The Solution
Storm water source control system

The system
Rather than collecting run-off and subsequently treating it, water engineers in many parts of the world are controlling the problem at source. This is the most cost-effective and environmentally productive approach.

The system allows rain water to infiltrate through permeable concrete surface blocks into a special sub-base.

Chris Pratt, Professor of Storm water management at Coventry University is a world authority on the the design of source control systems and has been working on infiltration pavements and the design of the underlying sub-base for many years.

Professor Pratt has been instrumental in developing the Formpave systems. Test areas have been monitored for over ten years.

Aquaflow paving blocks
Formpave have designed a range of Aquaflow paving blocks to be used in conjunction with either lined or infiltration systems.

Formpave also manufacture a full range of kerb blocks which can be used with Aquaflow paving as illustrated below.

Principal benefits of Formpave's storm water source control system:

- **Lower capital cost and maintenance**
- **Control of run-off and pollution**
- **No flooding**
- **Elimination of surface ponding**
- **Recharge of ground water base flows**
- **No erosion and deposited silts**
- **Reduced ground shrinkage**
- **No need to upsize culverts or water courses**
- **No requirement for surface falls, gully pots, drain runs, oil or silt traps, hydraulic controls etc.**
- **No need for detention ponds**
- **No danger to children**
- **Reduced land take**
- **Roof water can be discharged into sub-base**
- **Water available for non-potable secondary use**

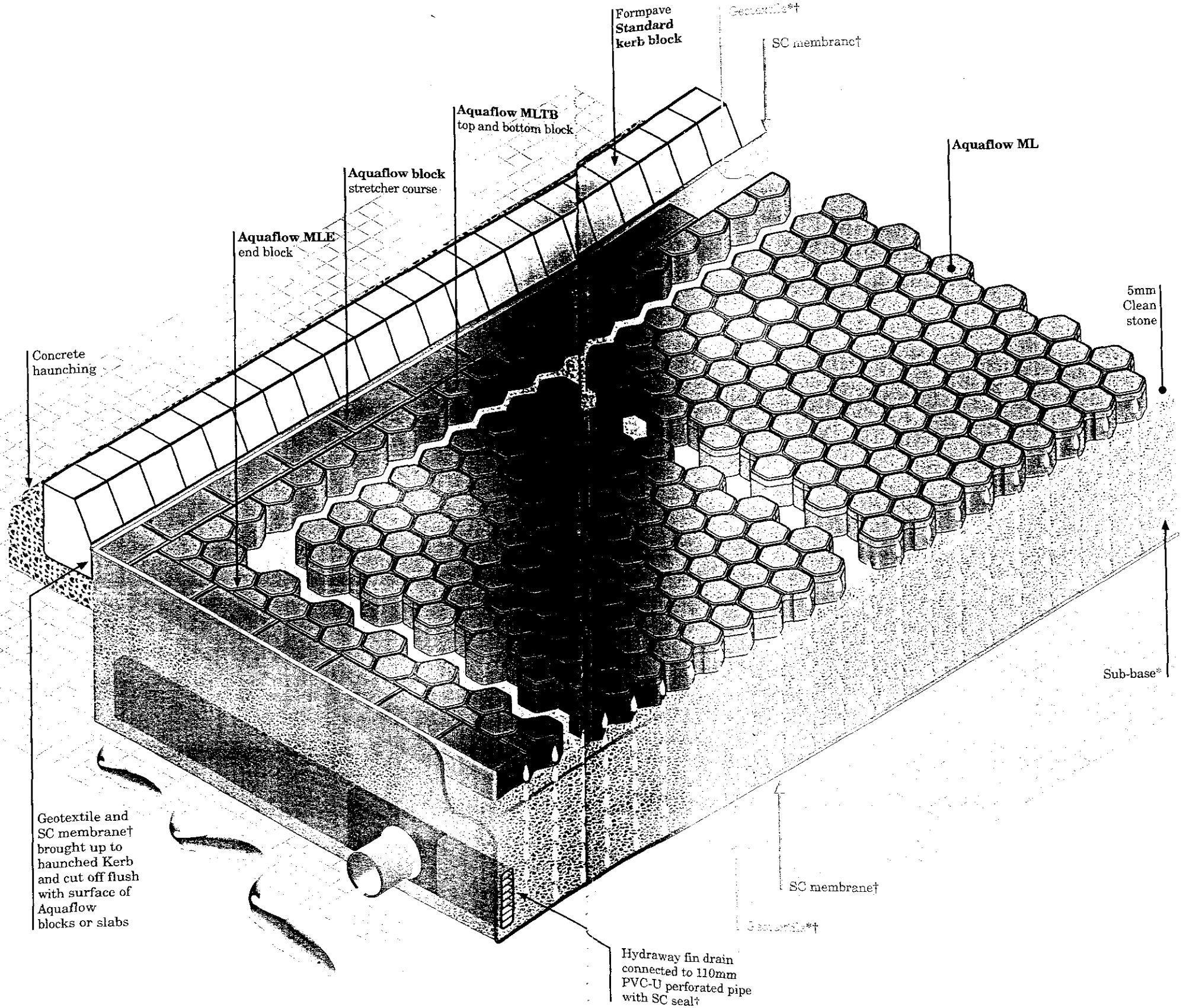


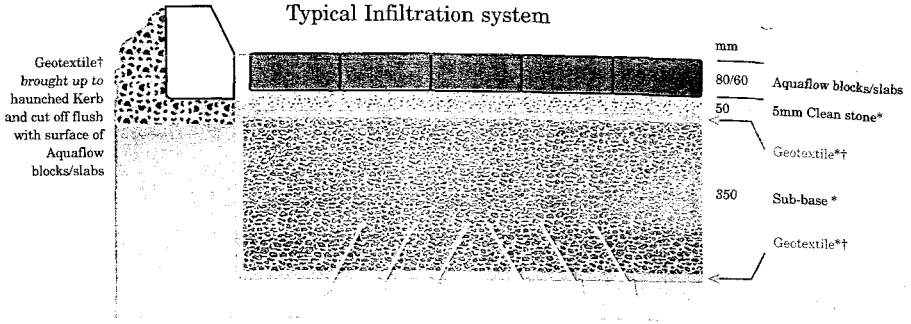
illustration features Tanked system, see page 8 for example of Infiltration system

Some of the effects of traditional systems:

- **Contaminated run-off**
- **Overloading of combined sewers and sewage works**
- **Water treated in expensive sewage works**
- **Flooding**
- **Increased diameter of storm water drains and channels**
- **Increased cost**
- **Use of costly hydraulic controls**
- **Expensive detention ponds which are potentially dangerous to children and damaging to the environment**
- **Loss of development land**
- **Costly maintenance**
- **In some cases the total environmental cost of traditional drainage methods exceeds the environmental benefits**

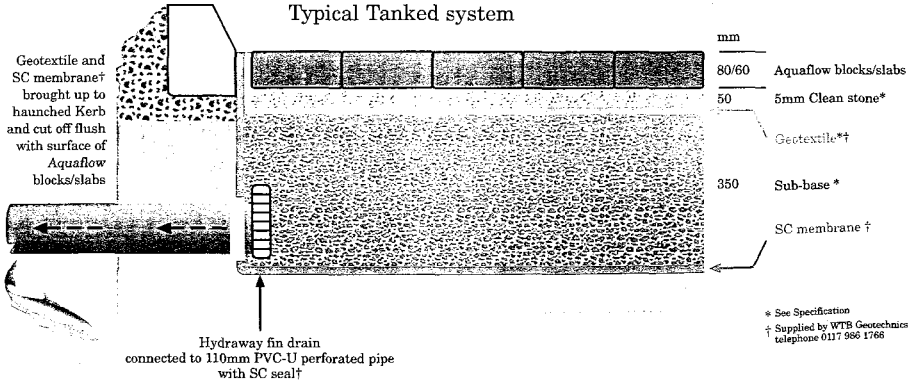
* See Specification
† Supplied by WTB Geotechnics telephone 0117 986 1766

Typical Infiltration system



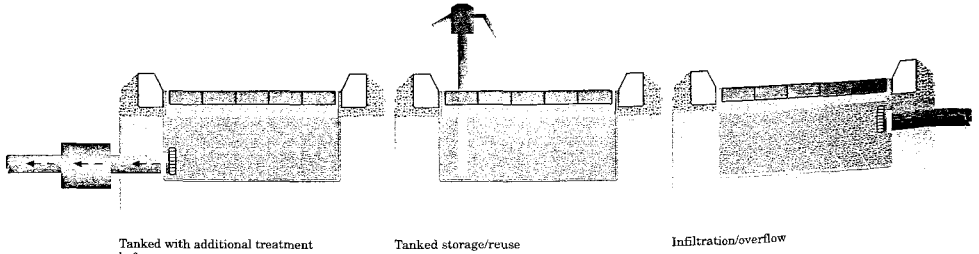
1m³/10m²
350 mm depth

Typical Tanked system



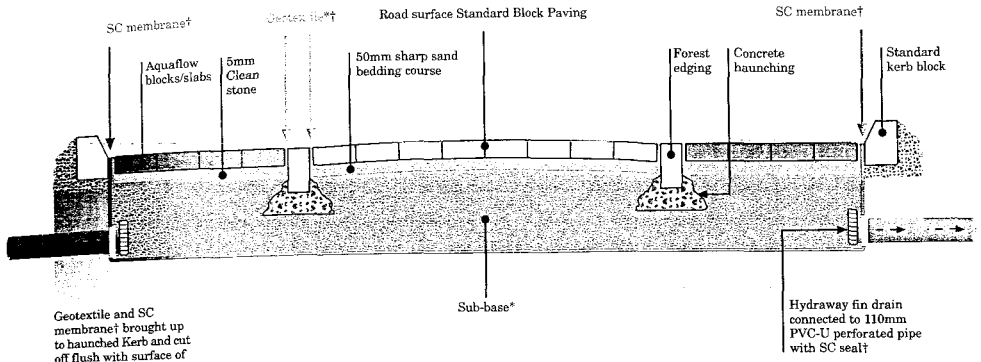
* See Specification
† Supplied by WTB Geotechnics telephone 0117 986 1766

Some alternative system designs



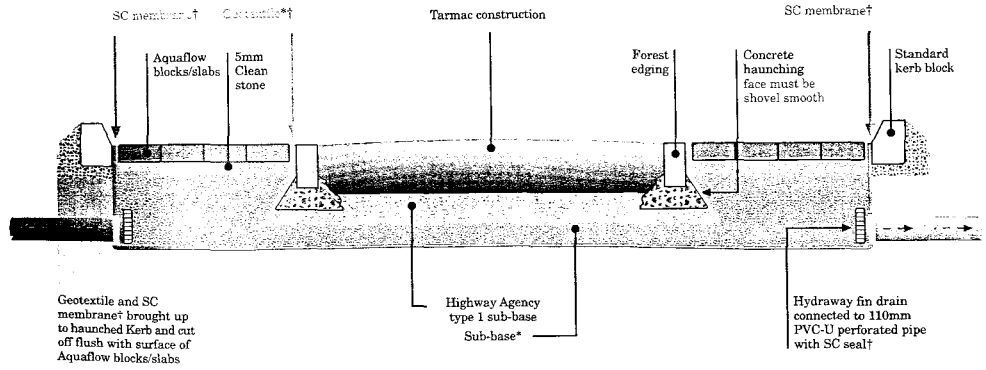
Aquaflow paving in conjunction with Standard block paved road surfaces

Tanked system section Aquaflow pavement with undersealing membrane

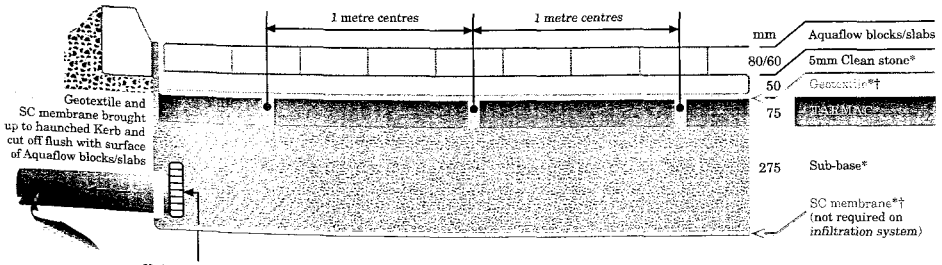


Aquaflow paving in conjunction with Tarmac road surfaces

Tanked system section Aquaflow pavement with undersealing membrane



Temporary running surface



- Lay SC membrane and 275mm of sub-base
- Lay 75mm of dense road base Tarmac over sub-base

After building work is completed

- Clean tarmac surface
- Cut 20/50mm diameter holes at 1 metre centres through tarmac surface into sub-base
- Fill holes with 5mm clean stone
- Lay Geotextile 5mm laying course and Aquaflow blocks

* See Specification
† Supplied by WTB Geotechnics telephone 0117 986 1766

Lower Construction Costs
From experience it has been found that total construction costs are lower than traditional drainage costs.

When comparing the cost of the Formpave System with traditional drainage it is important that an accurate comparison is made. In addition to the cost of surfacing and sub-base, gullies, drainage pipes, oil and silt traps, flow control mechanism, detention ponds and culvert works are all part of the total cost of traditional drainage. None of these are needed with the Formpave system.

Control of run off
Run off during periods of heavy rain is eliminated. Aquaflow blocks and Aquaflow slabs allow water through the surface at a rate of approximately 9000mm per hour. In practice however the rate is controlled by the flow rate through the underlying geotextile. Extensive tests in the United Kingdom show that this reduces the figure to approximately 4500mm per hour.

Discharge water
The statutory authorities are in many instances imposing limits on the rates of water discharged from site. Frequently limits of less than 5 ltrs/hectare/second are being demanded.

The Formpave sub-base design has an approximate 30% voids reservoir capacity. This allows water to be held within the sub-base and released slowly over a number of days. During periods of intermittent heavy rain it has taken as long as five hours before any water started to leave the system and it may take up to two weeks before the structure is empty. Discharge rates from the system of below 2.5 litres/hectare/second have been readily achieved.

Where the underlying subgrade is suitable, water can be infiltrated into the ground. Infiltration can be used even where the subgrade would not be considered suitable utilising BRE Digest 365 criteria. The reservoir capacity of the sub-base allows water to be stored before slowly infiltrating over a prolonged period.

Long term monitoring has shown that approximately 20% of water entering the system does not leave in the form of water, but is lost through evaporation.

Roof water
Roof water can be discharged into the sub-base. It is recommended that it is introduced into the sub-base by means of a sump adjacent to the paved area.

Over a period of years moss, and other roof debris may enter the discharge system and the sump should have a manhole cover to enable rodding to take place where necessary and for the periodic removal of roof debris.

Detention of heavy metals and in-situ treatment of hydrocarbons
Fine silts are carried through the permeable surface and are detained in the 5mm stone laying course above the geotextile. Lead, zinc, copper and nickel are the commonest heavy metals deposited on hard surfaces by vehicles. These heavy metals are carried by the water through the surface blocks into the laying course materials as are hydrocarbons. Both adhere to the particles of silt in the laying course.

The sub-base has a 30% voids reservoir capacity and contains air and water. A film develops on the surface of the sub-base stone where a microbial population naturally occurs. Through bioremediation the entrapped hydrocarbons are degraded and together with the filtering action of the geotextile, the water passing through the system is cleaned.

Laboratory research has shown that 1m² of the system will naturally degrade in excess of 70 grams of oil per annum. *(Please see Abertay University's analysis on the quality of exit water on page 7)*

Quality of discharge water and secondary use
Analysis of exit water from a number of sites has shown that the water is equally as clean as discharge water from a modern, well maintained, sewage works. Whilst the water is not potable, it can be used for many secondary purposes such as flushing lavatories, washing floors and cars or watering soft landscapes.

Typical rainwater in the UK is acid. Analysis of exit water from the system has shown it to be slightly alkaline with a Ph of approximately 7.5.

Maintenance and performance
The surface has a design life equivalent to standard block paving. The surface blocks require routine maintenance and the surface should be brushed at least twice a year with a mechanical suction brush. It is recommended that this should be carried out in the spring and after leaf fall in autumn.

Ultimately, perhaps after 25 years, the 5mm laying course may become filled with silts and toxins. When this occurs the surface blocks should be uplifted and the 5mm laying course material and geotextile disposed of. The existing sub-base can be left in situ. Fresh geotextile and 5mm laying course stone should be laid and the existing surface blocks reused. It is not possible to accurately predict when the geotextile and 5mm laying course will need to be replaced. This will depend on the burden of detritus moving over the surface.

Professor John Argue of the Urban Water Resource Centre at the University of South Australia has undertaken extensive research on this aspect. The research assumed rainfall of 580mm per annum with a loading of 200 parts per million of silts. This is similar to the annual rainfall in Newark, Nottinghamshire, and the silt loading is what would be found in an established urban catchment. His conclusions were that even after thirty years life, the permeability of the surface was only reduced by 25%.

Assume a 'worse case scenario' where after say twenty five years, 90% of the surface permeability has been lost through silting. The permeability of the surface is still 9000mm x 10% or 900mm of water per hour. This would indicate that permeability is still eighteen times what is required to deal with 50mm of rain in an hour.

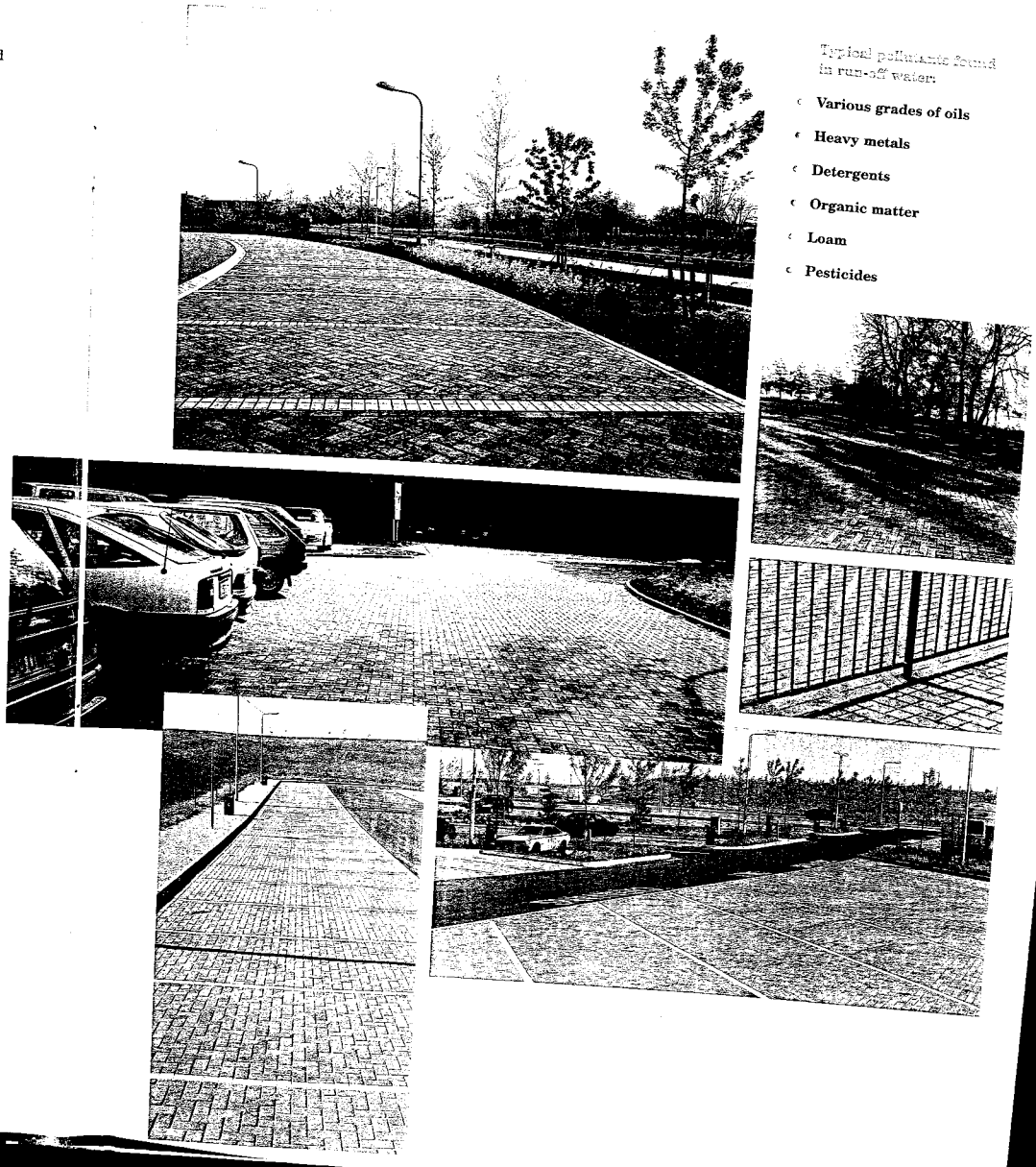
Design Criteria
Most drainage systems are designed to cater for say 1 in 10, 1 in 25 or 1 in 100 year rainfall events. The intensity of such a storm varies widely with location.

If it is assumed that a design calls for attenuation of a storm intensity of say 50mm of rain per hour and the site has a roof area of 2000m² and the surface area of road and parking is 3000m².
The volume of water produced during the rainfall event is:

$$\frac{5000m^2 \times 50}{1000mm} = 250 \text{ cubic metres of water}$$

The sub-base has a reservoir capacity of approximately 30%. Therefore if a sub-base depth of 350mm is assumed, the sub-base has a capacity of 3000m² x 0.35 x 0.3 = 315 cubic metres of water.

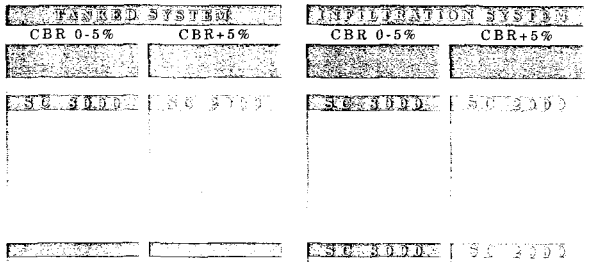
As a quick rule of thumb - 10m² of Formpave system with a 350mm depth of sub-base will accommodate 1 cubic metre of water.



Typical pollutants found in run-off water:

- Various grades of oils
- Heavy metals
- Detergents
- Organic matter
- Loam
- Pesticides

Pedestrian areas



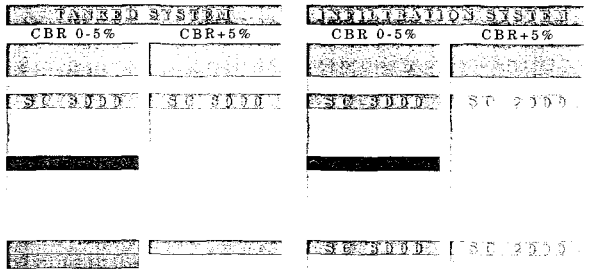
Aquaflow or Aquaslab

50mm of 5mm Clean stone
Geotextile

Sub-base to
Formpave Specification

SC Membrane/Geotextile
Subgrade

Car parking and lightly trafficked areas



Aquaflow or Aquaflow ML

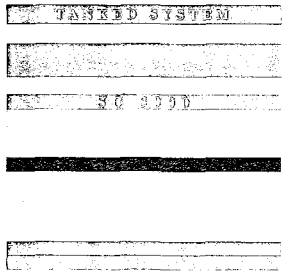
50mm of 5mm Clean stone
Geotextile

Sub-base to
Formpave Specification

SC Intergrid

SC Membrane/Geotextile
200mm Capping layer *see page 13*
Subgrade

Heavy duty applications



Aquaflow ML Block

50mm of 5mm Clean stone
Geotextile

Sub-base to
Formpave Specification

SC Intergrid

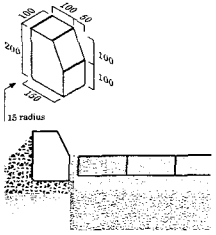
SC Membrane
Capping layer where necessary *see page 13*
Subgrade

The Subgrade must have a CBR of at least 15%. *Poor subgrades with low* CBR's may be improved by incorporating a capping layer of either cement, lime or bituminous bound materials. Alternatively granular materials in accordance with clause 613 of the Highways Agency specification may be used.

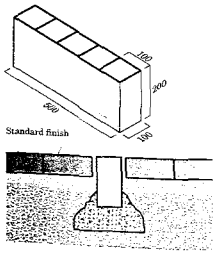
Sub-base: See specification for depth of stone which may be varied at the engineers discretion
SC Intergrid or capping layer: May be varied at the engineers discretion
Geotextiles: For advice contact WTB Geotechnics telephone 0117 986 1766

Formpave Kerb options
The range of kerb options together with the full range of Formpave concrete paving products are illustrated in greater detail in the standard Formpave *manual available* on request.

Standard kerb and step system
The range consists of fifteen blocks to facilitate edge restraint, cornering, cross-over, transition and channelling.
The Standard kerb block *illustrated below* may be used in both high and low profile or inverted to form steps. Available in nine colours with a standard finish



Forest edging
A substantial all purpose edge restraint. The range consists of four blocks to facilitate edge restraint and transition. Available *in four colours with either a* standard, olden or bush hammered finish. The standard finish block *illustrated below* has a patterned top surface



Standard contract documentation
To be read with preliminaries/general conditions

Q24 STORM WATER SOURCE CONTROL SYSTEM
Aquaflow paving

110 TYPE(S) OF PAVING
Concrete block paving

Manufacturer Formpave Limited,
Tufthorn Avenue, Coleford,
Gloucestershire GL16 8PR
Tel: 01594 836999
Reference; Aquaflow, Aquaflow ML, MLE MLTB or Aquaslab

Size
As per manufacturer's specification

Colours
Red brindle, Natural, Charcoal, Burnt red.

Setting out
Aquaflow: 90° herringbone with double stretcher course around all perimeters.

Aquaflow ML: In accordance with manufacturer's specification with stretcher course and *Aquaflow MLTB and MLE*: around all perimeters.

Aquaslab: Double stretcher course of *Aquaflow block at perimeters.*

Kerbs
Standard kerb and step system: To be haunched with concrete.

Forest edging: To be haunched with concrete.

Laying course.
50mm depth of 5mm. single size clean crushed stone to BS882. 1993

Geotextile
The Grade will vary according to the precise application.

Sub-base specification
The granular sub-base material shall comprise crushed gravel, rock or concrete possessing well defined edges. It must be sound, clean, non friable and free from clay or other deleterious matter.

The material must be non plastic when tested in accordance with BS1377 Test No.4

The material must have a minimum 10% fines value of 150K/n when tested in accordance with BS812 Part 3.
The selected test samples shall not be oven dried and should be soaked in water at room temperature for 48 hours before the test.

Grading of granular sub-base material

Sieve size	% passing
100mm	100
80mm	80-100
60mm	60-80
40mm	30-50
20mm	0-20
10mm	0-5

Depth of Sub-base
Thickness 350mm. The depth of sub-base may be varied by the Engineer. Alternatively 270mm of sub-base overlaid with 80mm of dense bitumen road base to Clause 903 of the Highways Agency may be used.

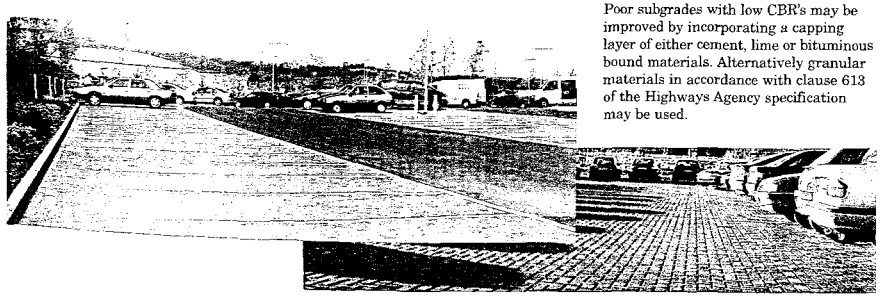
Membrane
Where methane or a high water table is present in the subgrade it will be necessary to use a heavy duty membrane and to weld the joints. The membrane should be protected against puncturing.

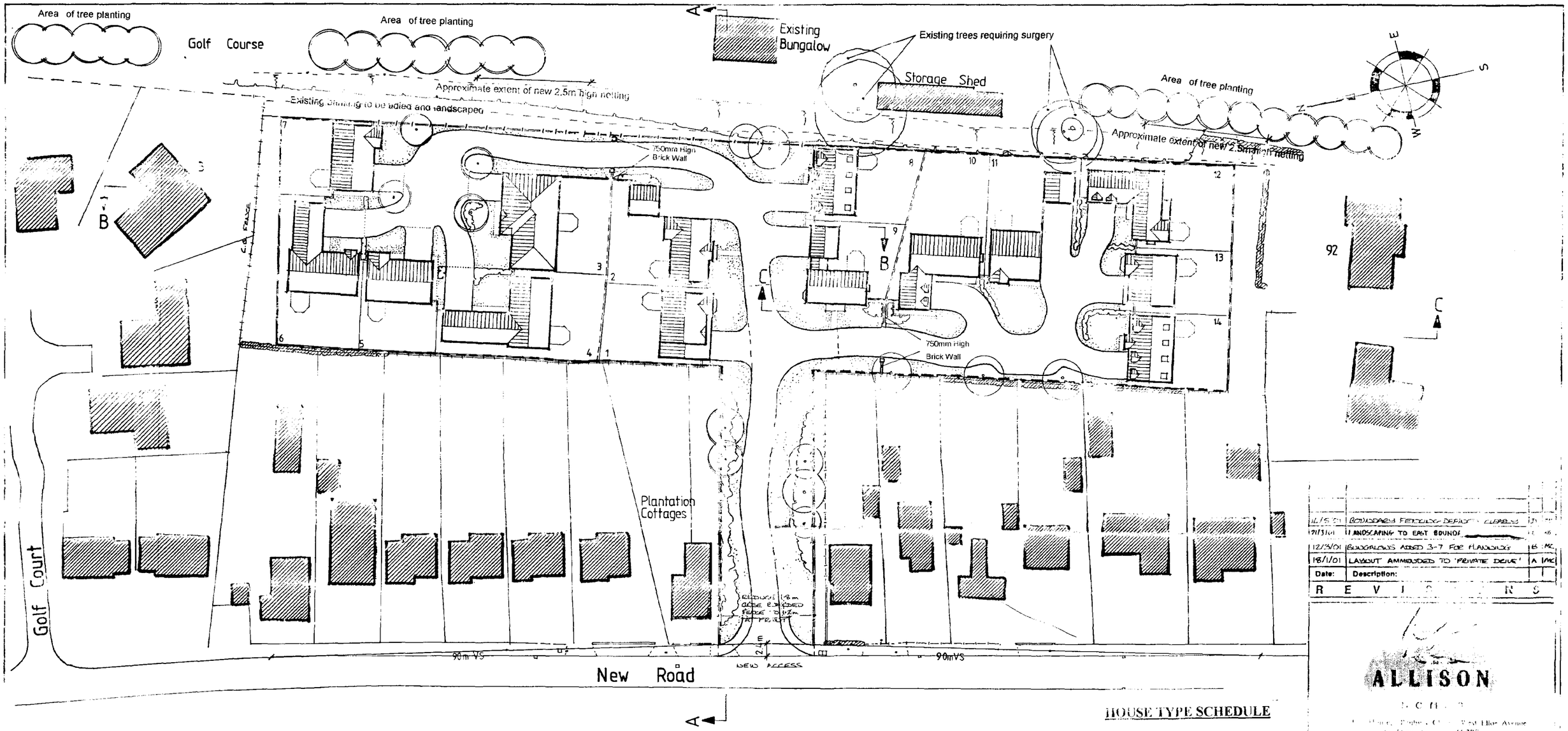
Fin drain
Hydraway, fin drain to BBA Number 95/85

Seal
110mm diameter

Capping layer
The Subgrade must have a CBR of at least 15%.

Poor subgrades with low CBR's may be improved by incorporating a capping layer of either cement, lime or bituminous bound materials. Alternatively granular materials in accordance with clause 613 of the Highways Agency specification may be used.





LEGEND

- 1.2m High Post & Wire Fence
- 1.2m High Post & Rail Fence (3 BAR)
- 1.8m High Timber Boarded Fence (BASED ON HOUSE SLAB LEVELS)
- 1.8m High Timber Panelled Fence
- Denotes Existing Trees & Hedges
- Denotes Indicative Trees & Hedges
- Denotes Existing Trees & Hedges To Be Removed

The conservatory is for planning purposes only, and will not be constructed and included in the sale unless requested as an extra by the purchaser. The design is therefore indicative and may be subject to alteration to suit individual requirements.

SEE SEPERATE DRAWING FOR LANDSCAPING DETAILS

HOUSE TYPE SCHEDULE

2 Bedroom Bungalow		**No**
✓Brandon	5,7	2
3 Bedroom Bungalow		
✓Douglas	3	1
✓Eastcott	6	1
✓Walcott	4	1
3 Bedroom Chalet Bungalow		
✓Morton	8,14	2
4 Bedroom Detatched House		
✓Harringworth	1	1
✓Kingstone	2	1
Laxton	9	1
✓Marlow	11	1
✓Westland	13	1
5 Bedroom Detatched House		
✓Charlbury	10	1
✓Woburn	12	1
	Total	**14**

Date:	Description:	
11/5/01	BOUNDARY FENCING DETAIL CLARIFIED	JD
9/3/01	LANDSCAPING TO EAST BOUNDARY	JB
12/2/01	BUNGALOWS ADDED 3-7 FOR FLOODING	JB MC
18/1/01	LAYOUT AMMENDED TO 'PRIVATE DRIVE'	A MC

REVISIONS

ALLISON
Tel (01775) 724201 Fax (01775) 767411
ALLISON HOMES is a trading name of SWALLOWHOMES LTD

Project:
Residential Development,
New Bridge off Bridge.

Drawing Title:
Site Layout.

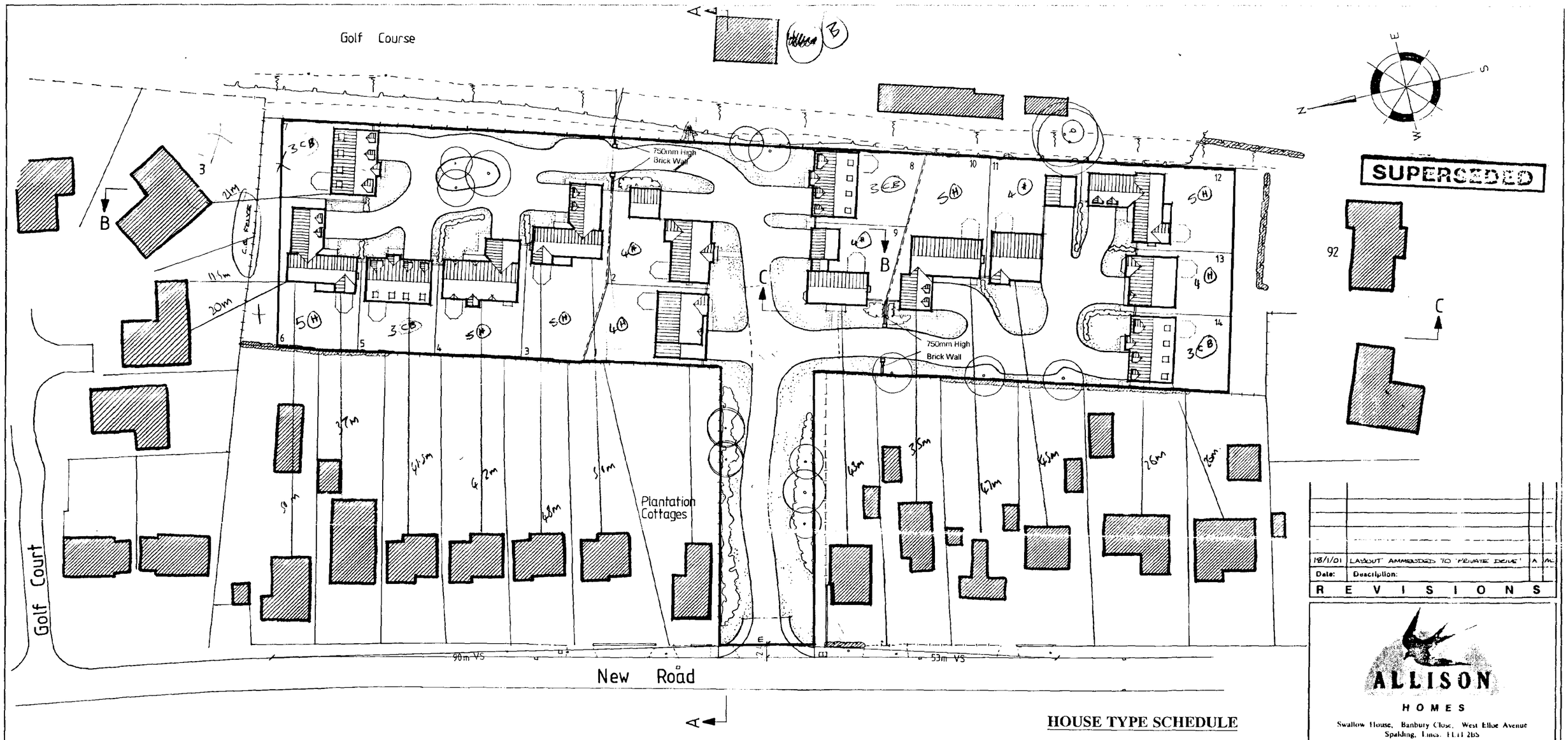
DETERMINED PLAN

Date: Oct 2000	Scale: 1:500
Reference No: SL	Drawn: MAC/KB
Drawing No: 01	Revision: A,B,C,D.

Do not scale directly from this drawing. All discrepancies to be brought to the attention of the above office.

Summit DS (UK) 992448

9-May 2002



LEGEND

- 1.2m High Post & Wire Fence
- 1.2m High Post & Rail Fence
- 1.8m High Timber Boarded Fence
- 1.8m High Timber Panelled Fence
- Denotes Existing Trees & Hedges
- Denotes Indicative Trees & Hedges
- Denotes Existing Trees & Hedges To Be Removed

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SEE SEPERATE DRAWING FOR LANDSCAPING DETAILS

HOUSE TYPE SCHEDULE

		No.
3 Bedroom Chalet Bungalow		
Morton	5,7,8,14	4
4 Bedroom Detached House		
Kingstone	2	1
Harringworth	1	1
Laxton	9	1
Marlow	11	1
Westland	13	1
5 Bedroom Detached House		
Woburn	3, 6, 12	3
Newbury	4	1
Charlbury	10	1
		14

824/94
112 New Road

H18/0103/01.

Date:	Description:
18/1/01	LAYOUT AMENDED TO 'PRIVATE DRIVE' A MC

REVISIONS

ALLISON HOMES

Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs. PE11 2BS
Telephone (01775) 724781 Fax (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
Residential Development,
New Road, Sutton Bridge.

Drawing Title:
Site Layout.

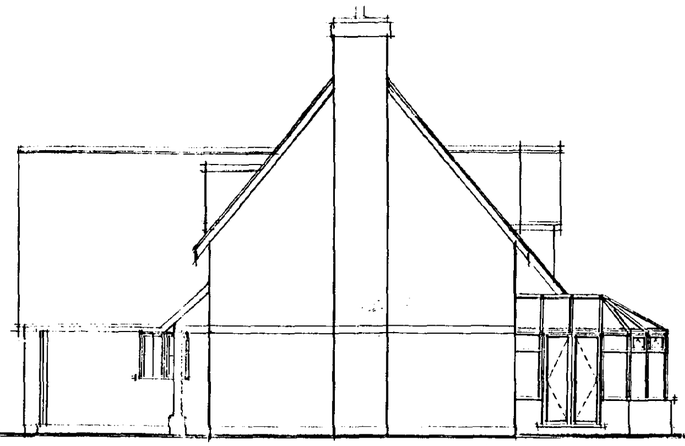
Date: Oct 2000	Scale: 1:500
Reference No:	Drawn: MAC/KB
Drawing No: 01	Revision: A

Do not scale directly from this drawing
All discrepancies to be brought to the attention of the above office.

Summit DS (UK) 992448



front elevation



side elevation

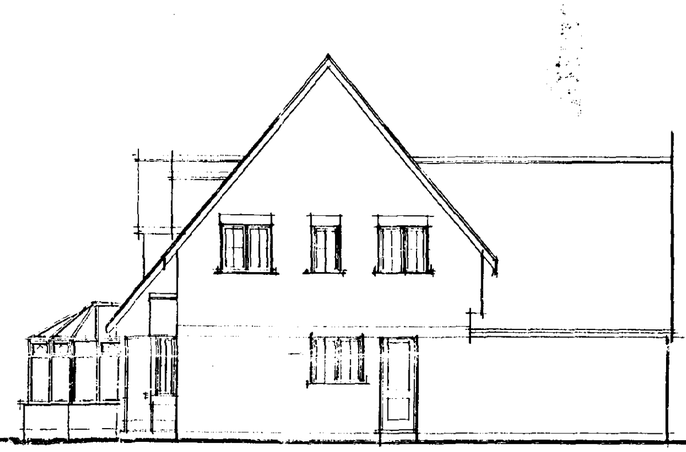
This drawing is for PLANNING PURPOSES ONLY. The internal layout shown on the plans is indicative and are for guidance purposes. Amendments may be made at the discretion of Allison Homes. For confirmation of finalised design and specification refer to the Sales Department.

The Conservatory is also for planning purposes only, and will not be constructed and included in the sale unless requested as an extra by the purchaser. The design is therefore indicative and may be subject to alteration to suit individual requirements.

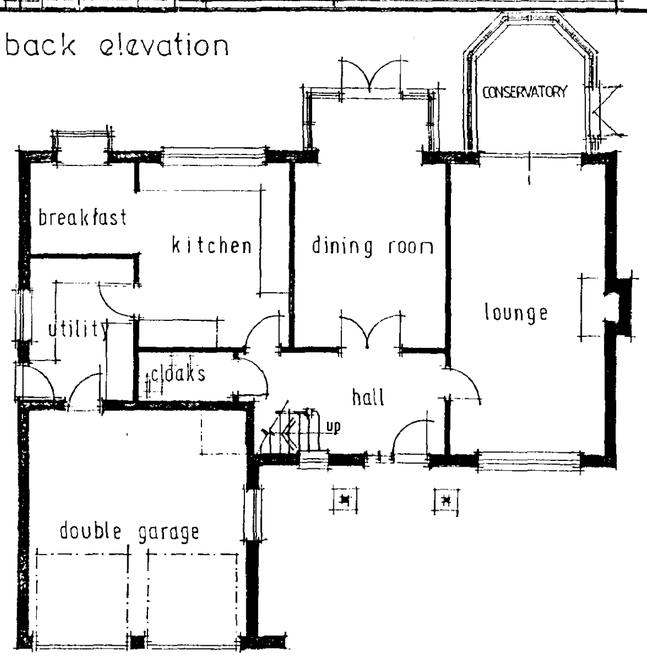
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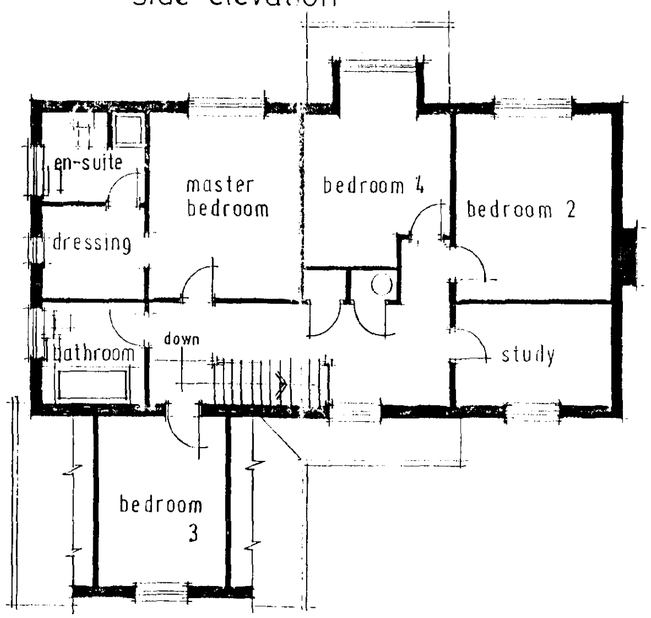
back elevation



side elevation



ground floor plan



first floor pldn

ALLISON HOMES

West Elloe Avenue, Spalding, Lincolnshire PE11 2BS
Telephone: (0775) 4701 Fax: [illegible] Telex: 32649

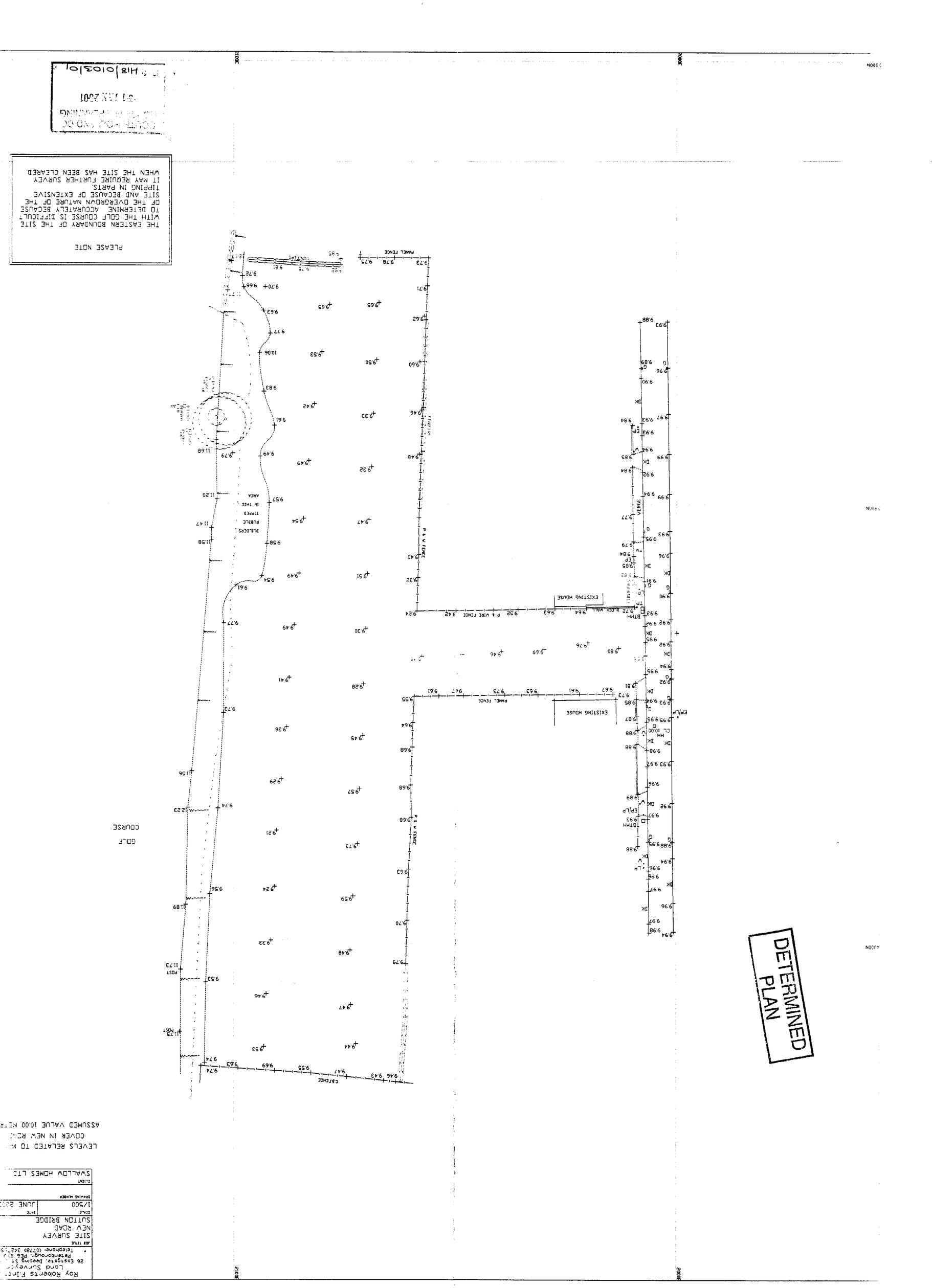
project

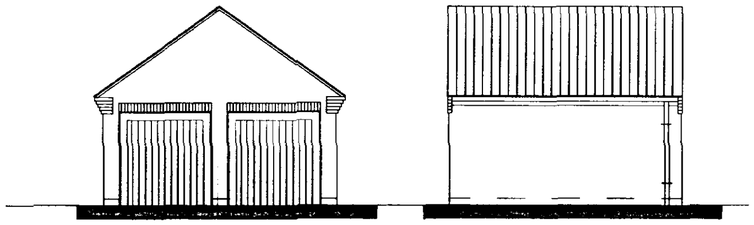
~~SUPERSEDED~~ NEWBURY

drawing title

DESIGN SHEET

scale 1:100	drawing no. P/H4/205
date Feb. 91	
drawn GWW	

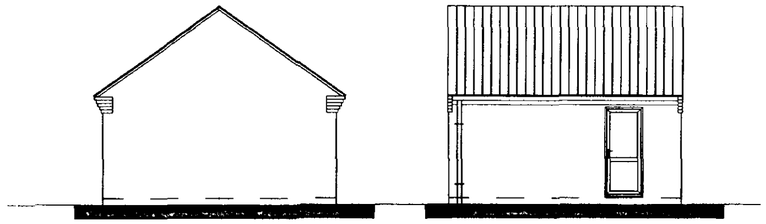

EXISTING HOUSE
PANEL FENCE
P V I FENCE
CURVED
CURVE
BULKERS FUELLED TIPPED IN THIS AREA
VERGE
GOLF COURSE
DETERMINED PLAN
PLEASE NOTE
THE EASTERN BOUNDARY OF THE SITE WITH THE GOLF COURSE IS DIFFICULT TO DETERMINE ACCURATELY BECAUSE OF THE OVERGROWN NATURE OF THE SITE AND BECAUSE OF EXTENSIVE TIPPING IN PARTS.
IT MAY REQUIRE FURTHER SURVEY WHEN THE SITE HAS BEEN CLEARED.
COUNTY COUNCIL OF SUFFOLK
PLANNING
-9 JAN 2001
Roy Roberts F.I.Mgt
Local Surveyor
26 Eastgate, Beping St
Peterborough, PE6 8NJ
Telephone: (0778) 342713
JOB TITLE
SITE SURVEY
NEW ROAD
SUTTON BRIDGE
SCALE 1:500 JUNE 2000
DRAWING NUMBER
CLIENT
SWALLOW HOMES LTD
LEVELS RELATED TO M...
COVER IN NEW RC...
ASSUMED VALUE 10.00 METR...



FRONT ELEVATION

SIDE ELEVATION

N.B. Refer to main dwelling for elevation treatment



REAR ELEVATION

SIDE ELEVATION

CONSTRUCTION NOTES

GROUND PREPARATION - Strip all top soil/vegetable matter from area occupied by buildings plus 2m all round, provisionally allow 150mm depth and store in site stockpile for later reuse. Reduce levels/grade oversite to levels indicated on site plans.

FOUNDATIONS - Unless otherwise stated, strip foundations to be 450/650mm wide of C15P mix concrete. Depth to suit site conditions, subject to 700mm min depth (1000mm on clay) and to the approval of the Local Authority Building Inspector.

GROUND FLOOR CONSTRUCTION - Insitu concrete ground bearing slabs to be 100mm thickness C20P mix concrete on 1200 gauge DPM (300mm laps) on 150mm sand blinded clean hardcore (max 600mm filling below slab). DPM to be turned up and over all walls and overlaid with DPC.

SUB-STRUCTURE WALLS - Class A blocks of FL quality bricks in 1:3 mix mortar. Fill cavities to within 225mm of lowest DPC with 1:10 mortar or lean mix concrete.

EXTERNAL WALLS - Made up of 105mm facing brickwork. Cavity walls between house and garage as external walls. Solid walls of 200mm Tarmac Toplite GTI or similar lightweight blocks in 1:1:6 mortar (K value 0.11 w/mk) to give U value of 0.48w/m degrees Celsius.

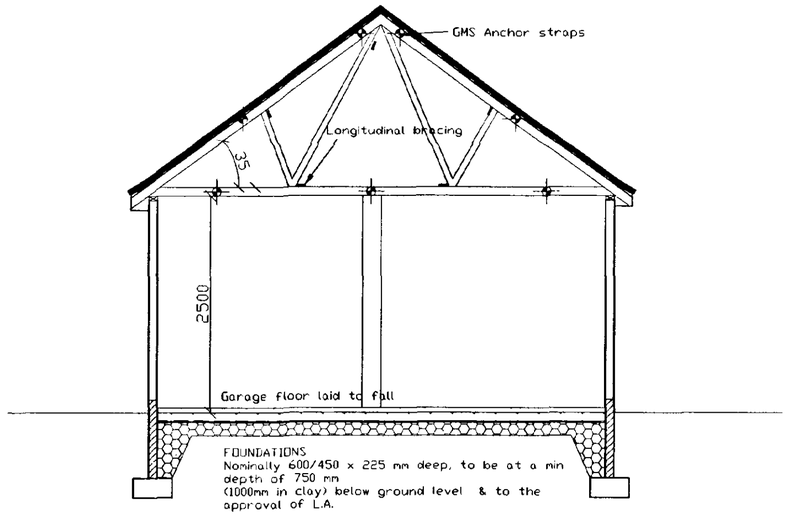
ROOF COVERING - Concrete interlocking, concrete/clay plain tiles or traditional/fibre cement slates, with ridges/verges/special fittings all as site specification. 38 x 25mm treated SW battens gauge to suite tiling on BS747 type 1F untearable roofing felt or similar on cut/trussed rafters as applicable. Contractor is to determine tile fixing specification from manufacturers published literature with due consideration for each site location, anticipated wind velocities and individual roof pitches. Roofing contractor to fix mineral fibre quilt fire stopping above and below roofing felt to head of party walls and fire stop eaves boxes in strict accordance with manufacturers written instructions.

ROOF CONSTRUCTION - Wall plates generally 100 x 50mm treated SW, with half lapped joints and fully bedded, strapped down to supporting wall with 30 x 5mm GMS straps at 1.0m cc's. Cut pitch rafters to be fully birdsmouthed over 4 twice nailed to manufacturer and fixed together with 100 x 25mm sawn SW binders and bracing, in strict accordance with BS5268 part 3 1985 (and any subsequent amendment) at 600mm max centres. Provide 30 x 5mm once bent (900/100) galvanised mild steel lateral restrain straps to external walls at ceiling and rafter level where shown at 2m max cc's) fixed with 4 no. 50mm 8 gauge CSK screws or 5 no. 3.5 x 50mm galvanised round wire nails to 2 trusses/ceiling joists min C/W solid blocking support and edge packing.

ROOF SPACE VENTILATION AND INSULATION - Provide eave to eave ventilation equivalent to 10,000mm.? /metre run or where eaves is dropped. 25,000mm?/metre run, together with high level vents giving 5000mm?/metre run (use tile manufacturers dry ridge ventilator system). Use either ventilating sofit boards, continuous sofit ventilation strips or continuous over fascia ventilation strips as site specification.

RAINWATER GOODS - 115mm dia HR or 100mm square line UPVC guttering, fixed level using standard fascia brackets at 1000mm cc's and 68mm dia/65mm square RWP's sealed to drain at ground level. Colour/profile as site specification.

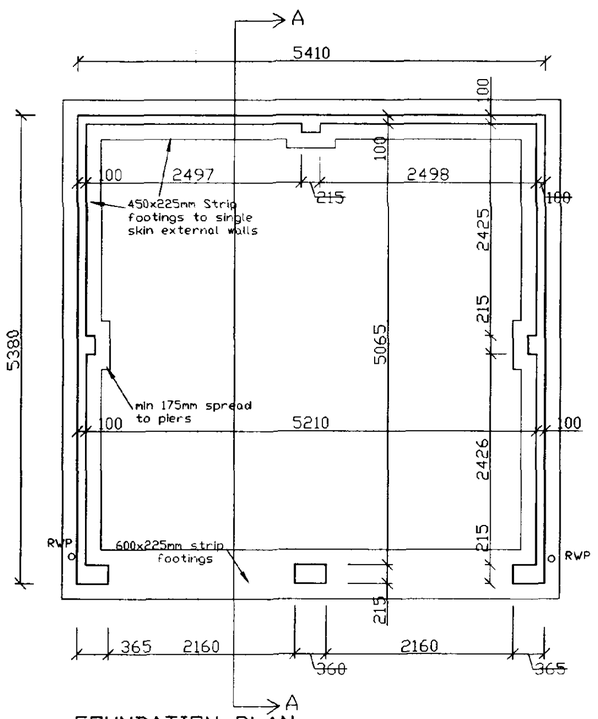
FOUL AND STORM DRAINAGE - Generally foul drainage to connect to foul sewer lateral and rainwater to discharge to rubble filled soakoways, but refer to drainage layout plan on a site by site and plot by plot basis.



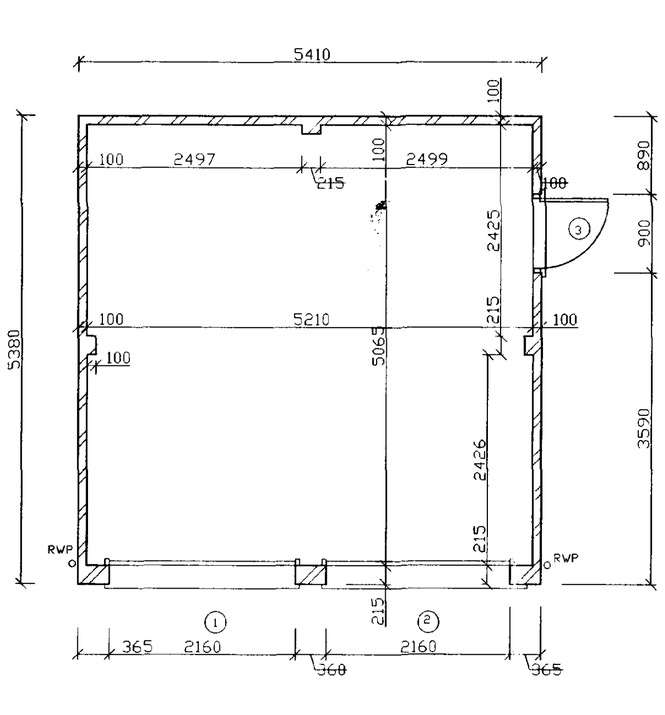
SECTION A - A

OPENING	FRAME	LINTOL	LENGTH
1	Purpose made	CN71A	2550
2	Purpose made	CN71A	2550
3	3XF	CN48C	1200

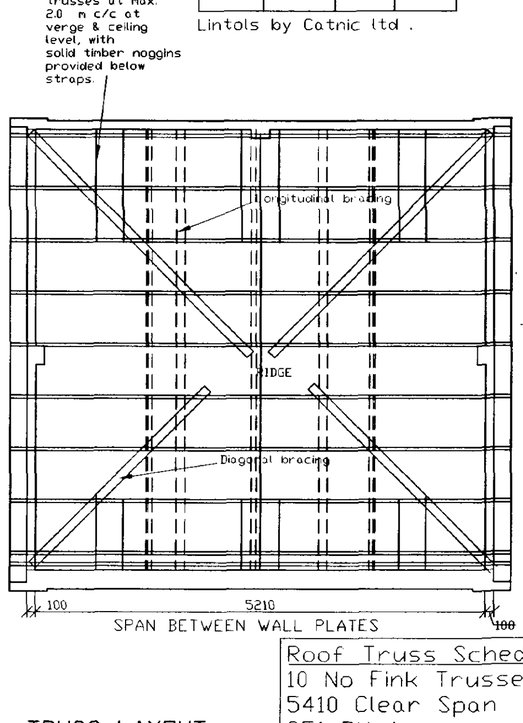
Lintols by Catnic ltd .



FOUNDATION PLAN



FLOOR PLAN



SPAN BETWEEN WALL PLATES

TRUSS LAYOUT

Roof Truss Schedule
10 No Fink Trusses
5410 Clear Span
35° Pitch
200mm Overhang

Date :	Description :		

R E V I S I O N S

Swallow House, Banbury Close, West Elloe Avenue, Spalding, Lincs. PE11 2BS
Telephone : (01775) 724781 Fax : (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

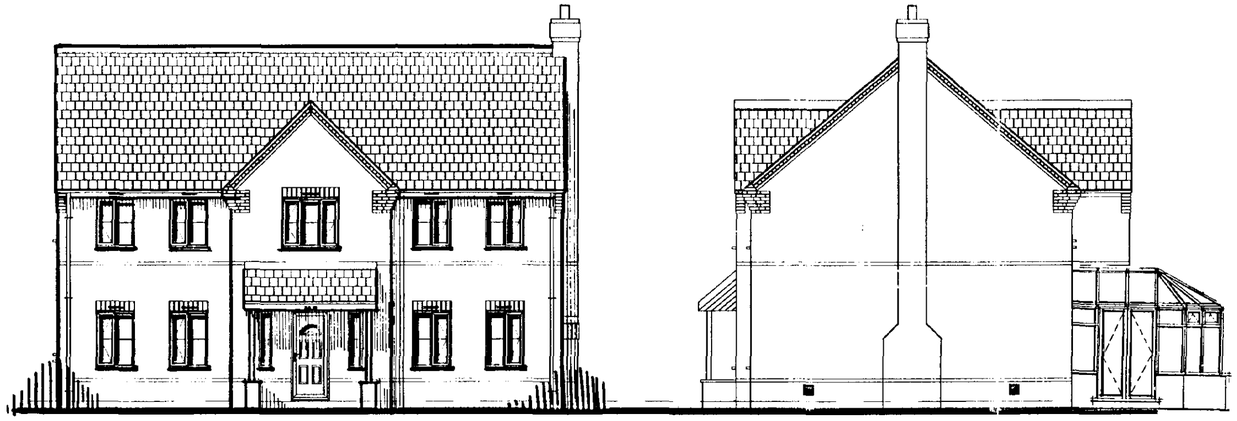
Project :
DOUBLE DETACHED GARAGE

DETERMINED PLAN

Drawing Title :
CONSTRUCTION DRAWING

Reference No :	Scales : 1:50, 1:100
Drawing No : W/DDG/02	Date : JULY '99
	Drawn : j.r.b.

Do not scale directly from this drawing . All discrepancies to be brought to the attention of the above office.



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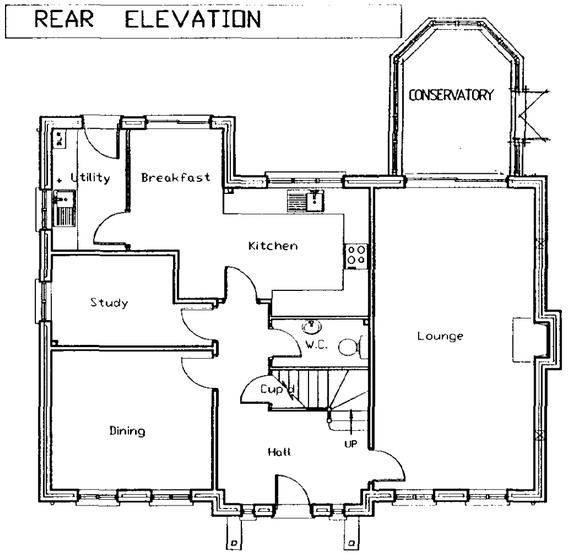
SIDE ELEVATION



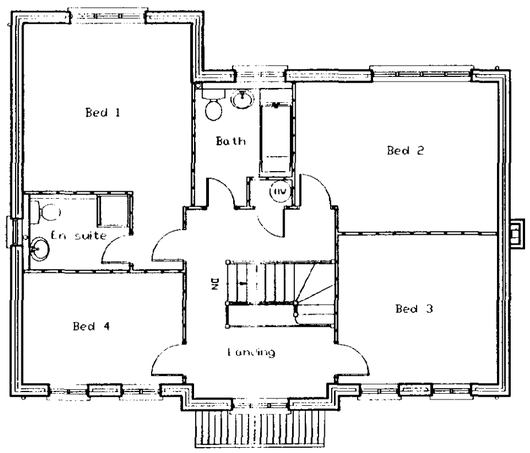
REAR ELEVATION



SIDE ELEVATION



GROUND FLOOR PLAN



FIRST FLOOR PLAN

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...NG
31 JAN 2001
Ref: H18/0103/01

6/7/00	KINGSTONE II REV TO KINGSTONE	A	KB
Date :	Description :		

R E V I S I O N S

ALLISON HOMES
Swallow House, Banbury Close, West Bilney Avenue, Spalding, Lincs. PE11 2BB
Telephone : (01775) 724701 Fax : (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

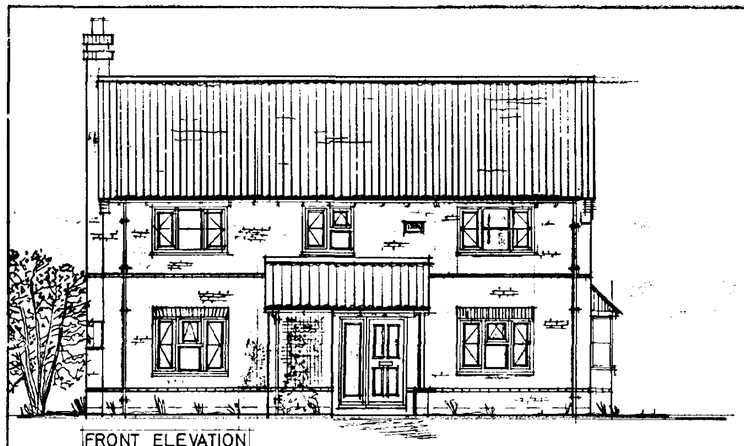
Project :
A RANGE 4 BED HOUSE
THE KINGSTONE

Drawing Title :
DESIGN SHEET

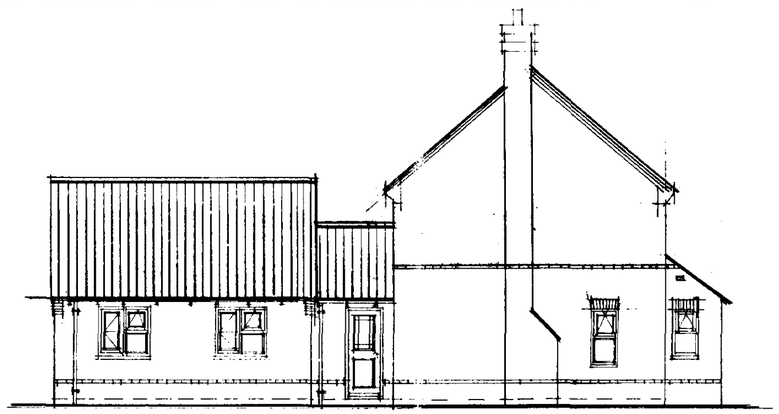
PLANNING DETERMINED
PLAN

Reference No : A4/DG/303	Scales : 1: 100
Drawing No : 01	Date : 02/11/99
	Drawn: JRB

Do not scale directly from this drawing. All discrepancies to be brought to the attention of the above office



FRONT ELEVATION

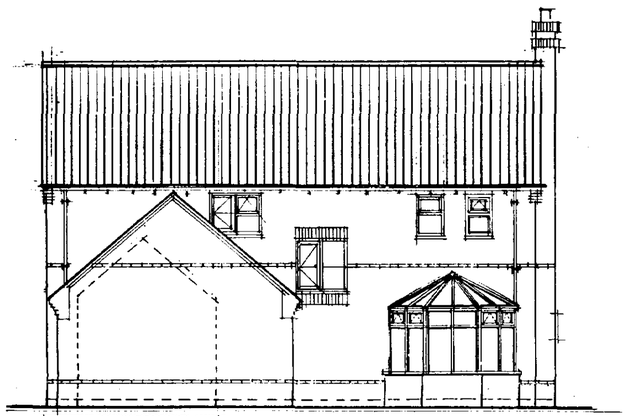


SIDE ELEVATION

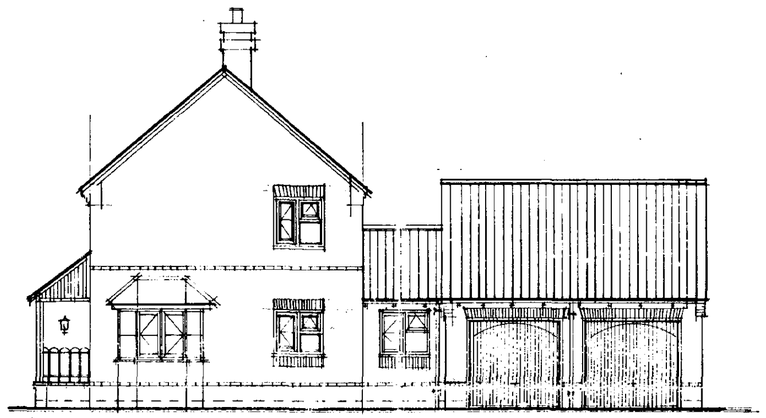
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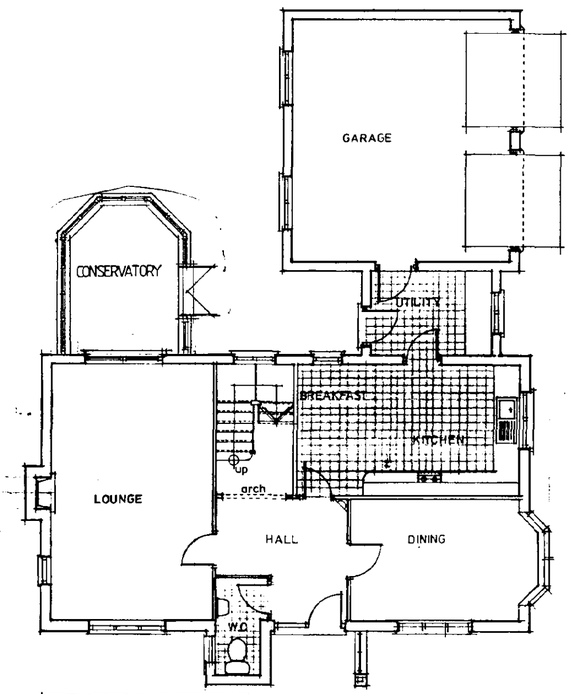
H18/0103/01



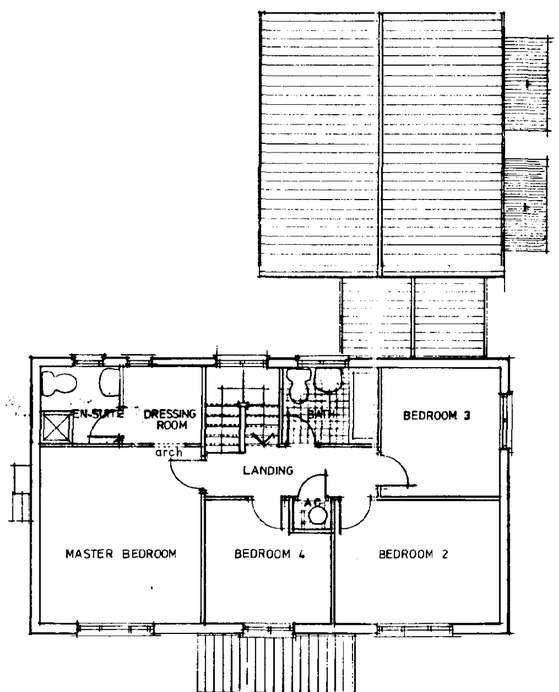
REAR ELEVATION



SIDE ELEVATION



GROUND FLOOR PLAN



FIRST FLOOR PLAN

DETERMINED PLAN

Date:	Description:

R E V I S I O N S

ALLISON

HOMES

Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs. PE11 2BS
Telephone (0775) 724701 Fax (0775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
R Range House Type
4 Bedroom House
1455 sq ft

Drawing Title:
Design Sheet
(Laxton)

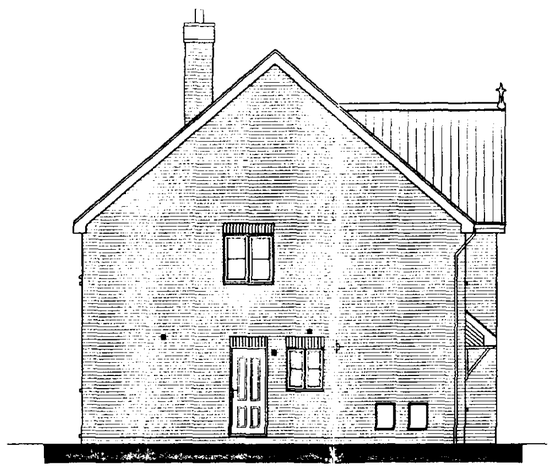
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Revision:	

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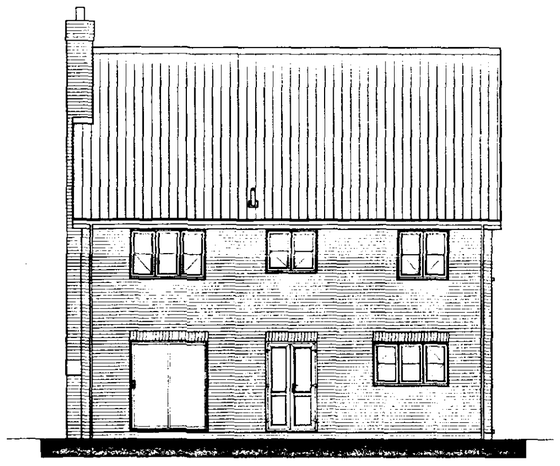
SUMMIT D.O.S. 941231



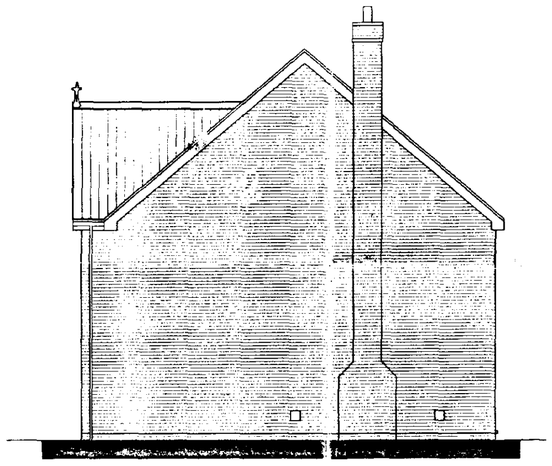
Front Elevation



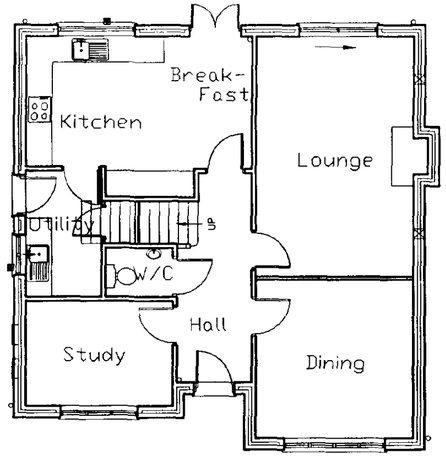
Side Elevation



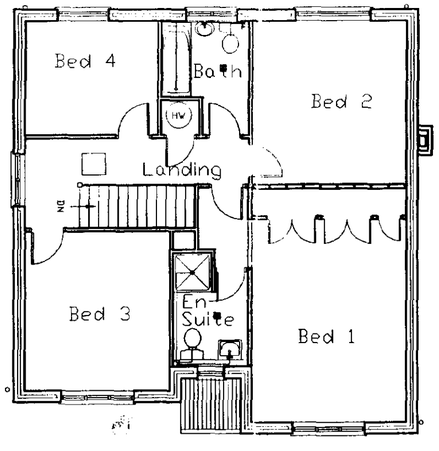
Rear Elevation



Side Elevation



Ground Floor Plan



First Floor Plan

DETERMINED PLAN

Highways

Date :	Description :
R E V I S I O N S	

ALLISON HOMES

Swallow House, Banbury Close, West Elloe Avenue, Spalding, Lincs. PE11 1BS

Telephone : (01775) 724701 Fax : (01775) 762153

ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project :

PROPOSED FOUR BED DETACHED HOUSE

Drawing Title :

DESIGN SHEET
THE MARLOW
1670 sqft

Reference No :	Scales : 1:100
Drawing No : 01	Date : AUG'00
	Drawn : J.r.b.

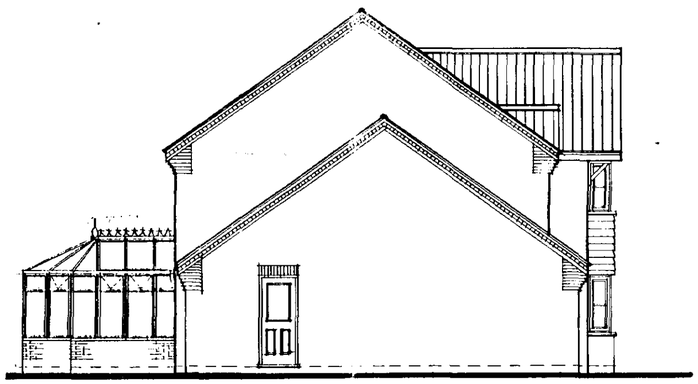
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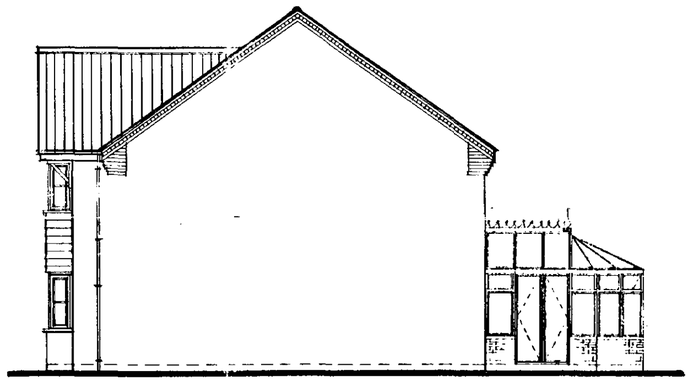
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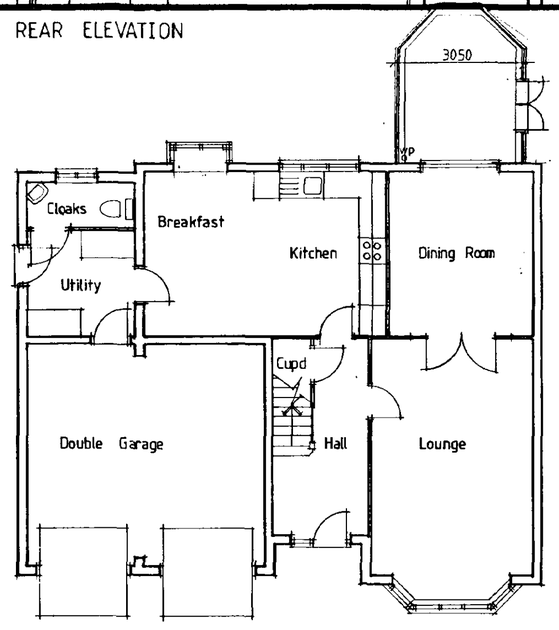
SIDE ELEVATION



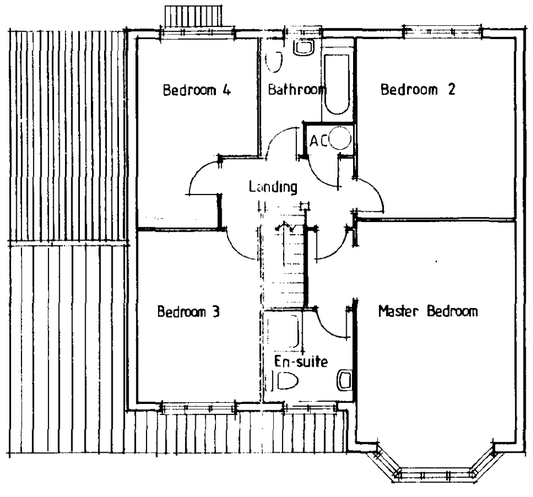
REAR ELEVATION



SIDE ELEVATION



GROUND FLOOR PLAN



FIRST FLOOR PLAN

H18/0103/01

Date:	Description:		
26/5/00	UPDATED TO PLAN 01	A	PW

REVISIONS

ALLISON HOMES
Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs PE11 2BS
Telephone (01775) 724701 Fax (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
A Range 4 Bedroom House Type
The Harringworth

Drawing Title:
Design Sheet

DETERMINED PLAN

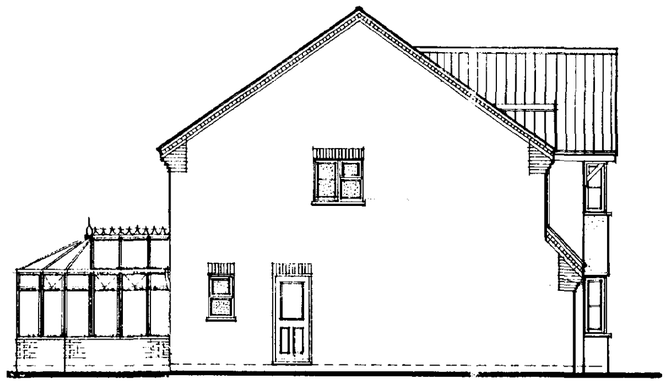
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Drawing No: 01	**Revision:** A

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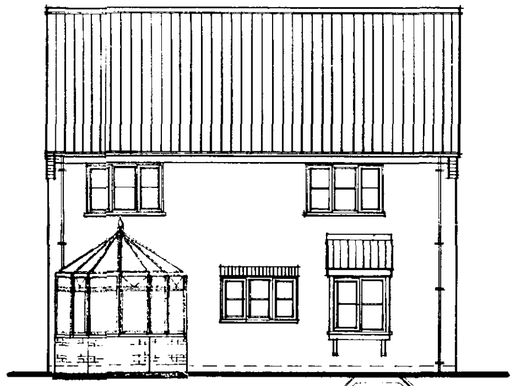
SUBMIT D.D.S. 841231/A



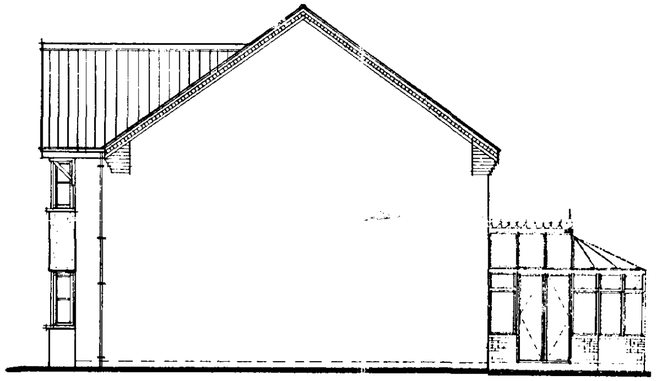
FRONT ELEVATION



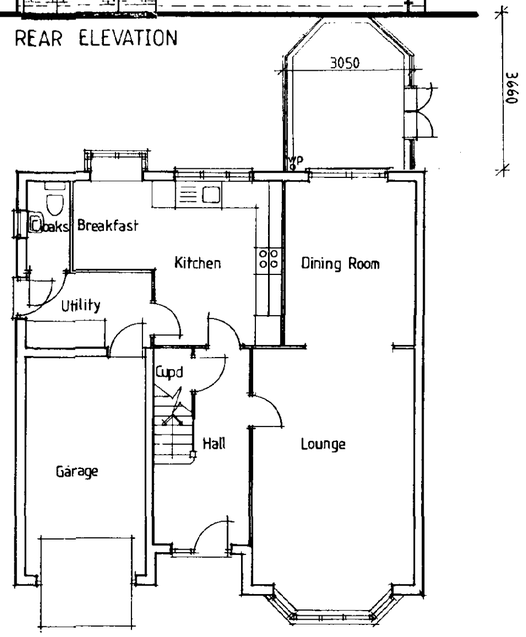
SIDE ELEVATION



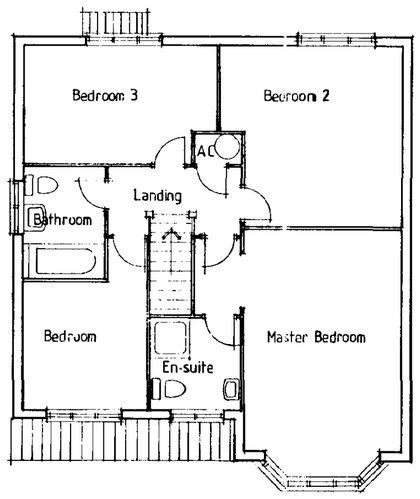
REAR ELEVATION



SIDE ELEVATION



GROUND FLOOR PLAN



FIRST FLOOR PLAN

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DETERMINED PLAN

H18/0103/01

Date:	Description:		
25/2/00	Elevations Revised	B	KW
24/5/97	Ideas [illegible]	A	KW

REVISIONS

ALLISON HOMES

Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs PE11 2BS
Telephone (01775) 724701 Fax (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
A Range 4 Bedroom House Type
The Westland

Drawing Title:
Design Sheet

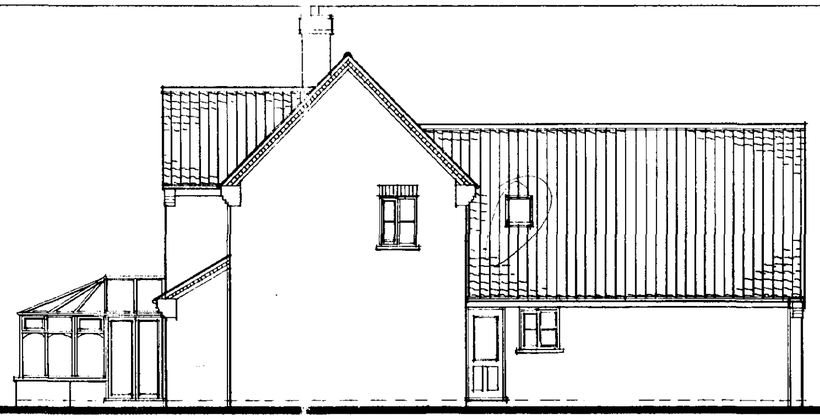
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Drawing No:	**Revision:**
01	B

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SUMMIT D.D.S. 841231/A



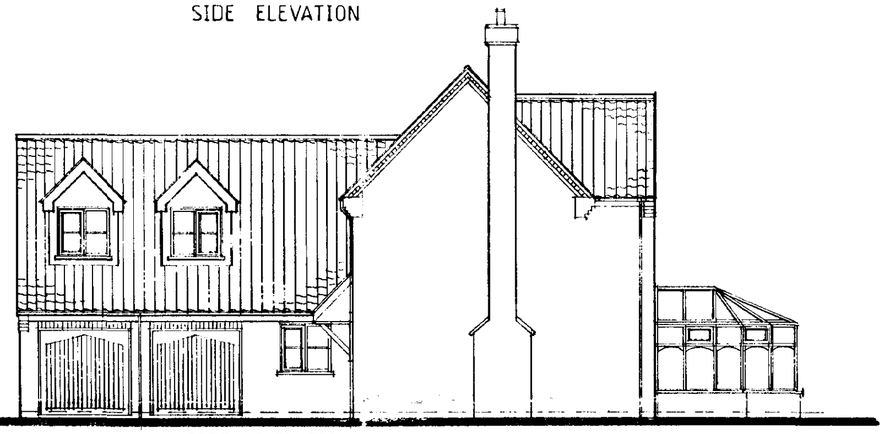
FRONT ELEVATION



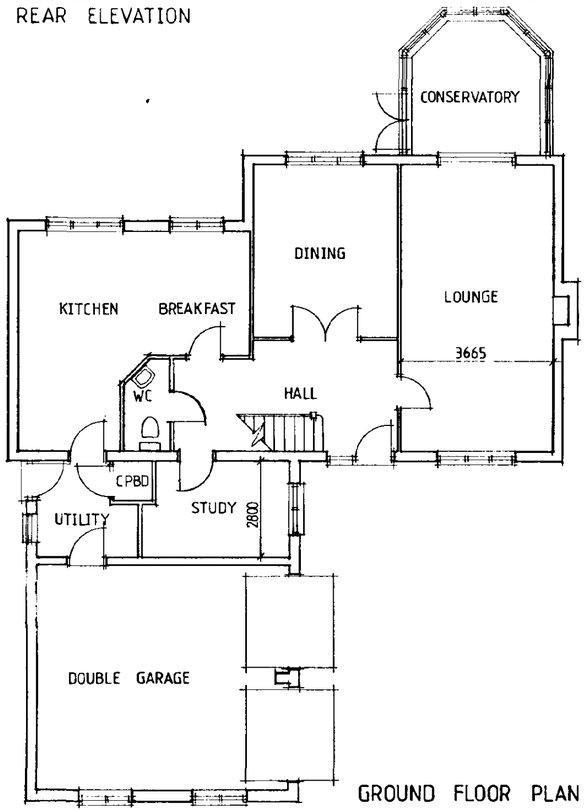
SIDE ELEVATION



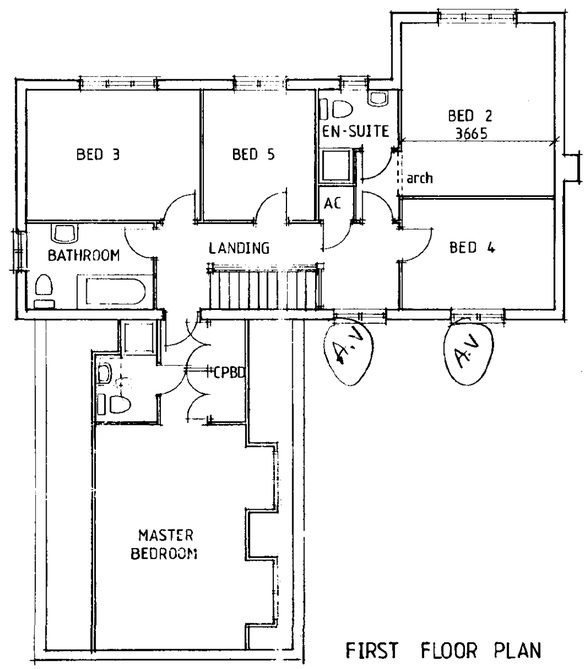
REAR ELEVATION



SIDE ELEVATION



GROUND FLOOR PLAN



FIRST FLOOR PLAN

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DETERMINED PLAN

H18/0103/01

Date:	Description:		
6/7/00	AMENDED TO WORKING DRAWING	NG	B
13/5/98	W.C. AMENDED		A

REVISIONS

ALLISON HOMES

Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs. PE11 2BS
Telephone (01775) 724701 Fax (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
R Range House Type
5 Bedroom House
sqft

Drawing Title:
Design Sheet

WOBURN

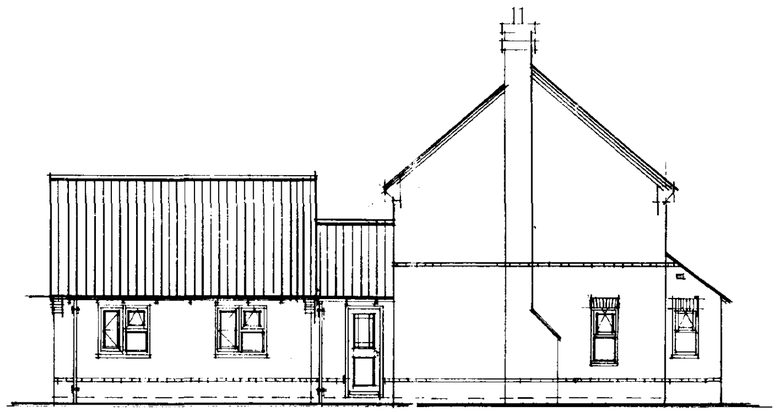
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Drawing No: 01	**Revision:** AB

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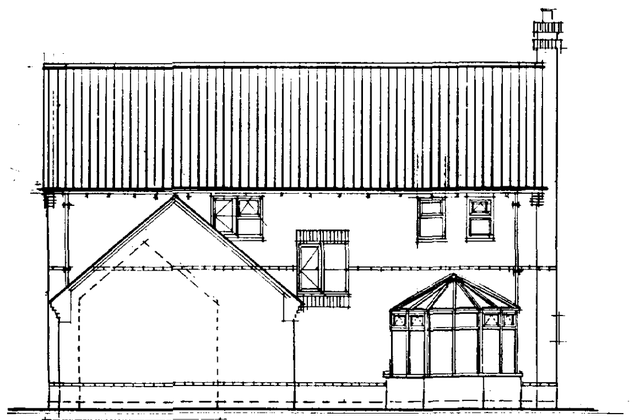
341231/A



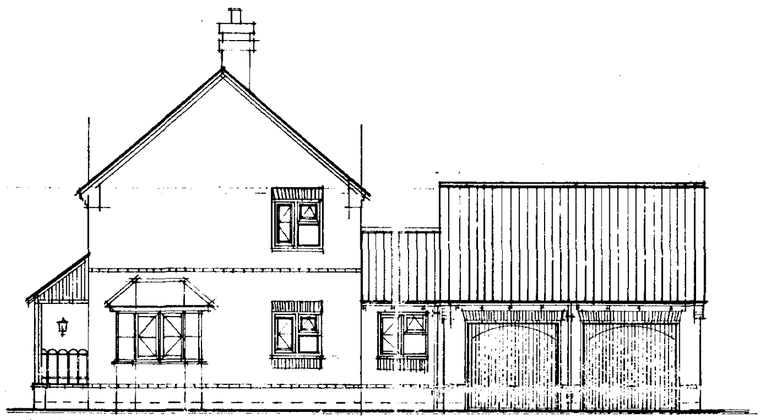
FRONT ELEVATION



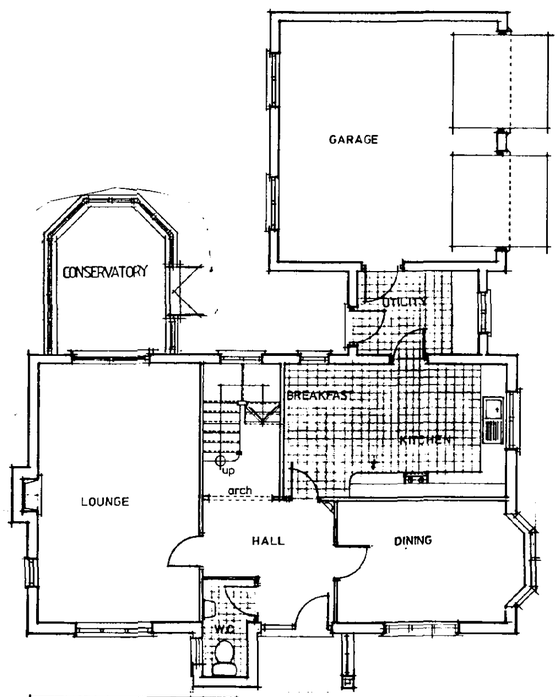
SIDE ELEVATION



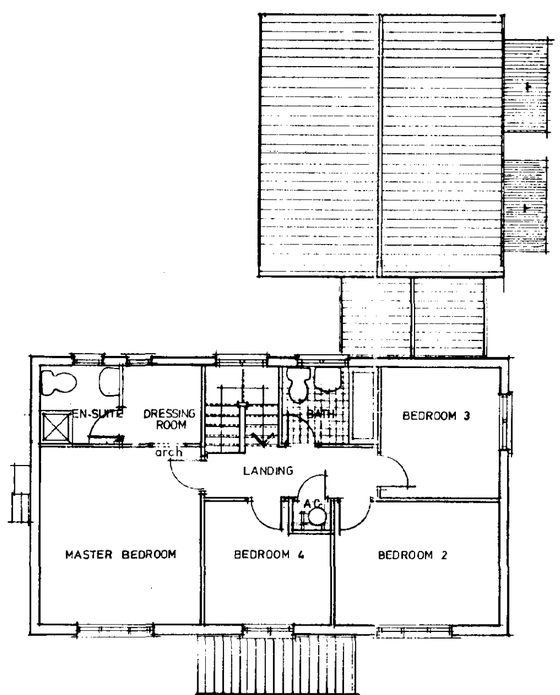
REAR ELEVATION



SIDE ELEVATION



GROUND FLOOR PLAN



FIRST FLOOR PLAN

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DETERMINED PLAN

Date:	Description:

R E V I S I O N S

ALLISON HOMES

Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs. PE11 2BS
Telephone (0775) 724701 Fax (0775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
R Range House Type
4 Bedroom House
1455 sq ft

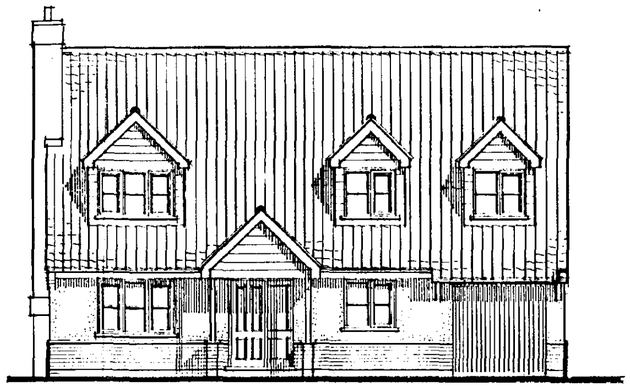
Drawing Title:
Design Sheet
(Laxton)

Reference No:	Scales: 1:100,
R4/DG/05/V1	Date: 16th OCT 94
Drawing No: 01	Drawn: SANDERS.
Revision:	

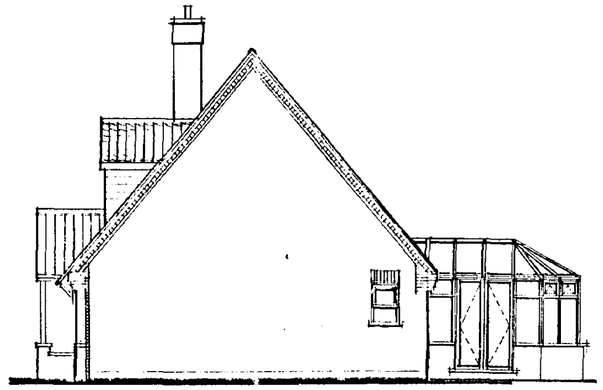
H18/0103/01

Do not scale directly from this drawing. All discrepancies to be brought to the attention of the above office.

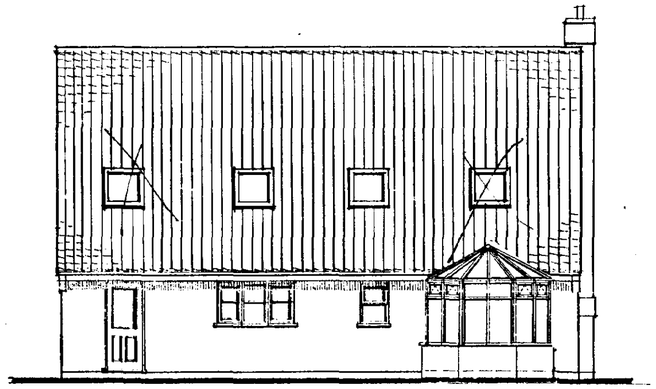
SUMMIT D.O.S. 941231



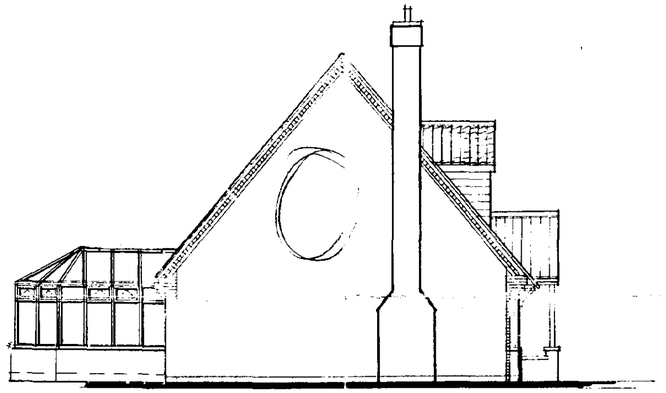
FRONT ELEVATION



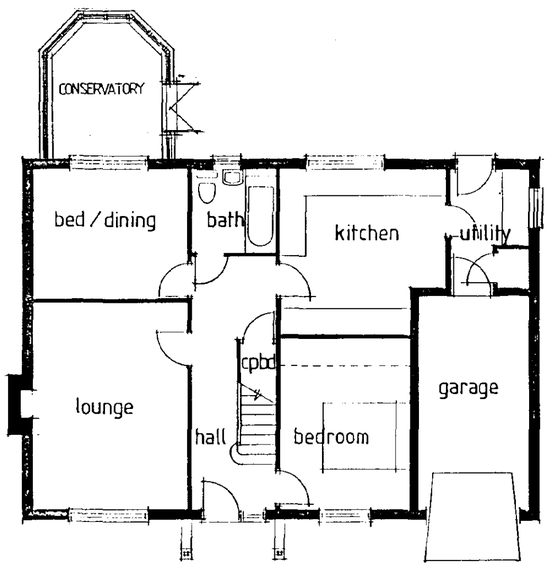
SIDE ELEVATION



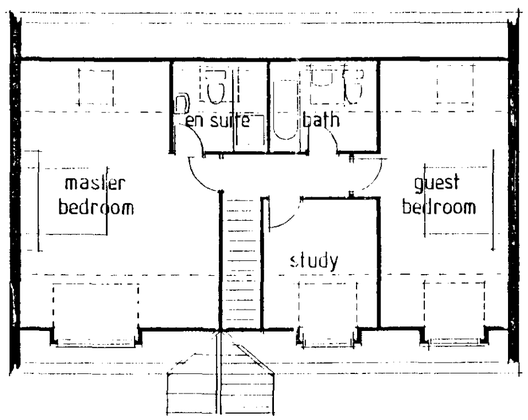
REAR ELEVATION



SIDE ELEVATION



GROUND FLOOR PLAN



FIRST FLOOR PLAN

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DETERMINED PLAN

2001

H18/0103/01

Date:	Description:		
6/7/00	MORTON VI REV TO MORTON	B	KB
24/5/00	Revised to Match Working Drawing	A	PW

REVISIONS

ALLISON HOMES

Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs. PE11 2BS
Telephone (01775) 724701 Fax (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
3 Bedroom Chalet Bungalow

MORTON

Drawing Title:
Design Sheet

1572 sqft

Date:	Scales:
20:7:98	1:100
Reference No:	**Drawn:**
Drawing No: AB / 01	**Revision:** AB

Do not scale directly from this drawing. All discrepancies to be brought to the attention of the above office.

SUMMIT DOS 9612317/A



LEGEND

- 1.2m High Post & Wire Fence
- 1.2m High Post & Rail Fence
- 1.8m High Timber Boarded Fence
- 1.8m High Timber Panelled Fence
- Denotes Existing Trees & Hedges
- Denotes Indicative Trees & Hedges
- Denotes Existing Trees & Hedges To Be Removed
- The conservatory is for planning purposes only, and will not be constructed and included in the sale unless requested as an extra by the purchaser. The design is therefore indicative and may be subject to alteration to suit individual requirements.

SEE SEPERATE DRAWING FOR LANDSCAPING DETAILS

SUPERSEDED

AMENDED PLAN
Ref.

HOUSE TYPE SCHEDULE

		No
2 Bedroom Bungalow		
Brandon	5,7	2
3 Bedroom Bungalow		
Douglas	3	1
Eastcott	6	1
Walcott	4	1
3 Bedroom Chalet Bungalow		
Morton	8,14	2
4 Bedroom Detatched House		
Harringworth	1	1
Kingstone	2	1
Laxton	9	1
Marlow	11	1
Westland	13	1
5 Bedroom Detatched House		
Charlbury	10	1
Woburn	12	1
	Total	14

Date:	Description:		
21/3/01	LANDSCAPING TO EAST BOUNDARY ADDED	C	VB
12/3/01	BUNGALOWS ADDED 3-7 FOR PLANNING	B	MC
18/1/01	LAYOUT AMMENDED TO 'PRIVATE DRIVE'	A	MC

REVISIONS

ALLISON HOMES
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Spalding, Lincs. PE11 2BS
Telephone (01775) 724701 Fax (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
Residential Development,
New Road, Sutton Bridge.

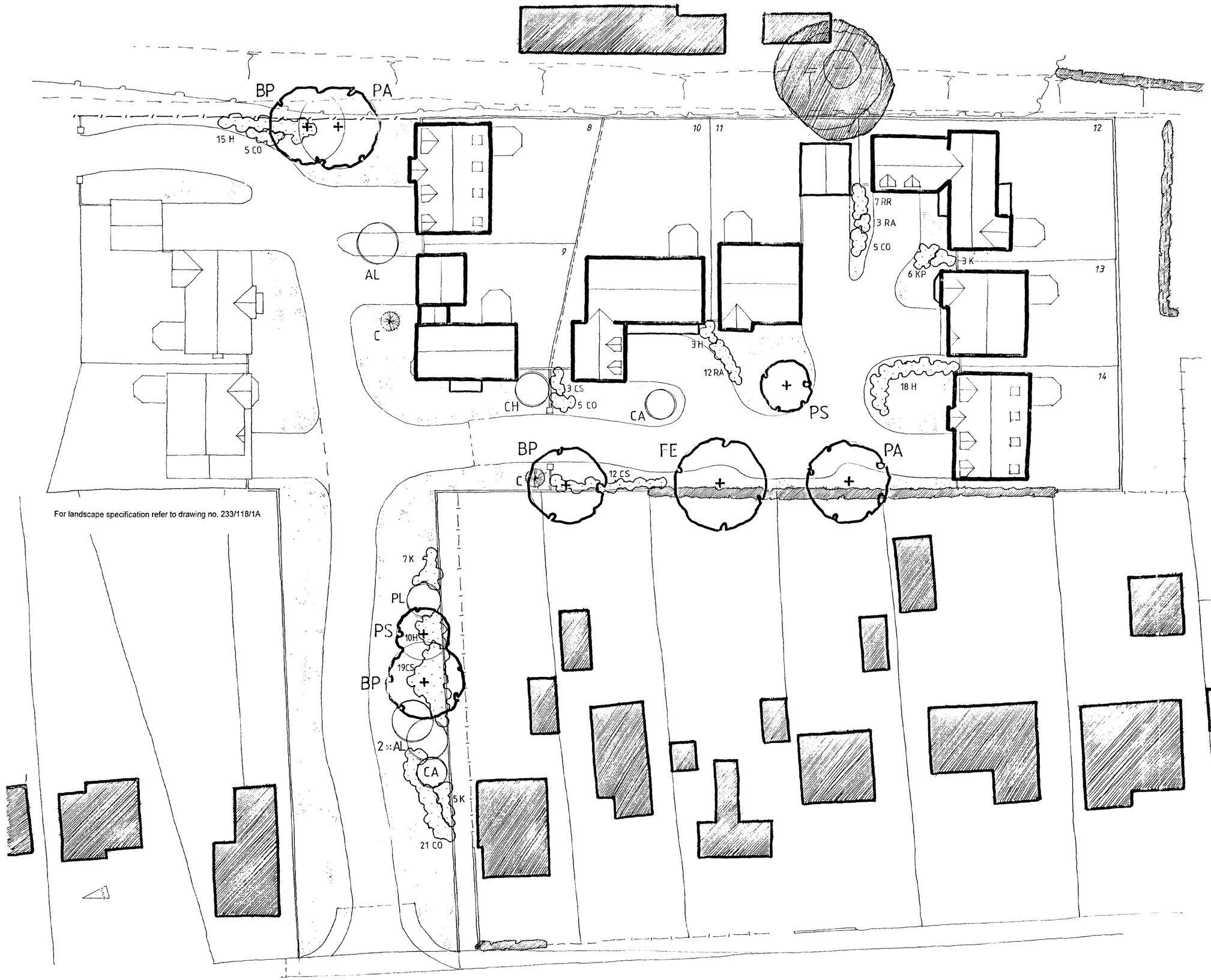
Drawing Title:
Site Layout.

Date: Oct 2000	Scales: 1:500
Reference No: SL	Drawn: MAC/KB
Drawing No: 01	Revision: A B C

Do not scale directly from this drawing. All discrepancies to be brought to the attention of the above office.

Summit DS (UK) 992448

ALLISON HOMES



For landscape specification refer to drawing no. 233/118/1A

PLANTING SCHEDULE

TREES

No	Ref	Species	Size/Specification
3	BP	Betula pendula	10L container grown/175-200
1	FE	Fraxinus excelsior	10-12 bare root/Selected Standard
2	PA	Prunus avium 'Plena'	10-12 bare root/Selected Standard
2	PS	Prunus subhirtella 'Autumnalis'	8-10 bare root/Standard

SPECIMEN SHRUBS

No	Ref	Species	Size/Specification
3	AL	Amelanchier lamarkii	10L container grown/80-100
2	CA	Corylus avellana 'Contorta'	10L container grown/80-100
1	CH	Cotoneaster 'Hybridus Pendulus'	10L container grown/80-100
2	C	Cortaderia selloana 'Sunningdale Silver'	10L container grown
1	PL	Prunus lusitanica	10L container grown /80-100

SHRUBS

No	Ref	Species	Size/Specification	Planting Density
34	CS	Cornus alba 'Spaethii'	3L container grown/60-80	1000 cs
36	CO	Cotoneaster horizontalis	3L container grown /30-40	750 cs
46	H	Hypericum 'Hidcote'	3L container grown /30-40	750 cs
6	KP	Kerria japonica 'Picta'	3L container grown /30-40	750 cs
15	K	Kerria japonica 'Pleniflora'	3L container grown /40-60	1000 cs
15	RA	Rosa rugosa 'Alba'	1+1/40-60 cutting	500 cs
7	RR	Rosa rugosa 'Rubra'	1+1/40-60 cutting	500 cs

PLANTING NOTES:

All trees to be adequately staked and tied.
Standards to be fitted with spiral guards.

Backfill to tree holes to consist of topsoil and peat free tree planting compost in equal parts, 50 gms Enmag and 5 gms P4 moisture retention crystals well mixed throughout.

103/01

SUPERSEDED

DRAWING
2 FEB 2001
ISSUED

REVISIONS

A Feb 2001 Layout amended to 'Private Drive'

New Road, Sutton Bridge

LANDSCAPE DETAILS

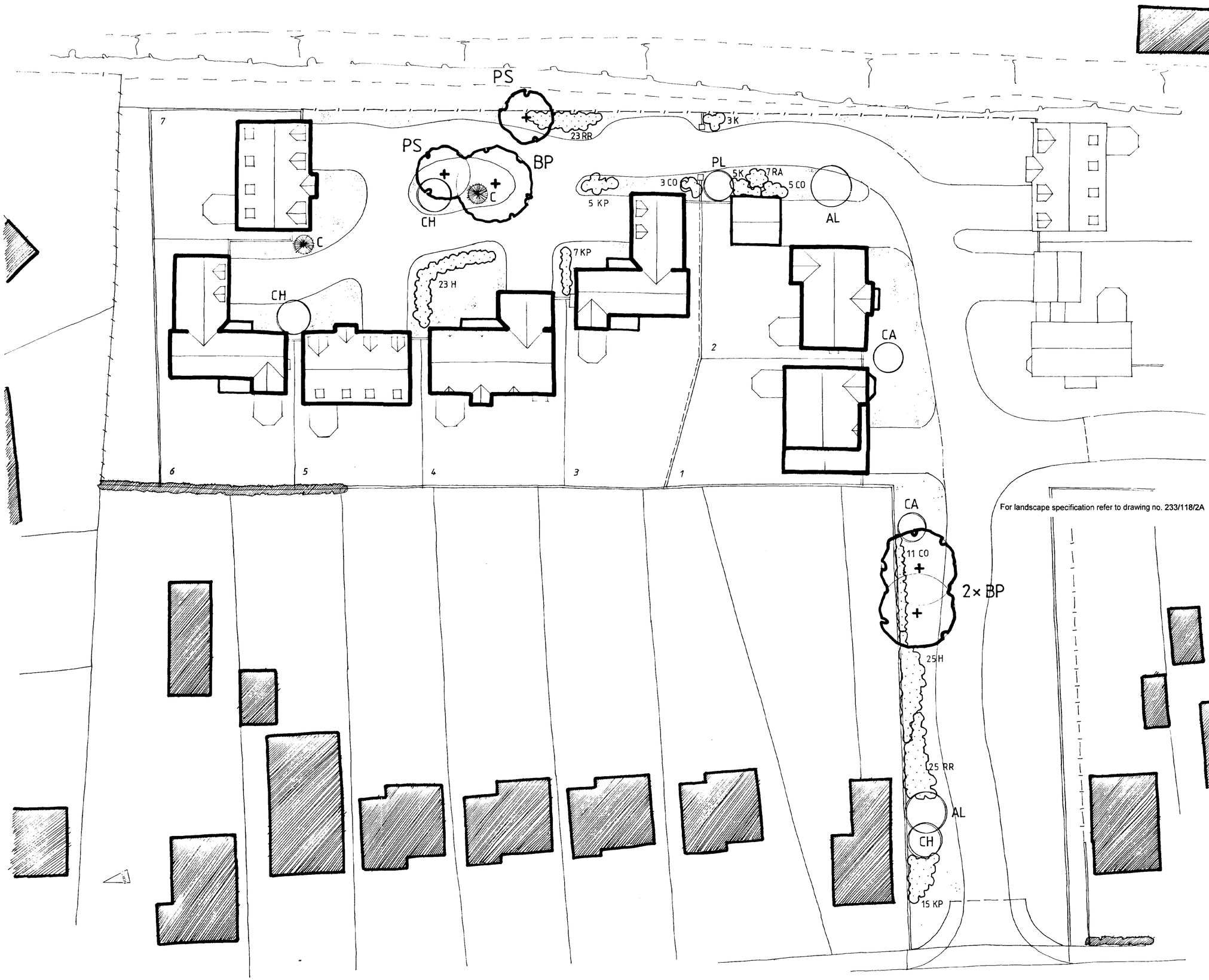
Dwg No.: 233/118/2A 1:200 February 2001

Town & Country Planning
Ecology
Landscape Architecture

Robert Doughty Consultancy

3 High Street, Helpringham, Sleaford NG34 0RA Tel. (01529) 421646 Fax. (01529) 421358

ALLISON HOMES



For landscape specification refer to drawing no. 233/118/2A

PLANTING SCHEDULE

TREES

No	*Ref*	*Species*	*Size/Specification*
4	BP	Betula pendula	10L container grown/175-200
2	PS	Prunus subhirtella 'Autumnalis'	8-10 bare root/Standard

SPECIMEN SHRUBS

No	*Ref*	*Species*	*Size/Specification*
2	AL	Amelanchier lamarkii	10L container grown/80-100
2	CA	Corylus avellana 'Contorta'	10L container grown/80-100
3	CH	Cotoneaster 'Hybridus Pendulus'	10L container grown/80-100
2	C	Cortaderia selloana 'Sunningdale Silver'	10L container grown
1	PL	Prunus lusitanica	10L container grown /80-100

SHRUBS

No	*Ref*	*Species*	*Size/Specification*	*Planting Density*
19	CO	Cotoneaster horizontalis	3L container grown /30-40	750 cs
48	H	Hypericum 'Hidcote'	3L container grown /30-40	750 cs
27	KP	Kerria japonica 'Picta'	3L container grown /30-40	750 cs
8	K	Kerria japonica 'Pleniflora'	3L container grown /40-60	1000 cs
7	RA	Rosa rugosa 'Alba'	1+1/40-60 cutting	500 cs
48	RR	Rosa rugosa 'Rubra'	1+1/40-60 cutting	500 cs

PLANTING NOTES:

All trees to be adequately staked and tied.
Standards to be fitted with spiral guards.

Backfill to tree holes to consist of topsoil and peat free tree planting compost in equal parts, 50 gms Enmag and 5 gms P4 moisture retention crystals well mixed throughout.

08 FEB 2001
103/01
SUPERSEDED
DRAWING
2 FEB 2001
ISSUED

REVISIONS

A Feb 2001 Layout amended to 'Private Drive'

New Road, Sutton Bridge

LANDSCAPE DETAILS

Dwg No.: 233/118/1A 1:200 February 2001

Town & Country Planning
Ecology
Landscape Architecture

Robert Doughty Consultancy

32 High Street, Helpringham. Sleaford NG34 ORA Tel: (01529) 421646 Fax: (01529) 421358



Section A-A



Section B-B



Section C-C

SUPERSEDED

Date:	Description:		
30/01/01	REV TO MATCH SITE LAYOUT	A	KB

REVISIONS

ALLISON HOMES
Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs. PE11 2BS
Telephone (01775) 724701 Fax (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
Residential Development,
New Road, Sutton Bridge.

Drawing Title:
Street Sections.

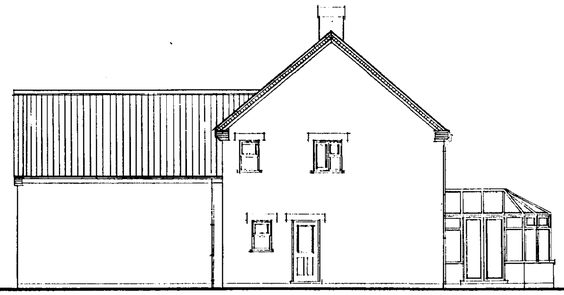
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Date:	Scale:
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Drawing No: SL/02	Revision: A

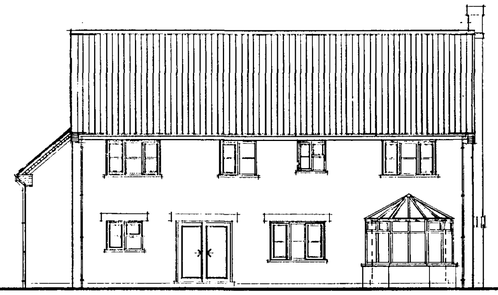
Do not scale directly from this drawing. All discrepancies to be brought to the attention of the above office



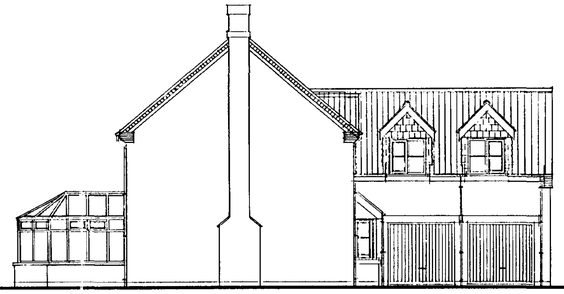
FRONT ELEVATION



SIDE ELEVATION

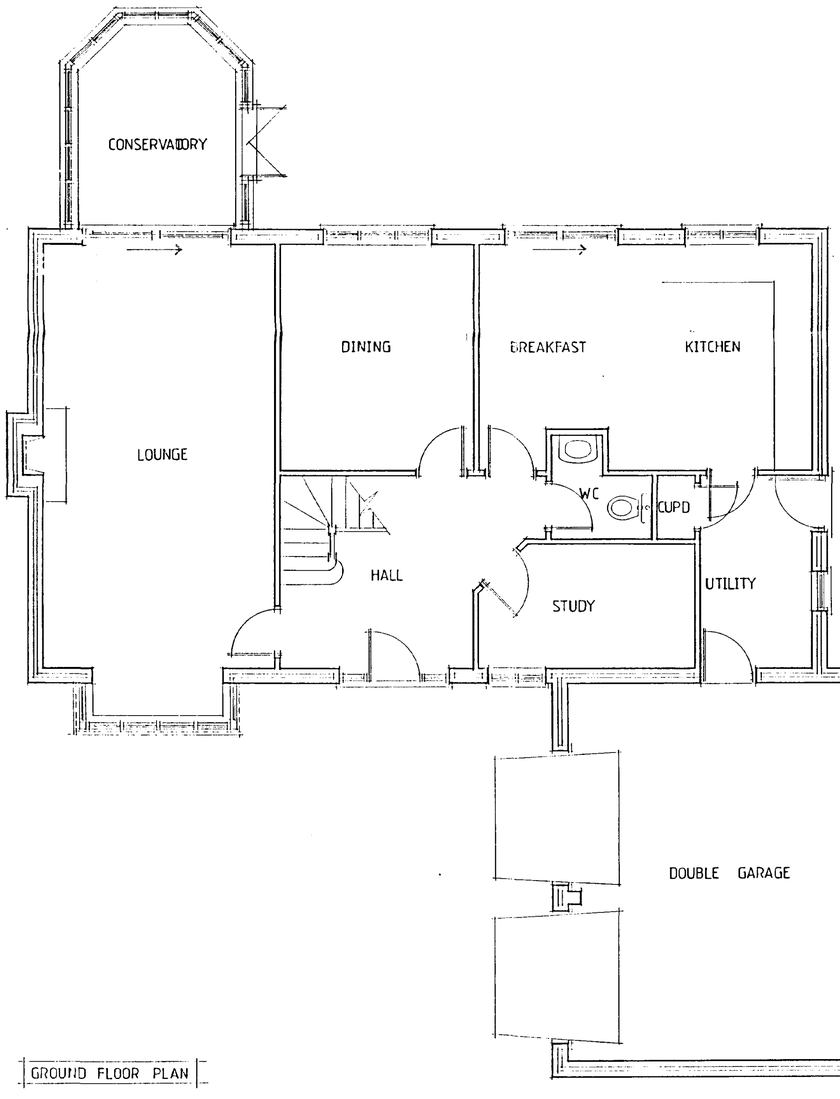


REAR ELEVATION

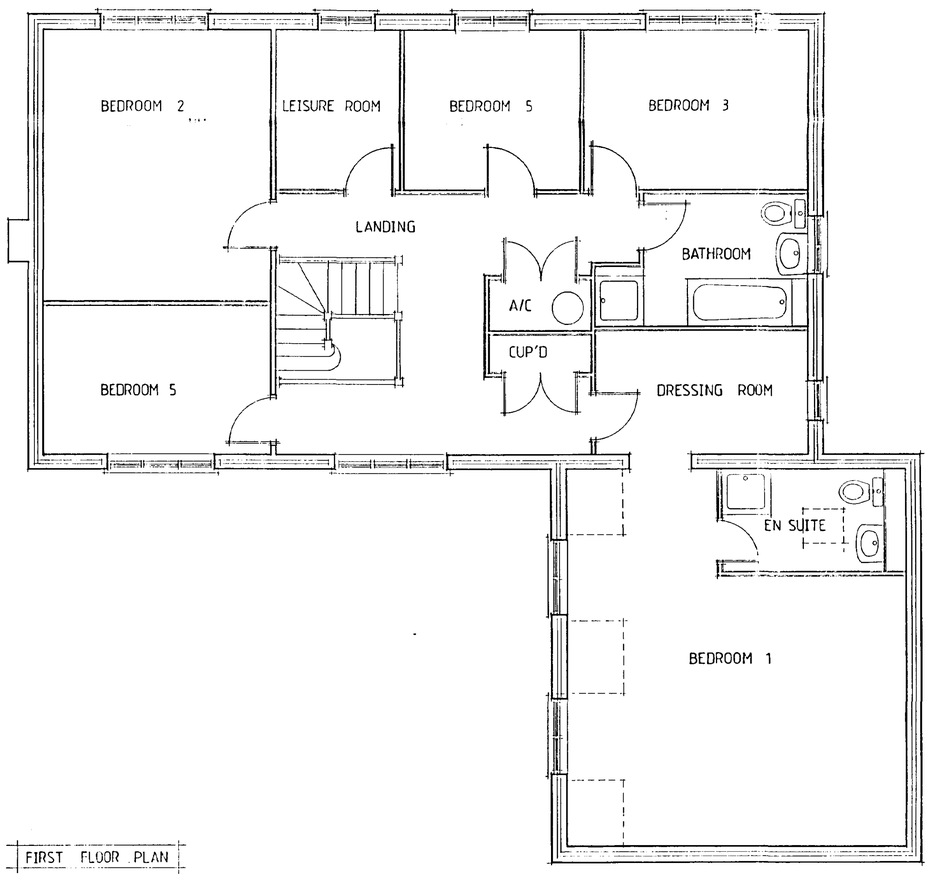


SIDE ELEVATION

DETERMINED PLAN



GROUND FLOOR PLAN



FIRST FLOOR PLAN

H18/0103/01

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Date:	Description:

REVISIONS

ALLISON HOMES
Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs. PE11 2BS
Telephone (01775) 724701 Fax (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

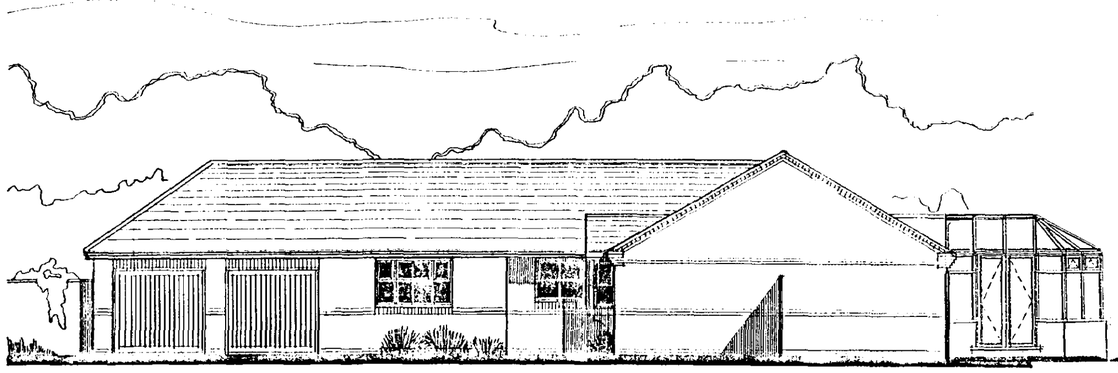
Project:
5 BED DETATCHED HOUSE
CHARLBURY

Drawing Title:
FLOOR PLANS AND ELEVATIONS

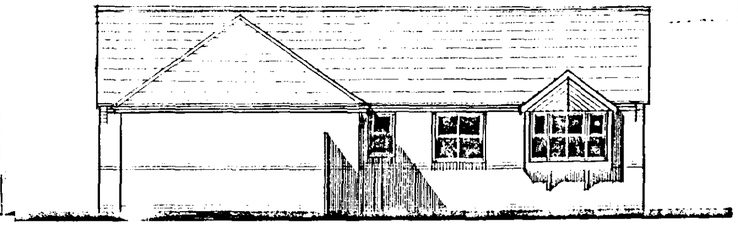
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A5/DG/03/V1	Date: FEB 98
Drawing No: 01	Drawn:
Revision:	

Do not scale directly from this drawing. All discrepancies to be brought to the attention of the above office.

LUMMI D.C.S. 8412304

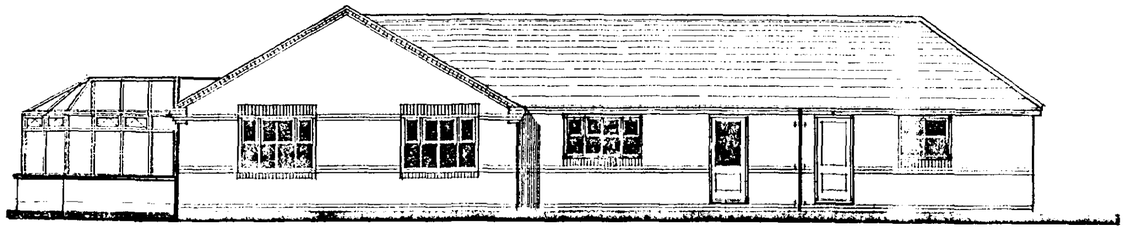


front elevation

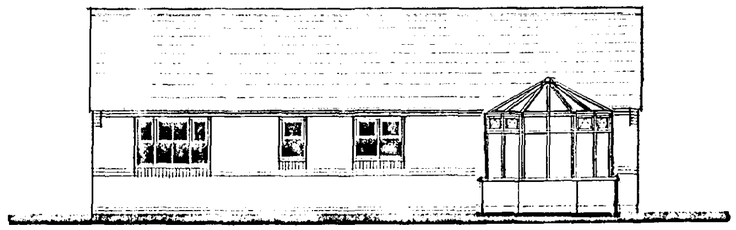


side elevation

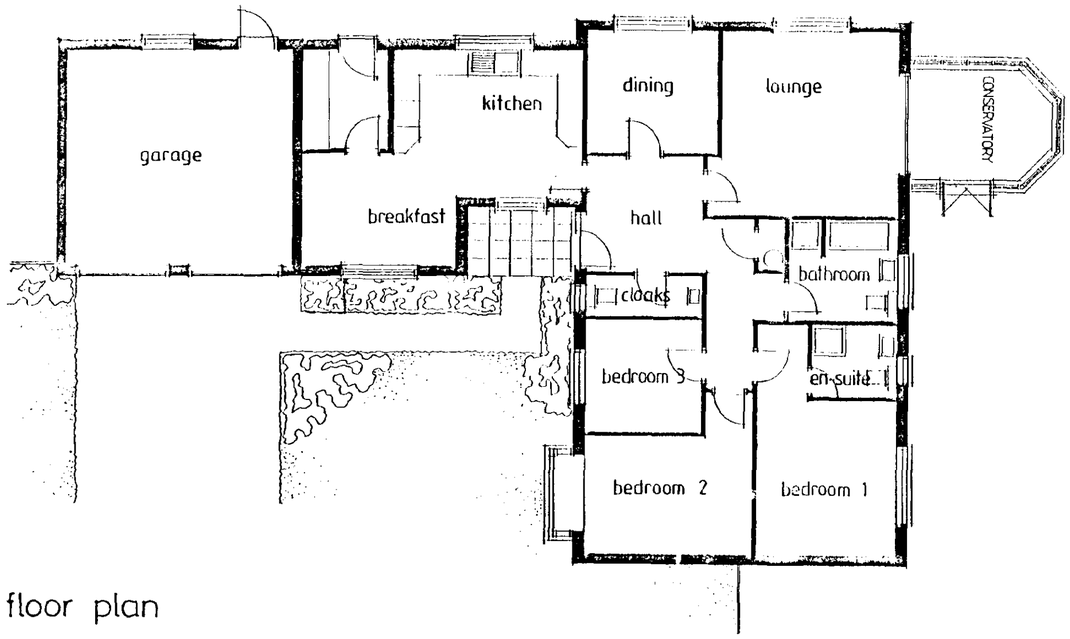
SOUTH HOLLAND DC
HOUSING & PLANNING
- 9 MAY 2001
Ref:



rear elevation



side elevation



floor plan

SOUTH HOLLAND DC
HOUSING & PLANNING
- 9 MAY 2001
Ref: 1a/1a

AMENDED PLAN
Ref. A1

Date:	Description:		
11/9/00	CONSERVATORY ADDED	D	CC
17/8/98	FACIA ADDED	C	MC
30.7.97	KITCHEN/UTILITY/GARAGE	B	RE
25.11.96	ELEVATION AMENDMENTS	A	RE

REVISIONS

ALLISON HOMES
Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs. PE11 2BS
Telephone (01775) 724701 Fax (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
B RANGE 3 BED BUNGALOW
THE WALCOTT

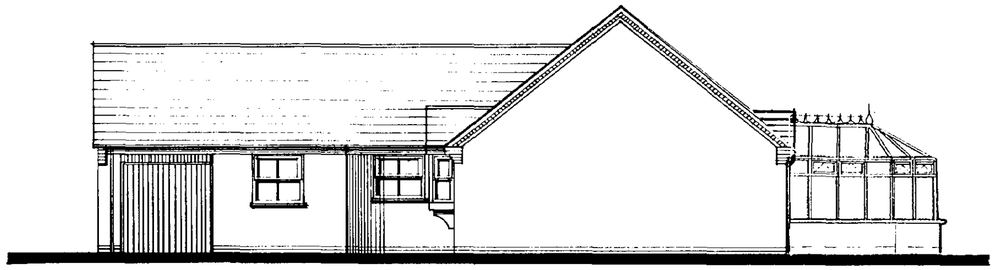
Drawing Title:
DESIGN SHEET

1226sq ft

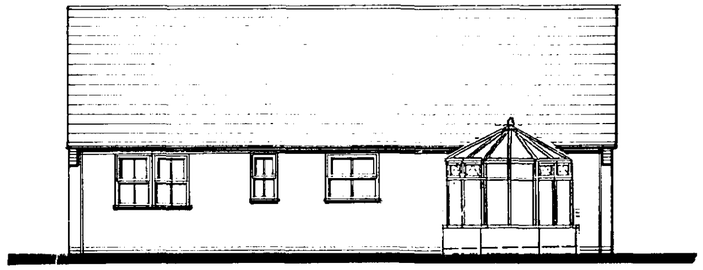
Date:	Scales:
October 1996	1:100
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Drawing No: B3/SG/14/V2	Revision: ABCD

Do not scale directly from this drawing. All discrepancies to be brought to the attention of the above office.

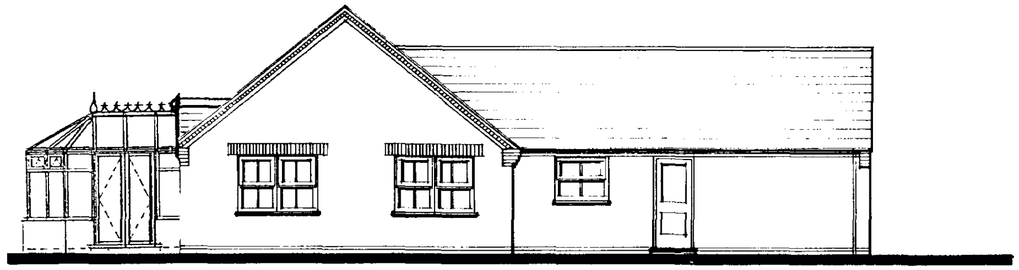
SUBMIT D.G.S. 841231/A



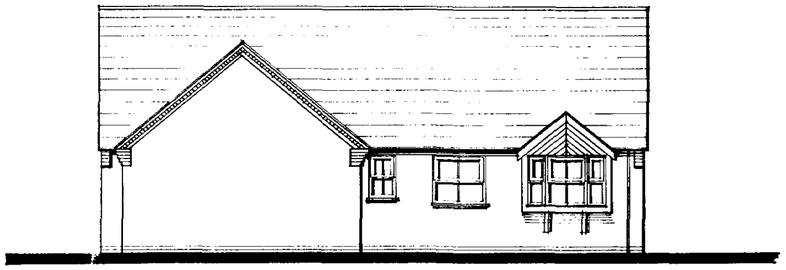
Front Elevation



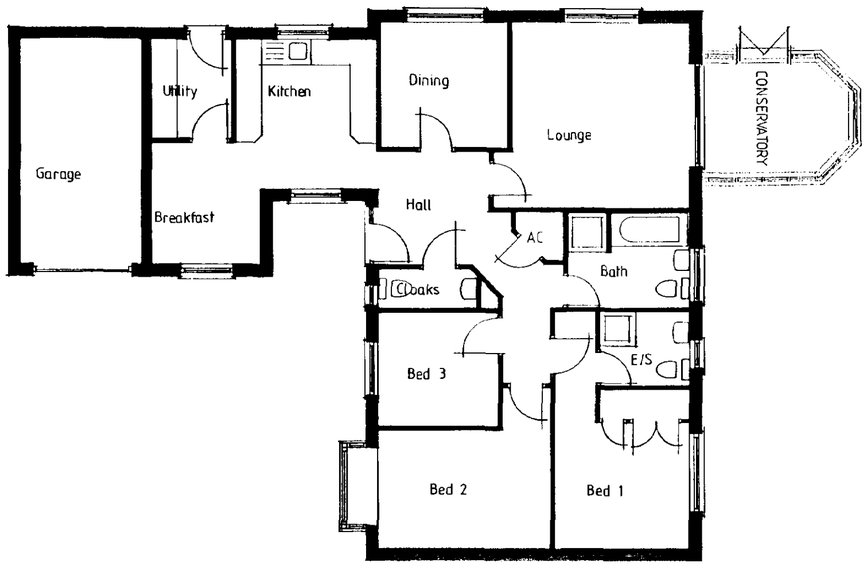
Side Elevation



Rear Elevation



Side Elevation



Floor Plan

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DETERMINED PLAN

SOUTH HOLLAND DC HOUSING & PLANNING - 9 MAY 2001 10/01

AMENDED PLAN
Ref. A1

Date:	Description:

REVISIONS

ALLISON HOMES
Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs. PE11 2BS
Telephone (01775) 724701 Fax (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
B-Range, 3 Bed Bungalow
The Eastcott

Drawing Title:
Design Sheet

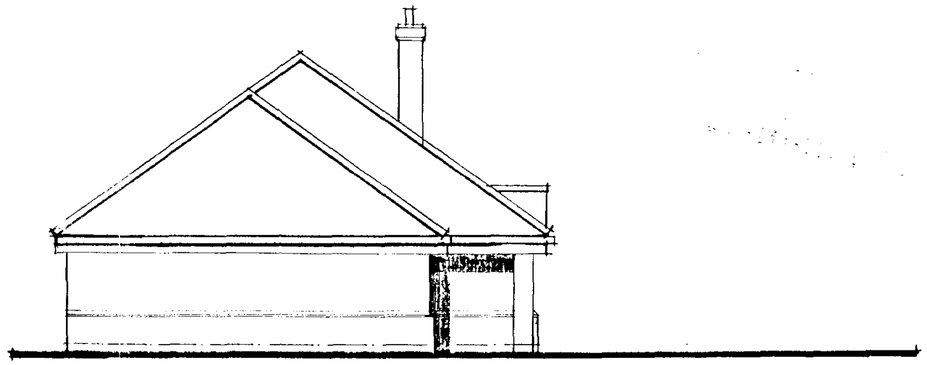
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Drawing No:	Revision:

Do not scale directly from this drawing. All discrepancies to be brought to the attention of the above office.

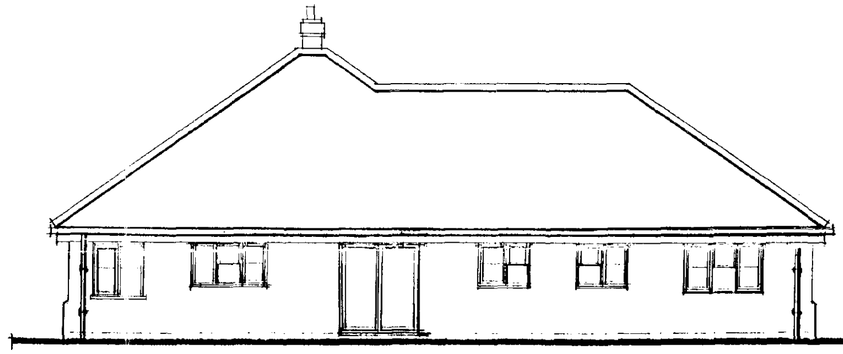
Summit OS (UK) 992448



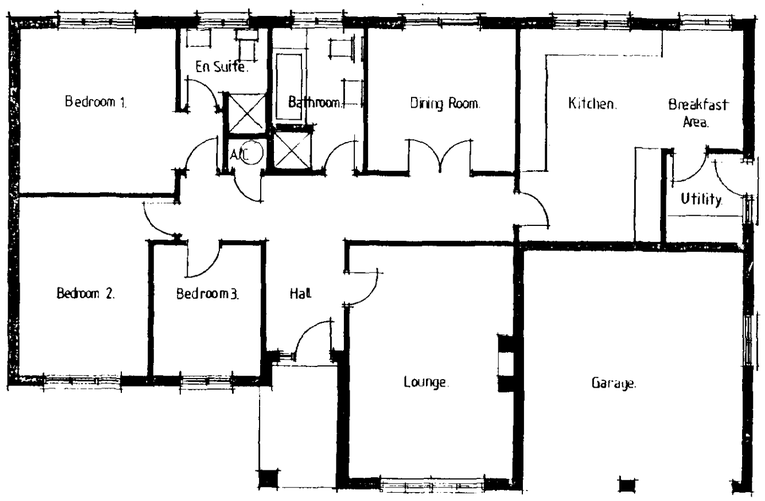
Front Elevation.



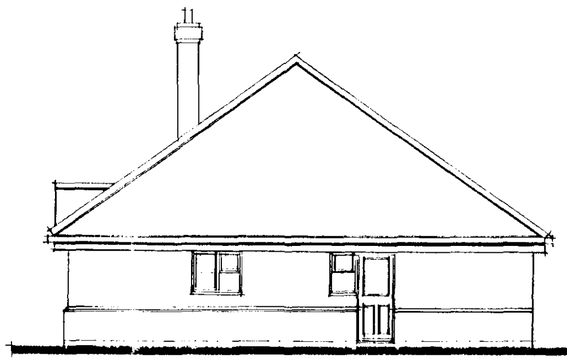
Side Elevation.



Rear Elevation.



Floor Plan.



Side Elevation.

SOUTH HOLLAND DC
- 5 MAY 2001

AMENDED PLAN
Ref. A1

DETERMINED PLAN

ALLISON HOMES

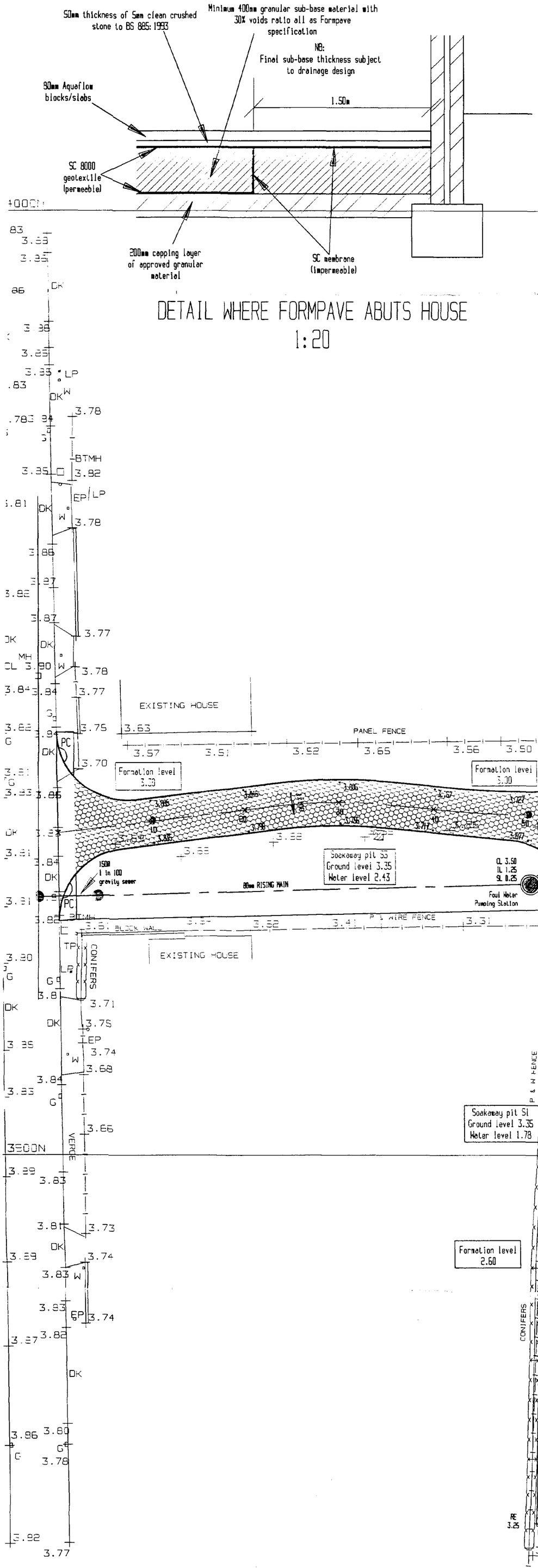
The Old Brewery
Cradge Bank, Spalding
Lincolnshire PE11 3AB
Tel: (0775) 724701
Fax: (0775) 762153

project:
Design Sheet.

drawing title
The Douglas. V1

scale 1:100	drawing no. P/B3/212/01 A.B
date Mar 93.	
drawn P.E. Rose	

B. PLINTH + DETAILS ADDED 17/3/99
A. FASCIA ADDED



DETAIL WHERE FORMPAVE ABUTS HOUSE
1:20

DRAINAGE NOTES

All works to comply with Building Regulations 1991 (Amended 1992)
Road gully connections to be 150mm dia. clayware pipes.
Private drain connections to adoptable sewers to be clayware pipes.
Remaining private drains to be 110mm dia. U.P.V.C. or clayware unless otherwise stated.
All pipe chambers and fittings to be installed, bedded and backfilled in accordance with the manufacturers instructions.
Private drains and sewers which pass adjacent to building foundations to be constructed in accordance with Part H.1. of the Building Regulations.
All private drains to incorporate preformed inspection and shallow access chambers where possible.
Traditional chambers (private) to be constructed using precast concrete sections with 150mm concrete surround.

Depth to I.L.	Min. chamber size (internal).	
1.0m or less	450 x 450mm	(normally a preformed chamber 0.9m depth or less)
1.5m or less	1200 x 750mm or 1050mm dia.	
Over 1.5m	1200 x 750mm or 1200mm dia.	

Rainwater downpipes to be connected directly to surface water drain via 68/110mm adaptors, removable to allow for rodding.
Position of yard gullies shown in garage drives are nominal only and may be adjusted on site.
All existing land drains encountered during construction to be connected to surface water system.
All drains the vicinity of proposed trees to be constructed in accordance with the requirements of N.H.B.C. Practice Note 3.
All back inlet gullies to be roddable.

DRAINAGE LEGEND

Existing foul water sewer
Existing surface water sewer
Proposed foul water sewer
Proposed surface water sewer
Proposed backdrop
Proposed foul water drain
Proposed surface water drain
Proposed inspection chamber (traditional) or
Proposed preformed inspection chamber (depth 1m. or less) or
Proposed preformed inspection chamber (depth 600mm or less) or
Proposed shallow access chamber
Proposed Silt trap with bucket
Proposed rodding eye RE
Proposed chamber invert level 7.50
Proposed road gully
Proposed Trapped gully in drives
Suspended slab, where appropriate SS
Proposed slab level SL 9.750
Proposed soakaway
Target levels to car parks + 7.500

rwp... ○ svp... ● svp via... ◉ 'durco' valve w/c... ● sink... ○ big... ■ vent pipe... ○ vent required at head of system

NOTE
Where durgo valves are used they should not adversely effect the amount of ventilation necessary for the below ground system which is normally provided by the open stacks of the sanitary pipework.

NOTE:
THIS DRAWING TO BE READ IN CONJUNCTION WITH HOUSE TYPE DRAWINGS SUPPLIED BY CLIENT

TOTAL AREA OF PAVING = 1832m²
TOTAL ROOF AREA = 1720m²

FOR A STORM OF 50mm/HR. VOLUME OF WATER
= (1832 + 1720) x 50 / 1000 = 177.6m³

TOTAL VOLUME AVAILABLE WITHIN SUB BASE USING 30% VOIDS
= 1832 x 0.4 x 0.3
= 219.84m³

∴ STORM CAN BE ACCOMMODATED WITHIN DESIGN

NOTE

ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH FORMPAVE SPECIFICATION.

ALLOWANCE TO BE MADE FOR MAINTENANCE OF BLOCKS AS PER FORMPAVE SPECIFICATION.

PIPE FROM SILT TRAP TO EXTEND A MINIMUM LENGTH OF 3M INTO THE GRANULAR SUB-BASE AND BE PERFORATED AS DETAILED IN FORMPAVE BROCHURE

▨ = Soakaway Trial Pit (6.12.2000)

● = Formation level 3.03

Rev. No.	REVISION	Date	Drawn By	Checked By
A	Plots 3,4,5,6 and 7 new house layout, drainage [illegible]	2.4.01	MPW	WD

PRELIMINARY

Written dimensions to be taken. Do not scale off the drawing.
Any discrepancies, written or scaled, should be brought to the attention of the engineer immediately.
This drawing to be read in conjunction with the relevant Bills of Quantities and Local Authority Specification.
CDM NOTE: The design has been undertaken as far as possible to avoid risks to health and safety or to reduce and control the effects of any unavoidable risks.
All relevant information identifying the unavoidable risks has been passed to the planning supervisor for inclusion in the Health & Safety plan.
The Health & Safety plan will be issued by the planning supervisor with these drawings.

DE[illegible]

WORMALD, BURROWS PARTNERSHIP
Civil Engineering Consultants
12a & 14a Hitchin Street, Tel 01767 317244
Biggleswade, Beds SG18 8AX, U.K. Fax 315434

SOUTH HOLLAND DC HOUSING & PLANNING
-9 MAY 2001
Ref. 1e/1e/

AMENDED PLAN
Ref. A1

Project
Proposed Development at:-
New Road - Sutton Bridge

Drawing Description
Private House Drainage

Client
Swallow Homes Ltd
West Elloe Avenue
Spalding
Lincolnshire PE11 2BS

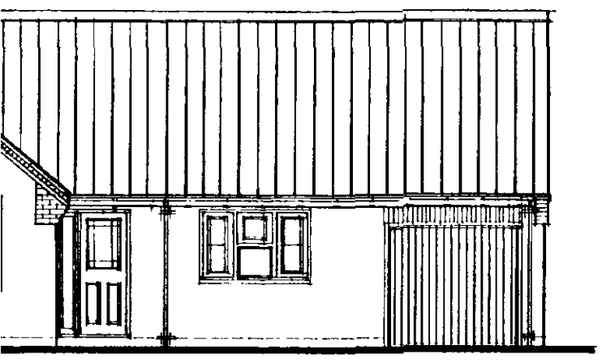
Drawing Number
E1329/6/A

Drawn By WD Date 14.02.01

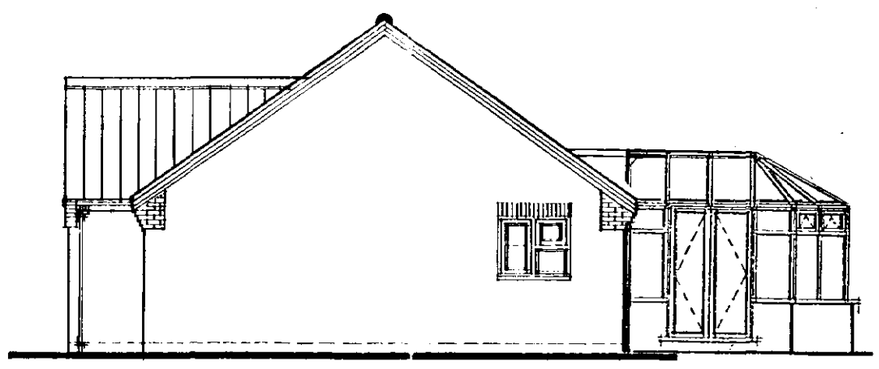
Scale 1:250

Checked By AJMB Date 26.3.01

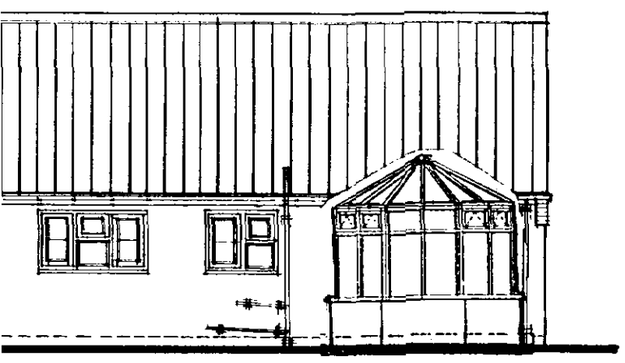
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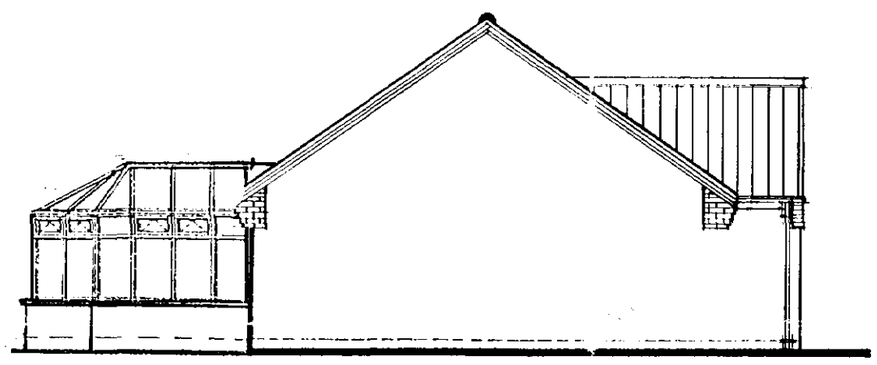
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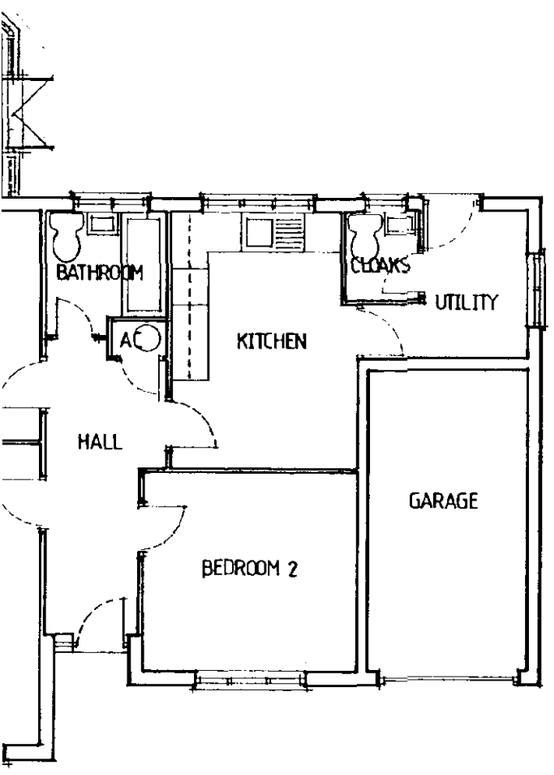
SIDE ELEVATION



ATION



SIDE ELEVATION



OR PLAN

DETERMINED
PLAN

SOUTH HOLLAND DC
HOUSING & PLANNING
- 5 MAY 2001
10701

AMENDED PLAN
Ref. A1

11/01	CONSERVATI
3/3/99	Changed
Date:	Description
R E V	

Swallow House
Telephone (077
ALLISON HOME

Project:
B-RANGE 2 B
THE BRANDON

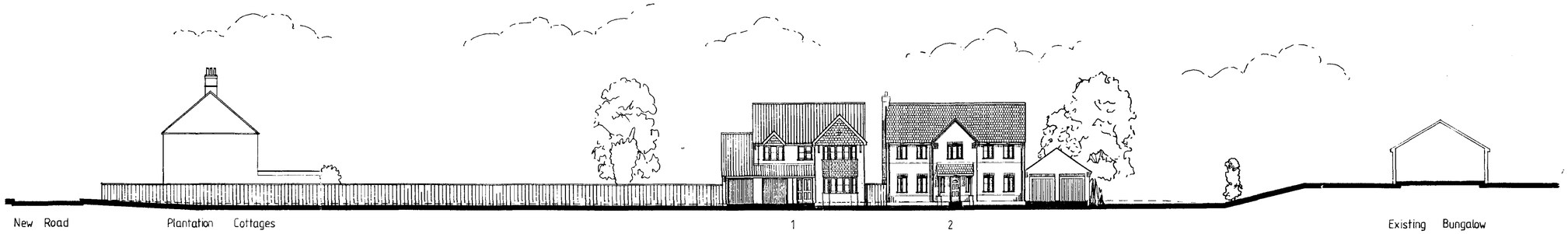
Drawing Title:
DESIGN SHEET
820 SQ FT.

Reference No:
B2/SG/01/V1

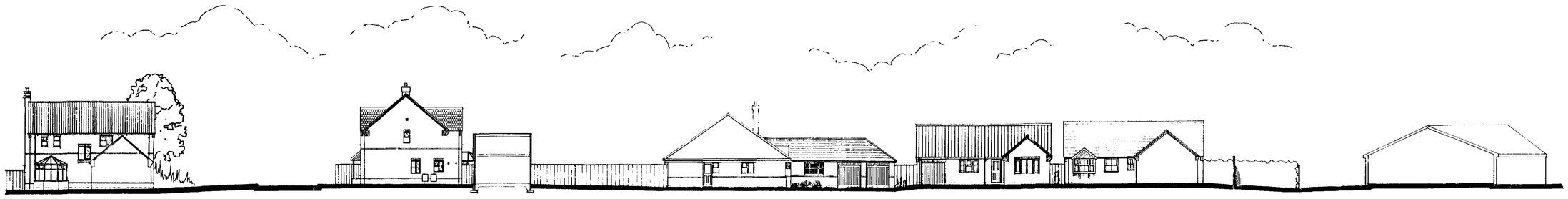
Drawing No:
01

Revision: B

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All discrepan
atten



Section A-A



Section B-B



Section C-C

AMENDED PLAN
Ref. A1

Date:	Description:		
12/3/01	BUNGALOWS ADDED 3-? FOR PLANNING	B	KB
30/01/01	REV TO MATCH SITE LAYOUT	A	KB

REVISIONS

SOUTH HOLLAND DC
HOUSE PLANNING
- 9 MAY 2001
Ref: 105/01

DETERMINED PLAN

ALLISON HOMES
Swallow House, Banbury Close, West Elloe Avenue
Spalding, Lincs. PE11 2BS
Telephone (01775) 724701 Fax (01775) 762153
ALLISON HOMES is a trading name of SWALLOW HOMES LTD

Project:
Residential Development,
New Road, Sutton Bridge.

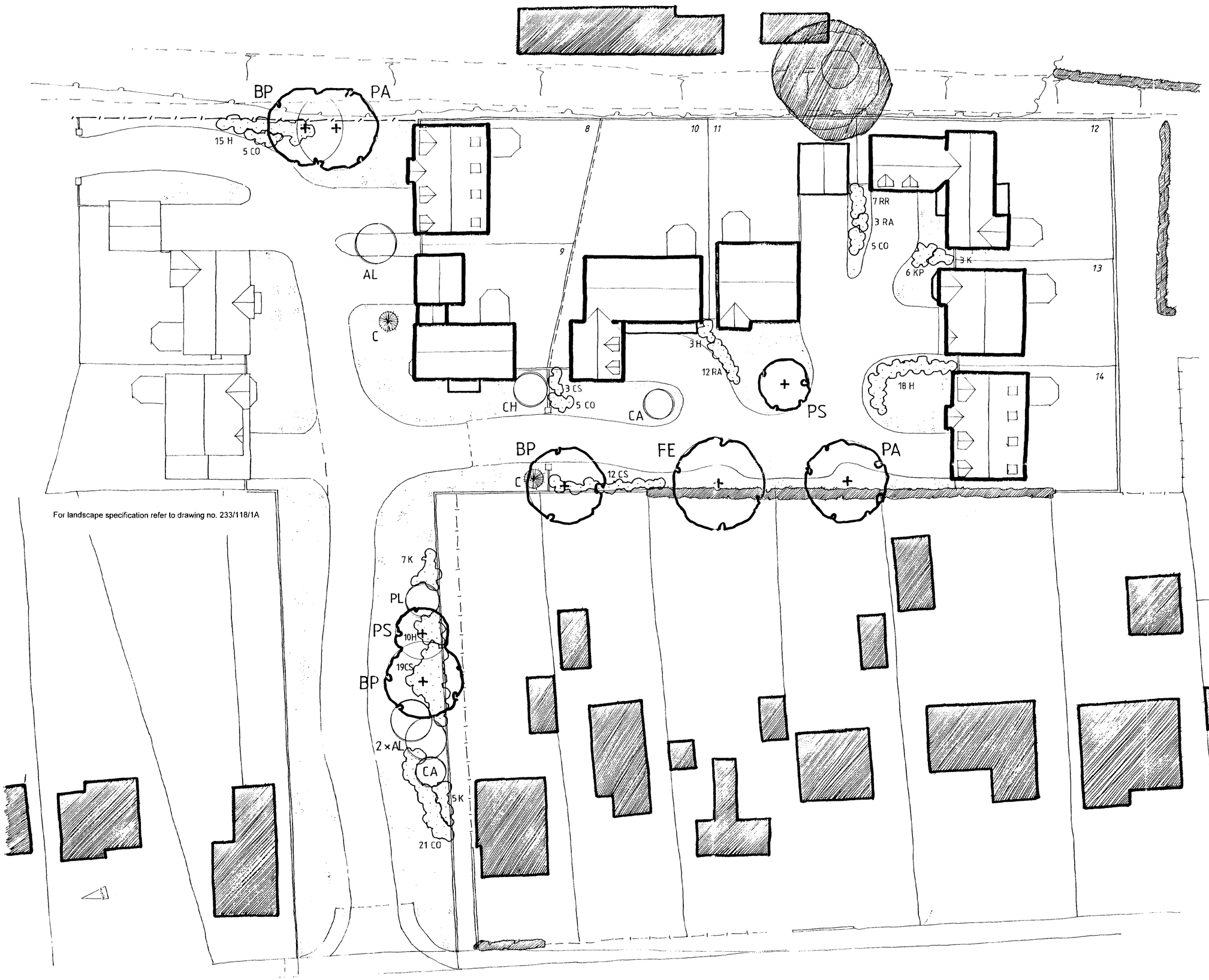
Drawing Title:
Street Sections

Date:	Scales:
Nov 2000	1:200
Reference No:	**Drawn:** KB
Drawing No: SL/02	**Revision:** A

Do not scale directly from this drawing. All discrepancies to be brought to the attention of the above office.

Summit DS (UK) 99162

ALLISON HOMES



For landscape specification refer to drawing no. 233/118/1A

PLANTING SCHEDULE

TREES

No	Ref	Species	Size/Specification
3	BP	Betula pendula	10L container grown/175-200
1	FE	Fraxinus excelsior	10-12 bare root/Selected Standard
2	PA	Prunus avium 'Plena'	10-12 bare root/Selected Standard
2	PS	Prunus subhirtella 'Autumnalis'	8-10 bare root/Standard

SPECIMEN SHRUBS

No	Ref	Species	Size/Specification
3	AL	Amelanchier lamarkii	10L container grown/80-100
2	CA	Corylus avellana 'Contorta'	10L container grown/80-100
1	CH	Cotoneaster 'Hybridus Pendulus'	10L container grown/80-100
2	C	Cortaderia selloana 'Sunningdale Silver'	10L container grown
1	PL	Prunus lusitanica	10L container grown /80-100

SHRUBS

No	Ref	Species	Size/Specification	Planting Density
34	CS	Cornus alba 'Spaethii'	3L container grown/60-80	1000 cs
36	CO	Cotoneaster horizontalis	3L container grown /30-40	750 cs
46	H	Hypericum 'Hidcote'	3L container grown /30-40	750 cs
6	KP	Kerria japonica 'Picta'	3L container grown /30-40	750 cs
15	K	Kerria japonica 'Pleniflora'	3L container grown /40-60	1000 cs
15	RA	Rosa rugosa 'Alba'	1+1/40-60 cutting	500 cs
7	RR	Rosa rugosa 'Rubra'	1+1/40-60 cutting	500 cs

PLANTING NOTES:

All trees to be adequately staked and tied.
Standards to be fitted with spiral guards.

Backfill to tree holes to consist of topsoil and peat free tree planting compost in equal parts, 50 gms Enmag and 5 gms P4 moisture retention crystals well mixed throughout.

DETERMINED PLAN

SOUTH HOLLAND DC
HOUSING & PLANNING
- 9 MAY 2001
Ref: 10/01

AMENDED PLAN
Ref. [illegible]

DRAWING
2 FEB 2001
ISSUED

REVISIONS

A Feb 2001 Layout amended to 'Private Drive'

New Road, Sutton Bridge

LANDSCAPE DETAILS

Dwg No.: 233/118/2A 1:200 February 2001

Town & Country Planning
Ecology
Landscape Architecture

Robert Doughty Consultancy

32 High Street, Helpringham, Sleaford NG34 0RA Tel: (01529) 421646 Fax: (01529) 421358

ALLISON HOMES

PS
9 S
15 RA
3 K
19 RA
AL
5 KP
3 KP
10 RR
PL
5 K
7 RA
5 CO
3 K
3 CO
AL
AL
12 H
C
3 H
5 S
5 H
3 H
6 S
3 K
7 H
CH
CA
7
6
5
4
3
2
1
CA
11 CO
2× BP
25 H
25 RR
AL
CH
15 KP

For landscape specification refer to drawing no. 233/118/2A

PLANTING SCHEDULE

TREES

No	Ref	Species	Size/Specification
2	BP	Betula pendula	10L container grown/175-200
1	PS	Prunus subhirtella 'Autumnalis'	8-10 bare root/Standard

SPECIMEN SHRUBS

No	Ref	Species	Size/Specification
4	AL	Amelanchier lamarkii	10L container grown/80-100
2	CA	Corylus avellana 'Contorta'	10L container grown/80-100
2	CH	Cotoneaster 'Hybridus Pendulus'	10L container grown/80-100
1	C	Cortaderia selloana 'Sunningdale Silver'	10L container grown
1	PL	Prunus lusitanica	10L container grown /80-100

SHRUBS

No	Ref	Species	Size/Specification	Planting Density
19	CO	Cotoneaster horizontalis	3L container grown /30-40	750 cs
55	H	Hypericum 'Hidcote'	3L container grown /30-40	750 cs
18	KP	Kerria japonica 'Picta'	3L container grown /30-40	750 cs
14	K	Kerria japonica 'Pleniflora'	3L container grown /40-60	1000 cs
41	RA	Rosa rugosa 'Alba'	1+1/40-60	500 cs
35	RR	Rosa rugosa 'Rubra'	1+1/40-60	500 cs
20	S	Spiraea nipponica 'Snowmound'	3L container grown /30-45	750 cs

PLANTING NOTES:

All trees to be adequately staked and tied.
Standards to be fitted with spiral guards.

Backfill to tree holes to consist of topsoil and peat free tree planting compost in equal parts, 50 gms Enmag and 5 gms P4 moisture retention crystals well mixed throughout.

AMENDED PLAN
Ref. A1

S[illegible] AND DC
HO[illegible] NING
- 9 MAY 2001
Ref: 10/[illegible]

DETERMINED PLAN

DRAWING
10 MAY 2001
ISSUED

REVISIONS

A	Feb 2001	Layout amended to 'Private Drive'
B	May 2001	Plots 3-7 amended

New Road, Sutton Bridge

LANDSCAPE DETAILS

Dwg No.: 233/118/1 | 1:200 | February 2001

Town & Country Planning
Ecology
Landscape Architecture

Robert Doughty Consultancy

32 High Street, Helpringham, Sleaford NG34 0RA Tel: (01529) 421646 Fax: (01529) 421358