floor and recessed plinth under sink and drainer.
- 7.6 **Bath and Wash Hand Basin**
Fit where indicated a bath in vitreous enamelled cast iron or other accepted material, minimum length 1700mm nominal and panelled as necessary and vitreous china wash hand basin 550mm x 400mm suitably supported and secured with not less than 150mm clearance to sides. Both to be provided with adequate overflow.
- 7.7 **Plugs, Traps, Wastes and Taps**
15mm hot and cold chrome plated brass taps to be fitted to sink and wash hand basin, and 22mm do. to bath. Provide 42mm waste fitting to bath and sink and 35mm to wash hand basin. All complete with plug and chain. Fit S or P trap, complete with cleaning eye and copper, lead or acceptable plastic waste pipe adequately secured and fitted with cleaning eyes as necessary and discharging approximately 50mm over gully trap.
- 7.8 **W.C. Suite**
Provide and fit where indicated W.C. suite, with cistern, to I.S.70, all fully supported and secured. Connect to soil pipe with proprietary flexible coupling or other acceptable joint. Cistern to be provided with adequate overflow.
- 7.9 Pipes shall not be jointed within the thickness of a wall.

Section 8 DRAINAGE

- 8.1 **Trenches**
Trenches shall be excavated to the necessary depths, widths and falls to allow the drains to be properly laid. The water service shall be in a separate trench from the drain. See also 1.3.2.
- 8.2 **Drain**
The main and branch drains shall be 100mm diameter laid to continuous falls of not less than 1 in 60 or not more than 1 in 30, with bends and junctions, splayed in the direction of flow, where required, and laid in straight lines from manhole to manhole. The drain shall be P.V.C., cast iron, impermeable glazed ware with flexible joints or concrete with flexible joints, all laid, jointed and back filled to manufacturers instructions or shall be socketed impermeable glazed ware or concrete supported on continuous concrete bed mix B 100mm thick x 300mm wide for full length of each pipe and haunched half way up the pipe after testing and shall be jointed in cement mortar, well worked in against 2 rings of tarred gaskin and finished with a neatly worked fillet. Clean pipe internally as necessary after each joint is made.

- 8.3 Back Filling**
Immediately over pipes back fill in fine material and fill remainder of trench in selected excavated material, well rammed and remove surplus spoil.
- 8.4 Drains under Roads and Buildings**
Where drains pass under roadways or are likely to be subjected to heavy traffic, they should be fully encased in 150mm concrete, mix B. Drains shall not be taken under any buildings unnecessarily, but where this is unavoidable pipes shall be cast iron, or encased in 150mm of concrete mix B or otherwise to local authority requirements and laid in straight lines. Form ducts through rising walls or foundations as necessary to avoid damage to drains.
- 8.5 A.J.s, Manholes, Drop-Manholes**
Armstrong junctions or manholes as suitable shall be provided at each change in direction or gradient of drain and at septic tank and of such dimensions and spacing as to permit easy cleaning of the system. Manholes shall be built in 225mm concrete walls on 150mm thick concrete floor mix B, with glazed channels, bends and branches, suitably benched. Benching and internal walls to be finished smooth in cement mortar. Fit cast iron, reinforced concrete, or hot dipped galvanised steel frame and cover. Covers to have provision for lifting. Where required by local authority, outfall manholes shall be formed, with interceptor trap, stoppered cleaning eye and air inlet.
- 8.6 Gullies and A.J.s**
Gullies and Armstrong junctions to be set level, supported on 150mm concrete bed, mix B, and connected to drain as previously specified. Armstrong junctions shall have frame and cover of cast iron, aluminium or galvanised steel.
- 8.7 Gully Traps**
Gully traps shall be set in dished concrete surround, to take wastes from bath, sink and wash hand basin and discharge from rain water pipes, and shall be fitted with cast iron, aluminium, or other suitable grid.
- 8.8 Soak Pits**
Where sewage disposal is to be a septic tank, rain water shall be piped to a separate soak pit, not less than 6m from the house or to a suitable watercourse.
- 8.9 Septic Tank**
Septic tank, where provided, shall be located so as not to endanger any well or other source of water supply and shall be in accordance with S.R.6 1975.
Septic tanks to accepted prefabricated systems may also be used.
- 8.10 Vent Shaft**
At head of drain, carry up 50mm minimum diameter vent pipe over eave level or to 1m over head of highest window within 4m of vent, secured with proper brackets and fitted with cowl or cage.
- 8.11 Single Stack Drainage**
Single stack drainage, where provided, must be in accordance with British Standard Code of Practice No. 304 (1968).
- 8.12 Testing**
Test plumbing and drainage on completion to ensure watertightness and efficient working of the system, and as may be required by the local authority. See also 8.2.

Section 9 ELECTRICAL INSTALLATION

9.1 Installation

Electrical installation shall be in accordance with the "National Rules for Electrical Installations" obtainable from the Electro-Technical Council of Ireland and shall have, in suitable locations, at least:-

Lighting Outlets	Socket Outlets
One in every room, landing/stairway, hall and corridor.	One in every bedroom. Three singles in one living-room. Two singles in kitchen excluding any cooker point. One in each other habitable room, entrance hall or landing.

Conduit shall be used where cable is buried in plaster. Joists shall not be notched; where necessary the cable shall be taken through holes bored in centres of joists.

Section 10 PROTECTIVE PAINTING

10.1 Preparation

All surfaces to be painted or otherwise protectively coated shall be cleaned down and prepared by wire brushing, sanding, planing or as necessary to obtain the best possible finish. Timber preservatives should be applied where already specified in 3.2 et seq.

10.2 Paints

Thinners, sealers, primers, colour washes, paints, varnishes or other brush, roller or spray applied finishes shall be of suitable manufacture for the surface and material to be covered and shall be applied strictly in accordance with the manufacturer's instructions.

10.3 Woodwork

All woodwork usually painted shall be knotted, stopped, primed and painted with two undercoats and one finishing coat. Alternatively, may be stained or dyed and knotted, primed and finished with two coats varnish.

Decorative hardwoods may be treated traditionally internally and shall be oiled or treated with suitable preservatives externally, or may be painted or varnished, as previously specified.

10.4 Metal Work

All metalwork, ironmongery, rainwater goods, shall be cleaned down, suitably primed, twice, undercoated and one coat finished.

Section 11 GLAZING

11.1 Glass

All window panes up to 0.5m² shall be glazed in 3mm glass
All window panes up to 1.5m² shall be glazed in 4mm glass
All window panes over 1.5m² shall be glazed in 5mm or 6mm glass

All panes less than 600mm over floors shall be 6mm glass.

11.2 Fixing

Bathroom W.C. or other closet windows may be glazed in obscured glass to standard as above. Before glazing, timber rebates shall be painted and back puttied. Glass shall be sprigged and puttied with linseed oil putty to I.S.28 or other acceptable non-hardening compound and neatly struck off. 5mm glass and over shall be fixed with a suitable glazing slip, pinned and bedded in mastic. Galvanised steel windows shall be back puttied and finished with metal sash putty or other suitable mastic.

11.3 General

House to be thoroughly cleaned and all rubbish removed, on completion.

Section 12 FIRE PRECAUTIONS

12.1 Garage

12.1.1 Garage under first floor rooms: — the ceiling in the garage shall be 10mm plaster slab with skim coat finish or 10mm soft asbestos sheets with joints thoroughly sealed.

12.1.2 Garage directly under roof of house: — separating wall to be taken to plane of roof and treated as for party wall to complete fire stop. See 2.11 and 5.7.

12.1.3 Any door between garage and dwelling shall be self closing and door and frame shall have half hour fire rating. Garage floor shall be 100mm under floor level of house.

12.2 Central Heating

A central heating unit shall not be located in a garage.

Section 13 VENTILATION

13.1 Rooms

Every habitable room, kitchen, and scullery shall have an opening window area of not less than one twentieth of the room area, ventilated directly to open air.

13.2 Bathrooms

Bathroom and W.C. apartment shall be ventilated as above subject to a minimum of 0.1m².

13.3 Lobby

A ventilated lobby shall be provided between any W.C. apartment and a living room, kitchen or scullery.

13.4 Presses

All built in cupboards, presses, closets and wardrobes to be adequately through ventilated.

13.5 Under Floor

Under floor ventilation shall be as previously specified under 2.25 and 3.6.

13.6 Garage

Garage must have permanent ventilation.

Section 14 THERMAL INSULATION

14.1 Insulation must be in accordance with the maximum U-Value laid down by the Department viz., a general whole building standard not exceeding $0.85 \text{ W/m}^2\text{°C}$ and elemental values as follows:

External Walls	0.60 watts per square metre per degree celsius.
Roofs	0.40 watts per square metre per degree celsius.
Ground Floors	0.60 watts per square metre per degree celsius.
External parts of intermediate floors	0.60 watts per square metre per degree celsius.

U-values will be required to be calculated in accordance with the method for calculating standard U-values set out in Section A 3 of the C.I.B.S. Guide Book A 1980 published by the Chartered Institution of Building Services.

14.2 Mineral fibre mats for thermal insulation of buildings

Mineral fibre mats for thermal insulation of buildings shall be certified by the Institute for Industrial Research and Standards under the Irish Standard Mark Licensing Scheme as complying with I.S.260: 1984 "Mineral fibre mats for thermal insulation of buildings", and shall bear the Irish Standard Mark.

METRIC CONVERSION

25mm	=	1 inch(es) approx.
50mm	=	2 inch(es) approx.
100mm	=	4 inch(es) approx.
300mm	=	12 inch(es) approx.
600mm	=	24 inch(es) approx.
1.00m	=	39.37 inches approx.
1 litre	=	0.22 gallons
1 Kilogram	=	2.20 lbs.

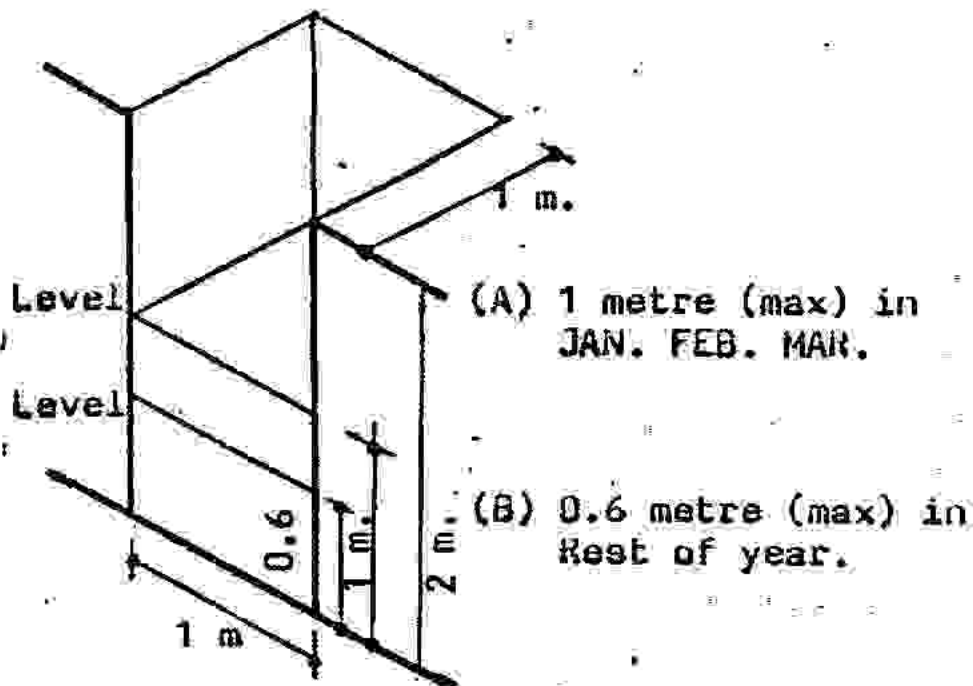
TYPICAL SIZE OF SEPTIC TANKS

Population Served	CONSTRUCTION			
	In - Situ		Conc. Block	
	Vol 1.	L (mm)	Vol 1.	L (mm)
4	2720	2685	2860	2370
6	3080	3030	3120	2600
8	3440	3390	3390	2820
10	3800	3750	3780	3150

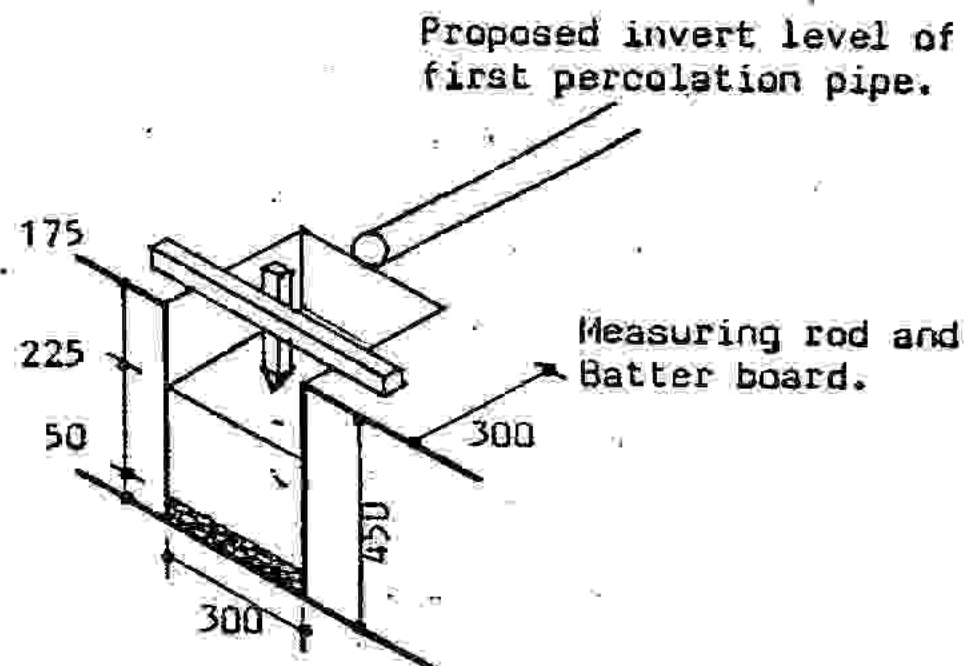
TABLE 1.

Value of 'T'	Length of distribution piping in m.
1	17
2	21
3	26
4	30
5	35
10	47
15	56
30	78
60	105

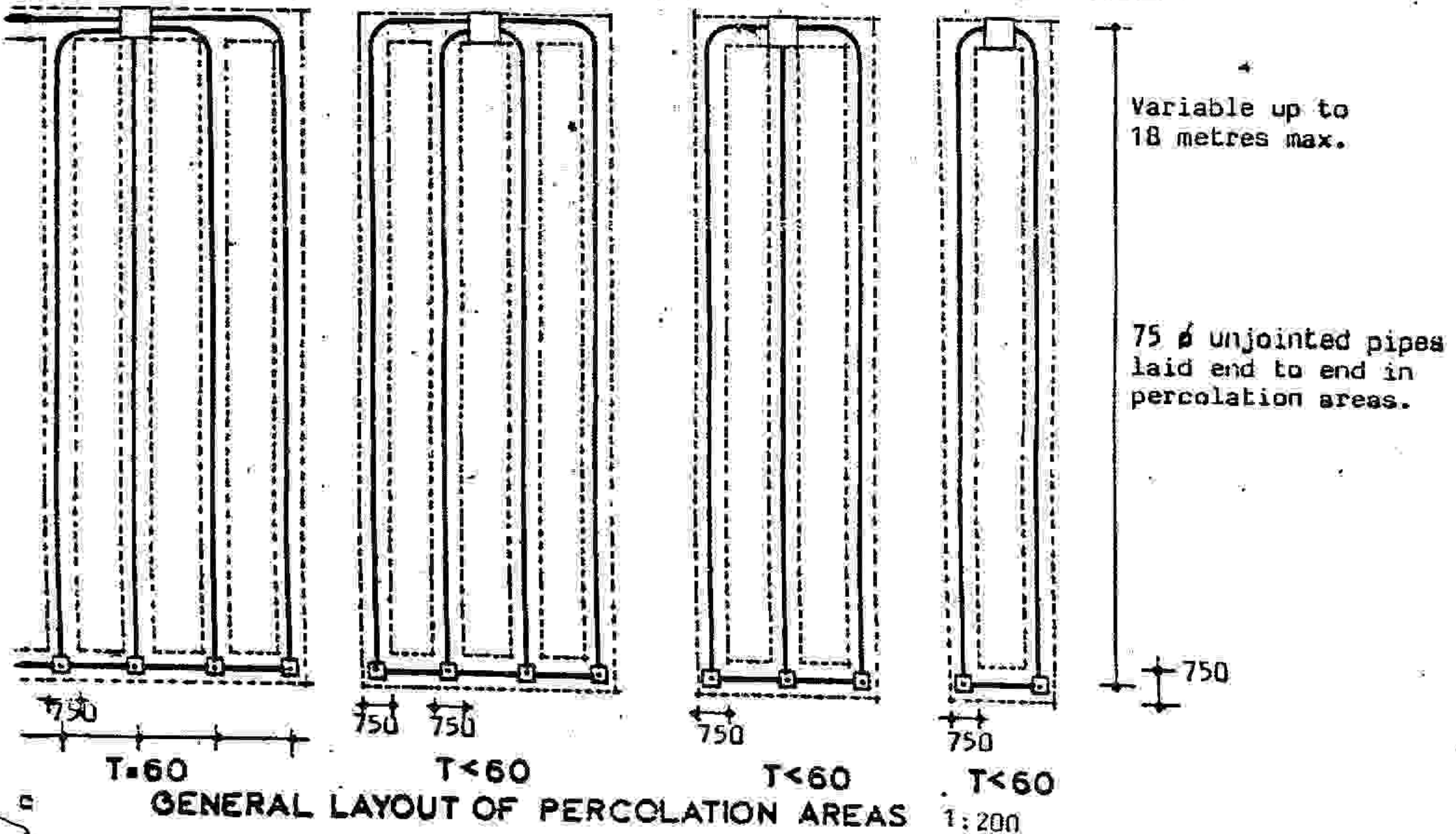
TABLE 2.

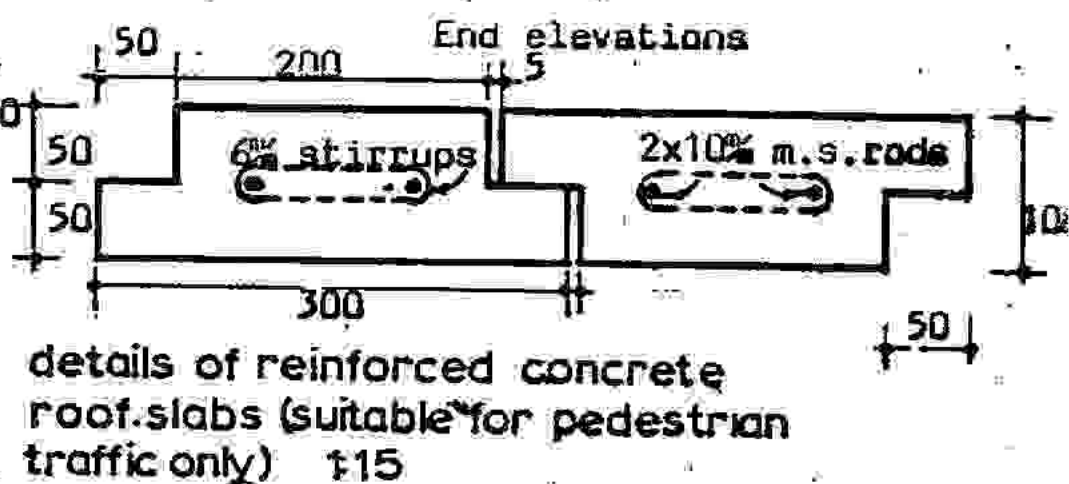
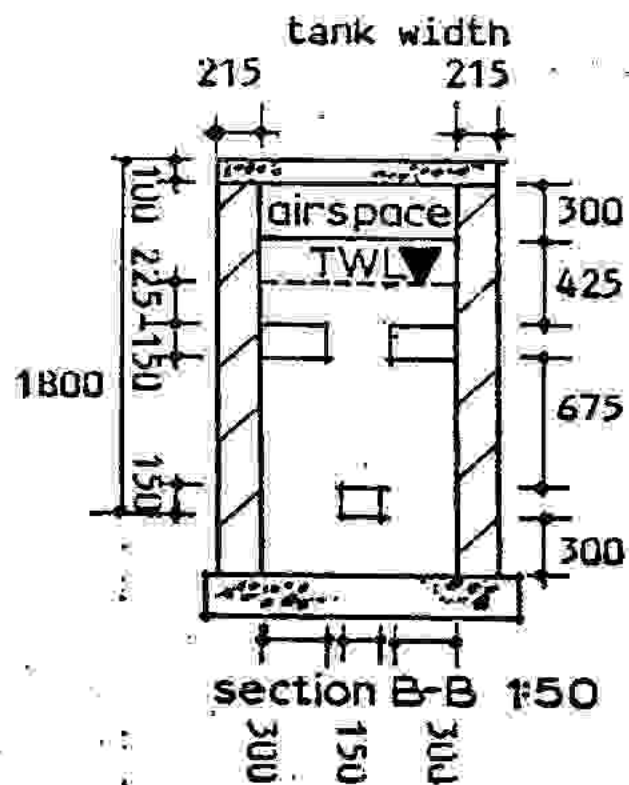
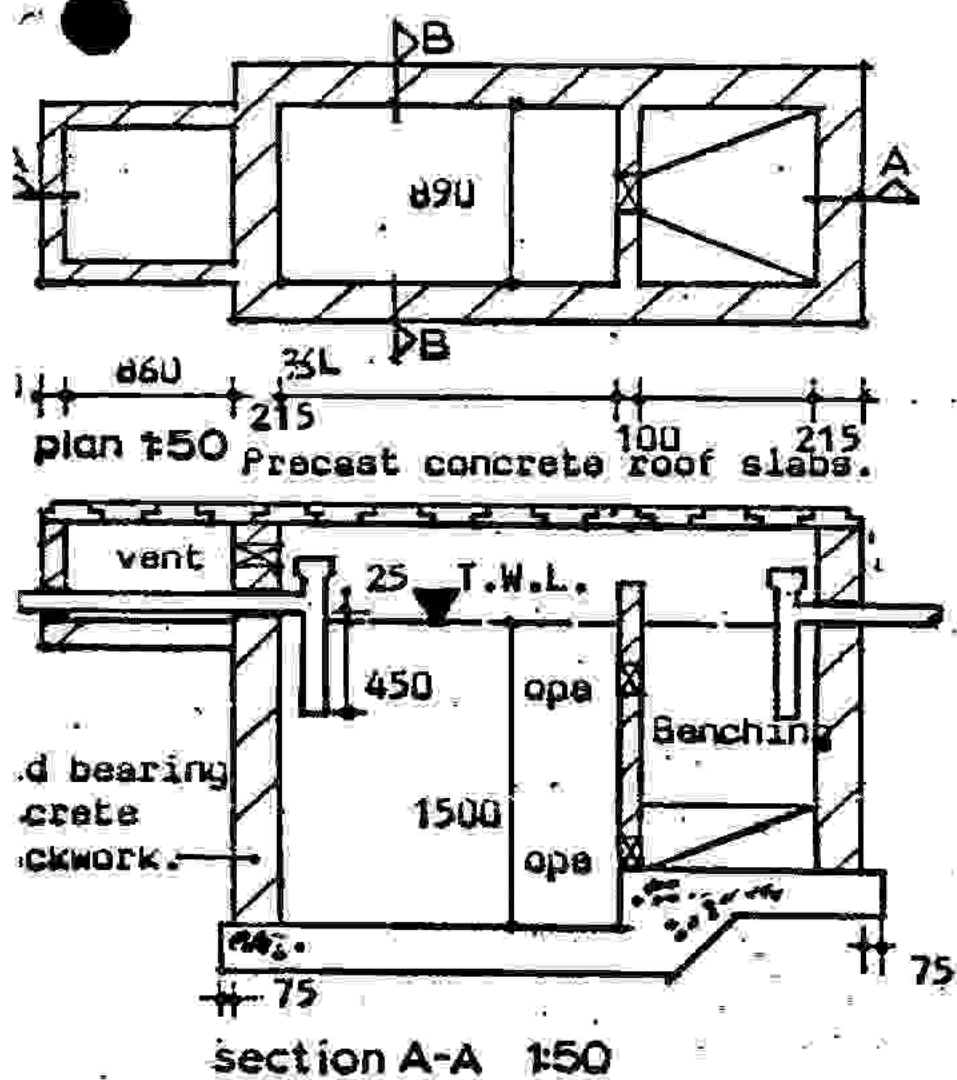


TRIAL HOLE 1:50



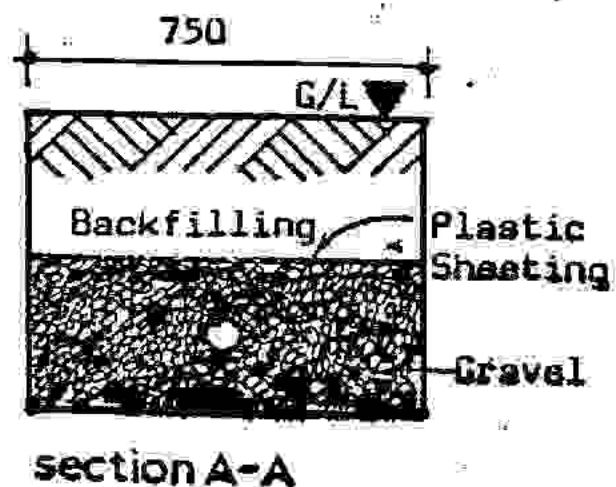
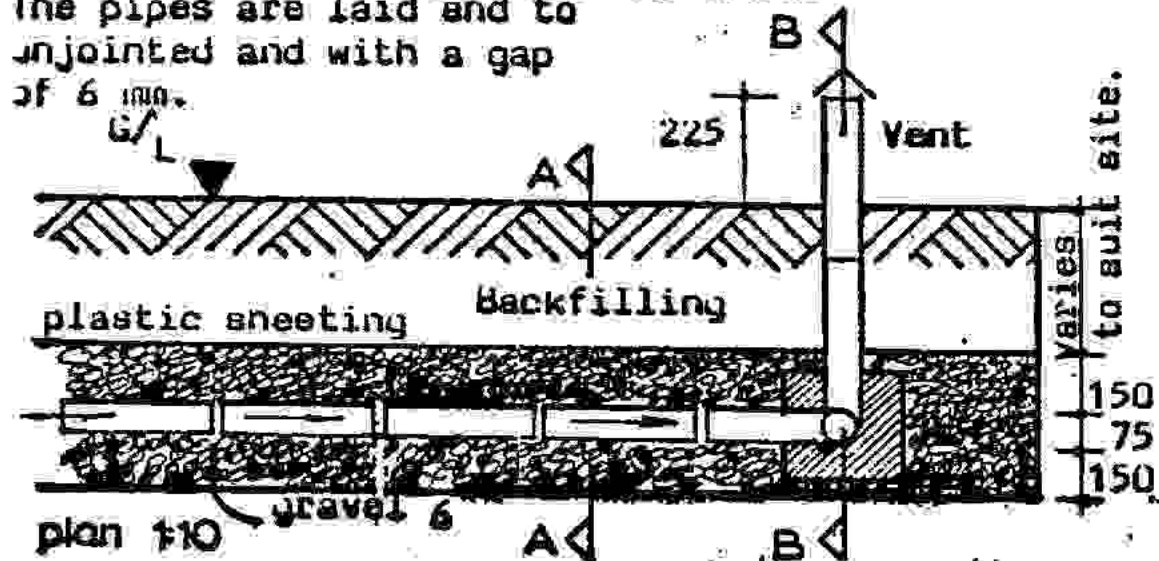
PERCOLATION TEST HOLE 1:20



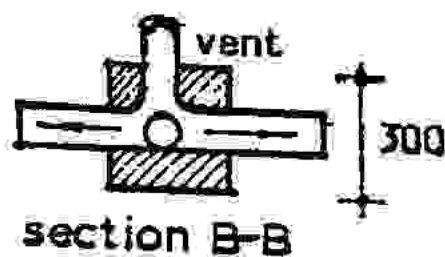
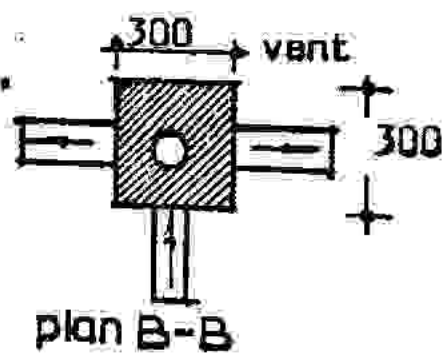
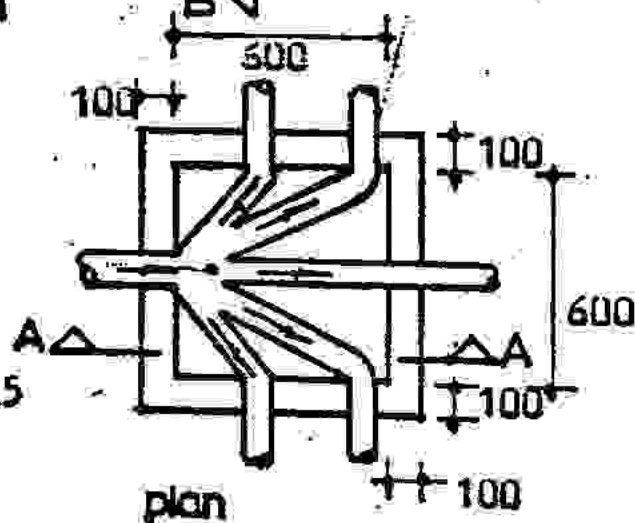
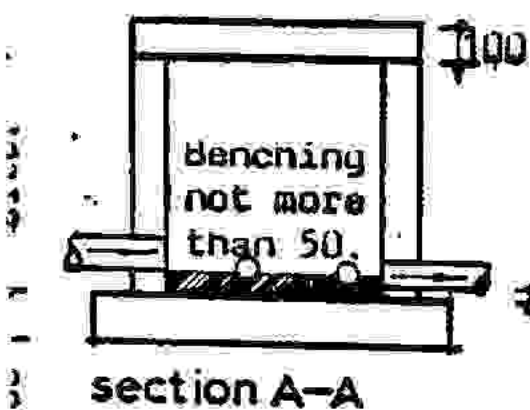


CONCRETE BLOCK SEPTIC TANK

The pipes are laid and to be unjointed and with a gap of 6 mm.



PERCOLATION AREA



TYPICAL DISTRIBUTION BOX