

Flood Risk Assessment

Proposed First Floor Apartments

Sudden Mill

Manchester Road

Rochdale

OL11 4QR

On behalf of Home Grace Ltd

Nov 2025

1.Introduction and Executive Summary

Manchester Building Design Ltd has prepared a Flood Risk Assessment (FRA) for the change of use of the first floor of an existing commercial property at Sudden Mill, Manchester Road, Rochdale from commercial use into 5 No. apartments with ancillary accommodation to the ground floor.

The Environment Agency (EA) and Rochdale Borough Council (RBC) need to be satisfied that that granting planning permission / prior approval will address any risk of flooding to the development, and that the proposals will not in turn increase the risk of flooding to neighbouring land and property.

This FRA has been prepared in accordance with the national guidance and requirements set out in the National Planning Policy Framework (NPPF) and National Planning Policy Guidance (NPPG) which give guidance for the preparation of site specific FRA's.

This FRA has been prepared to identify and evaluate the various possible sources of flood risk to which the site might be subjected to, and to identify any mitigation or protection measures deemed necessary of feasible; and to ensure the development does not increase the probability of flooding within or near to the site.

The Government has introduced a comprehensive data base to advise applicants for planning permission on the flood risks for individual sites in an attempt to remove undue delays in the planning process.

The Governments flood risk website clearly concludes that the likelihood of flooding from any source at the site is "Very Low", see screen prints within appendices. (this being the lowest designation that can be attributed to any area of land within the UK)

The Governments flood risk assessments are based on the whole site, and importantly the proposed change of use relates to the first floor and the ground floor of the site (adjacent to Manchester Road) which are generally some 6.8m and 3.5m respectively "above" the level of the site that the Government has deemed to have a "very low" risk of being adversely affected by flooding.

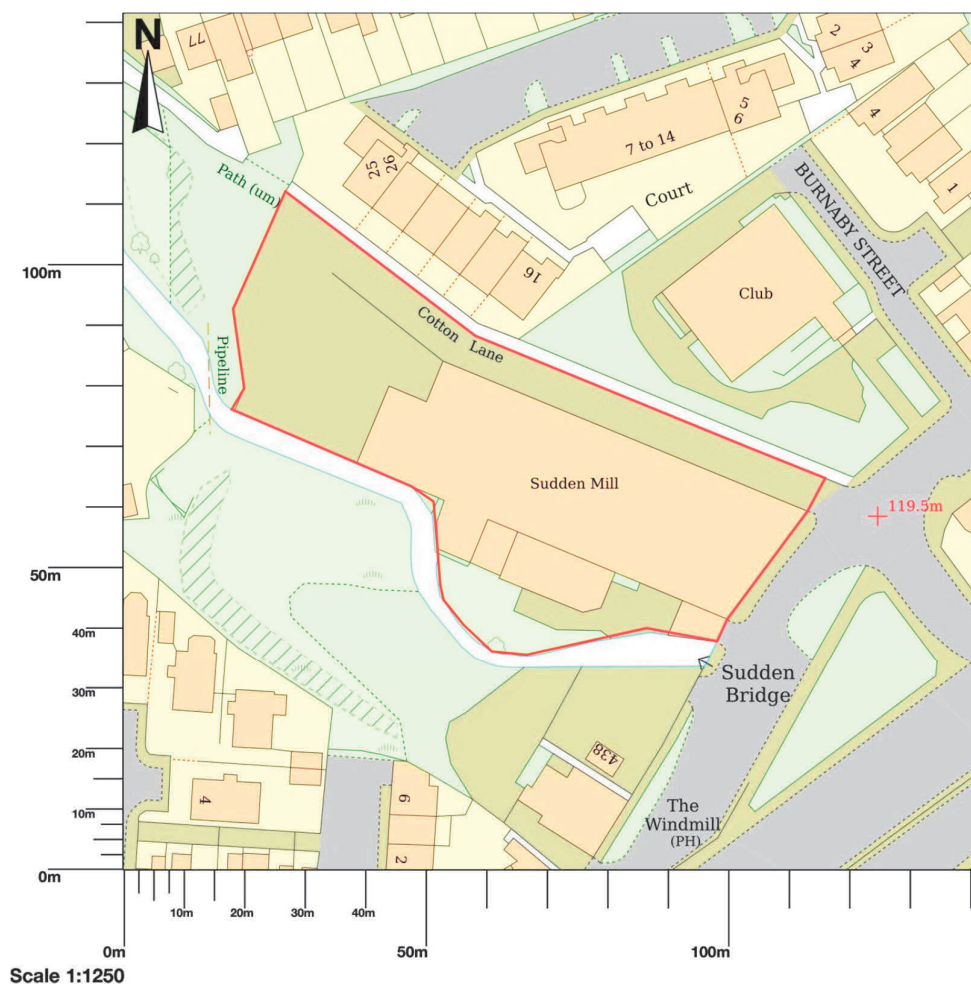
2.Site Setting and Description

2.1 Site Location

The site is within a mixed commercial and residential area off Manchester Road, Rochdale.

The co-ordinates to the centre of the site are: Easting 338425 and Northing 411820

A site location plan is shown below with the site edged in red.



Site Location Plan – showing AOD of Manchester Road adjacent to the application site at approx. 119.5m

Importantly the application to which this report relates is for the change of use of the second floor (located at approx. 123.1m AOD) of the existing mill which is adjacent to the East / Manchester Road boundary of the site.



Photograph 1 – South East elevation of two storey mill, the proposed apartments are to be located on the first floor of this section of the building – elevation approximately 8.6m above the Sudden Brook

Sudden Brook forms the Southern boundary to the application site and generally runs at a level of approximately 114.5m AOD, or some 8.6m “below” the level of the proposed residential accommodation.



Photograph 2 – South East elevation of 2 storey mill with Sudden Brook running adjacent to the Southern boundary of the application site.



Photograph 3 – South West corner of application site with Sudden Brook running approximately 1.8m lower than the base of the masonry wall that encloses the yard serving the application site.

The ancillary accommodation for the application that is located on the upper ground floor (located at approx. 119.8m AOD) is some 3.5m above the lower ground floor / service yard level of the mill or approx. 116.3m AOD.

The Governments Flood Risk Maps and Data are based on the lowest part of the application site, ie the lower ground floor / service yard area located to the West of the site.

2.2 Existing Site

The site is already developed with a 2 storey former mill complex to the South East elevation and a relatively more recent single storey unit located at a lower level to the West .

The property has a large service yard which is accessed via Cotton Lane.



Photograph 4 – South West corner of application site showing service yard level, which corresponds with the lower ground floor level of the mill and is approximately 6.8m lower than the floor level of the proposed apartments and 3.5m lower than the ancillary accommodation which will be located on the ground floor of the two storey section of the mill.

Existing floor plans and elevation drawings are included in Appendix B.

2.3 Proposed Development

The proposed development comprises the conversion of the first floor of the two storey section of the mill into 5 No. apartments with ancillary accommodation on the ground floor.

There are no extensions / changes to the footprint of the building.

Proposed floor plans and elevation drawings are included in Appendix C.

2.4 Topography

Ordnance Survey mapping indicates that the local topography gently falls towards the west and south-west towards the, with ground levels at the site adjacent to Manchester Road the region of 119.8m AOD.

Digital OS plan with AOD levels is included in Appendix A

2.5 Coast / Rivers / Canals and Artificial Water Bodies

The nearest waterbody to the development site is the Sudden Brook, which meanders in a general westerly direction, passing within approximately 1m to the south-west boundary of the site.

There are no other known canal or artificial water bodies in the vicinity of the development site.

2.6 Drains and Sewers

The exact location of any water main or drains within the development site are to be confirmed before works commence on site. However due to the urban nature of the development site it is assumed that public drains and water mains are located in the immediate vicinity.

The proposed development will not involve any new connections to the existing drainage system.

3.Sources of Flooding

In accordance with the NPPF, flood risk must be assessed for all sources of flooding and development of the site should be carried out in such a way as to mitigate any potential flood risk to both the site and third parties and their property. This section identifies all possible sources of flooding.

3.1 Fluvial Flooding

Fluvial flooding results from watercourses / rivers surcharging and flooding the surrounding areas.

3.2 Coastal Flooding

Coastal flooding results from high tides from the sea.

3.3 Pluvial Flooding

'Pluvial' flooding is that which results from rainfall generated overland flow before the run-off enters any watercourse, drain or sewer. It is more often linked to high intensity rainfall events (typically in excess of 30mm per hour).

However, it can also result from lower intensity rainfall or melting snow where the ground is saturated, frozen, developed or has low permeability. This results in overland flow and ponding in depressions in the topography. In urban areas 'pluvial' flows are likely to follow the routes of highways and other surface connectivity to low spots where flooding can occur. In some cases, it can deviate from this route into adjacent developments via dropped kerbs (either for access to driveways or disability access).

3.4 Groundwater Flooding

Groundwater flooding is caused by the emergence of water from sub-surface permeable strata. Fluctuations in the groundwater table can cause flooding should the table rise above the existing ground level. Groundwater flooding events tend to have long durations, lasting days or weeks.

3.5 Flooding from Drains and Sewers

Flooding from drains and sewers is caused when the capacity of the drains and sewers is exceeded and will result in flooding from the manholes.

3.6 Canals, Reservoirs and Other Artificial Sources

Flooding from canals, reservoirs and artificial sources is caused when the capacity of the sources is exceeded, or if there is, an infrastructure failure.

4.Sourced Data

Data from the Environment Agency; local Strategic Flood Risk Assessments; and information from other parties are to be studied to establish which sources of flooding are at the site.

4.1 Government Flood Maps for Planning

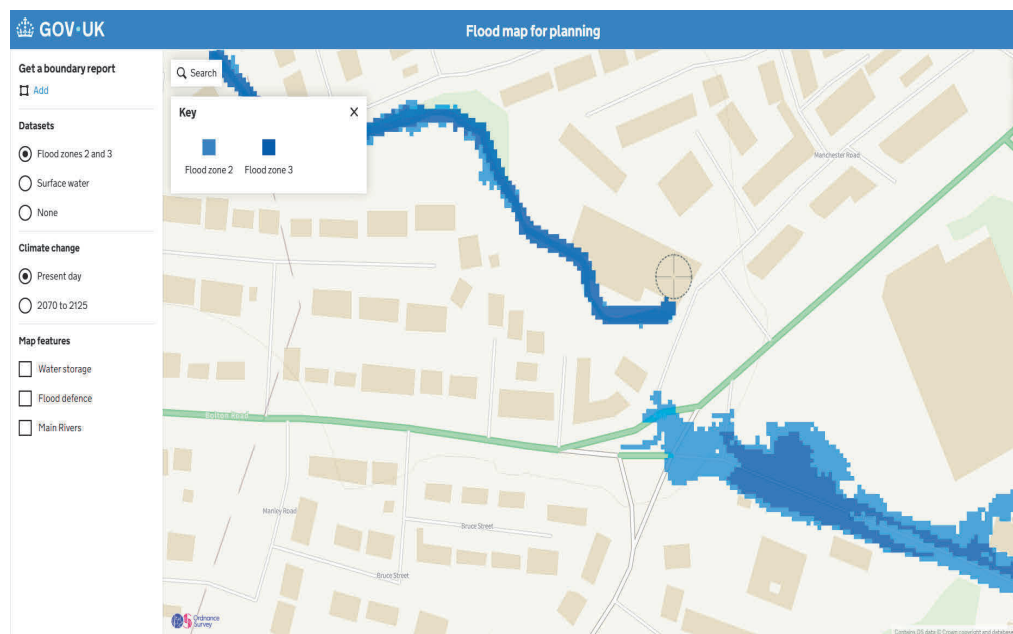


Figure 1 - Government Flood Risk Map – Showing that during flooding events the raised water levels of Sudden Brook are contained within the banks of same adjacent to the application site and do not present any risk to proposed occupants of the proposed apartments – the primary flood plain for Sudden Brook is shown on the image

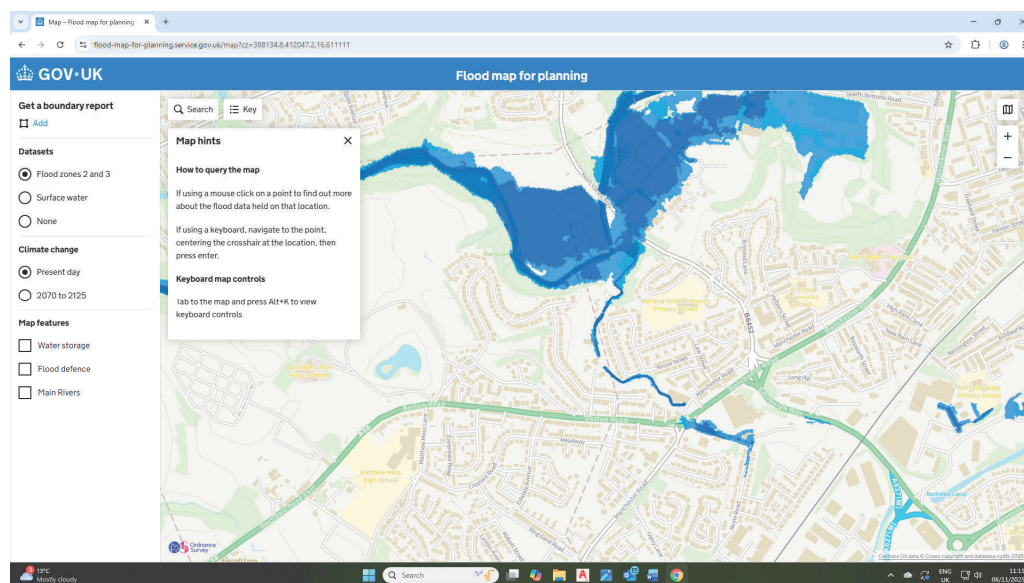


Figure 2 - Government Flood Risk Map – Showing the flood plain is an area half a kilometre to the North West of the application and not the application site itself.

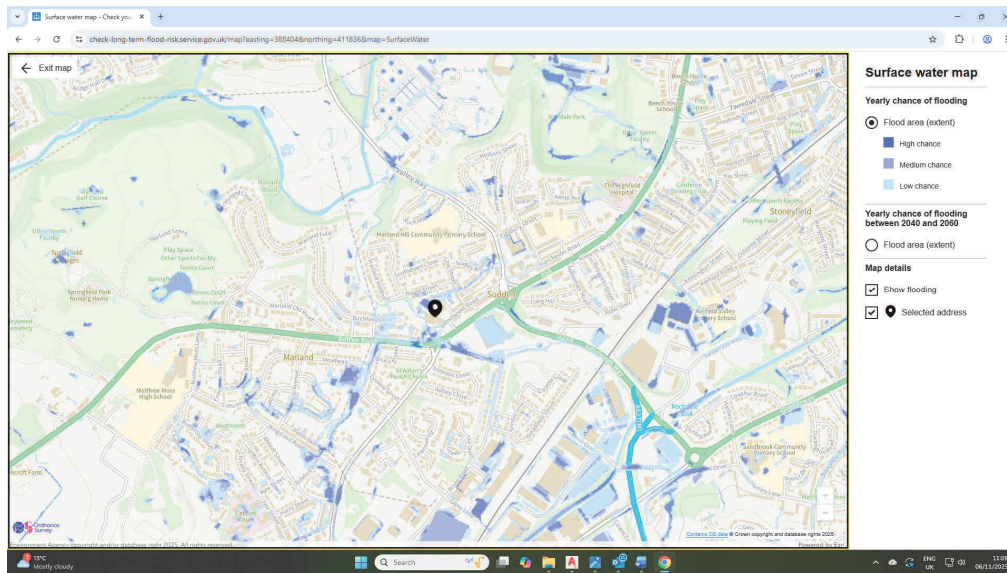


Figure 3 – Government Flood Risk Map Surface Water Risk

5.Probability of Flooding

Now that the extents of the sources of flooding are known from the above data, an assessment is to be made of the probability of flooding from each of the sources.

5.1 Fluvial Flooding (Sea and River) – Probability : Very Low

The source of the fluvial flooding is from the Sudden Brook that passes approximately 1m to the south-west of the site. The Government Flood Risk data included in the appendices shows the likelihood of such events to be “very low”

5.2 Pluvial Flooding – Probability : Very Low

The Government Flood Map indicate that the development site is at very low risk of pluvial flooding, defined as <0.1% annual probability (<1 in 1000 year).

5.3 Groundwater Flooding – Probability : Very Low

The Government Flood mapping indicates that the site is within an area not identified as being at risk of groundwater flooding.

There are no known reports of groundwater flooding within the region and no below ground (basement) development is proposed. Therefore, it is concluded that the probability of groundwater flooding to the development is low.

5.4 Flooding from Drains and Sewers – Probability : Very Low

The exact location of any water main or drains within the development site are to be confirmed. The SFRA does not identify the area as one with reported drainage or sewer problems. Therefore, based on this, the probability of flooding from drains and sewers is deemed to be low.

5.5 Flooding from Canals, Reservoirs and Other Artificial Sources – Probability : Very Low

The Government Planning Flood maps indicate that the development site is not within the predicted flood extent of local reservoirs.

In England, large reservoirs that are capable of holding 25,000m³ or more of water are regulated under the Reservoirs Act 1975, as amended by the Flood and Water Management Act, 2010. These reservoirs are registered with the Environment Agency and subject to inspection and supervision by reservoir engineers.

The SFRA does not identify local canals as a potential flood risk source to the region.

6.Flood Risk and Vulnerability

The NPPG Paragraphs 065 to 067 sets out the flood risk for a site by assessing the flood zones, flood risk vulnerability classification, and flood risk vulnerability and flood zone ‘compatibility’.

6.1 Flood Zones

Table 1 – Flood Zones	
Flood Zone	Definition
Zone 1 Low Probability	Land having a less than 1 in 1,000 annual probability of river or sea flooding. (Shown as ‘clear’ on the Flood Map – all land outside Zones 2 and 3)
Zone 2 Medium Probability	Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or Land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding. (Land shown in light blue on the Flood Map)
Zone 3a High Probability	Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding. (Land shown in dark blue on the Flood Map)
Zone 3b The Functional Flood Plane	This zone comprises land where water should flow or be stored in times of flood. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. (Not separately distinguished from Zone 3a on the Flood Map)

The available map data has identified that the development site is within Flood Zone 1

6.2 Flood Risk Vulnerability Classification

NPPG Paragraph 066, Table 2 stated the flood risk vulnerability classifications as:

Table 2 – Flood Risk Vulnerability Classification
Essential Infrastructure Essential transport infrastructure (including mass evacuation routes) which should cross the area at risk; Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood; Wind turbines.
Highly Vulnerable Police and ambulance stations; fire stations and command centers; telecommunications installations required to be operational during flooding; Emergency dispersal points; Basement dwellings; Caravans, mobile homes and park homes intended for permanent residential use; Installations requiring hazardous substances consent.
More Vulnerable Hospitals; Residential institutions such as residential care homes, children’s homes, social services homes, prisons and hostels; Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels; Non–residential uses for health services, nurseries and educational establishments; Landfill* and sites used for waste management facilities for hazardous waste; Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.

Less Vulnerable Police, ambulance and fire stations which are not required to be operational during flooding; Buildings used for shops; financial, professional and other services; restaurants, cafes and hot food takeaways; offices; general industry, storage and distribution; non-residential institutions not included in the 'More Vulnerable' class; and assembly and leisure; Land and buildings used for agriculture and forestry; Waste treatment (except landfill* and hazardous waste facilities); Minerals working and processing (except for sand and gravel working); Water treatment works which do not need to remain operational during times of flood.
Water Compatible Development Flood control infrastructure; Water transmission infrastructure and pumping stations; Sewage transmission infrastructure and pumping stations; Sand and gravel working; Docks, marinas and wharves; Navigation facilities.

The development site would be classed as “More Vulnerable” in flood risk terms as the development comprises the change of use from retail unit to a building used for dwellings.

6.3 Flood Risk Vulnerability and Flood Zone “Compatibility”

NPPG Paragraph 067 Table 3, gives guidance on flood risk vulnerability compared with flood zone, to determine the compatibility.

NPPF – Table 3 – Flood Risk Vulnerability and Flood Zone “Compatibility”					
Flood Zones	Flood Risk Vulnerability Classification				
	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test Required	✓	✓	✓
Zone 3a	Exception Test Required	X	Exception Test Required	✓	✓
Zone 3b	Exception Test Required	X	X	X	✓

In accordance with Table 3 of the NPPF “More Vulnerable” development within Zone 3a requires an “Exception Test”, however it should also be noted that this report relates to a change of use of existing premises and as such the Site Specific Flood Mitigation Measures (SSFMM) will focus on Flood Resilient / Resistant Design proposals and Flood Warning / Evacuation Plans

7.Conclusion

The Governments Planning Flood Risk data contained in this report and the appendices clearly shows that the whole of the application site has a “Very Low” risk of being adversely affected by flooding events from any source.

The occupants of the proposed apartments which will be accessed via the Manchester Road elevation are at “Very Low” risk of being adversely affected by flooding events given that they will reside some

Appendices

[◀ Back to select an address](#)

Flood risk summary

Your selected location: Lancashire Wallpaper & Paint Co Ltd, Sudden Mill, Manchester Road, Rochdale, OL11 4QR

This information tells you the flood risk of the land around a building, not the building itself.

- ▶ [How we assess an area's flood risk](#)
- ▶ [Flood risk and climate change](#)

Surface water

[More about your surface water flood risk \(/surface-water\)](#)

Yearly chance of flooding

Very low Low Medium High

Yearly chance of flooding between 2040 and 2060

Very low Low Medium High

What surface water is

Surface water flooding is sometimes known as flash flooding. It happens when rainwater cannot drain away through normal drainage systems.

- ▶ [Why surface water flooding is a problem](#)

Rivers and the sea

[More about your rivers and sea flood risk \(/rivers-and-sea\)](/rivers-and-sea)

Yearly chance of flooding

Very low

Low

Medium

High

Yearly chance of flooding between 2036 and 2069

Very low

Low

Medium

High

What makes rivers and sea flooding more likely

Low-lying areas that are close to rivers or the sea are more likely to flood when water levels rise.

This information takes into account any flood defences.

► [Why flood defences cannot completely prevent flooding](#)

Groundwater

[More about your groundwater flood risk \(/ground-water\)](/ground-water)

We use groundwater flood alert areas to check the risk of flooding from groundwater.

This location is outside of a groundwater flood alert area.

► [What this means](#)

What groundwater is

Groundwater is the water that is usually held in rocks and soil underground.

Groundwater flooding happens when this water rises and flows above the surface.

Flooding from rivers is more likely when groundwater levels are high.

Reservoirs

[More about your reservoir flood risk \(/reservoirs\)](#)

Flooding from reservoirs is unlikely in this area.

What a reservoir is

A reservoir is a large natural or artificial lake that is designed to collect and store water.

They are usually formed by building a dam across a river, or by building a large tank or surrounding embankment. If one of these dams or embankments fails, then water could escape from the reservoir. This would result in land or properties being flooded.

Surface water: possible flood depths

Your selected location: Lancashire Wallpaper & Paint Co Ltd, Sudden Mill, Manchester Road, Rochdale, OL11 4QR

This information tells you the flood risk of the land around a building, not the building itself.

Flooding is hard to predict and there is always a chance any flood water could be deeper than what we show.

► [What the flood risk ratings mean](#)

Chance of flooding to 20cm

Present day

2040 – 2060

60cm
(2ft)

60cm
(2ft)

30cm
(1ft)

30cm
(1ft)

20cm
(8in)

Very low

20cm
(8in)

Very low

At this location there's a **Very low** chance of flooding to **20cm** (or 8 inches).

Between 2040 and 2060 this stays at a **Very low** chance of flooding to **20cm** (or 8 inches).

At 20cm, flood water can get into some homes and buildings, especially if the property has a basement. At this level, water can also damage your car or cause a breakdown.

Chance of flooding to 30cm

Present day

2040 – 2060

60cm
(2ft)

60cm
(2ft)

30cm
(1ft)

Very low

30cm
(1ft)

Very low

20cm
(8in)

20cm
(8in)



At this location there's a **Very low** chance of flooding to **30cm** (or 1ft)

Between 2040 and 2060 this stays at a **Very low** chance of flooding to **30cm** (or 1ft)

At 30cm, flood water can get into homes and buildings. Water at this level can also move a car, damage roads and cause major traffic disruption.

Chance of flooding to 60cm

Present day

2040 – 2060

60cm
(2ft)

Very low

60cm
(2ft)

Very low

30cm
(1ft)

30cm
(1ft)

20cm
(8in)

20cm
(8in)



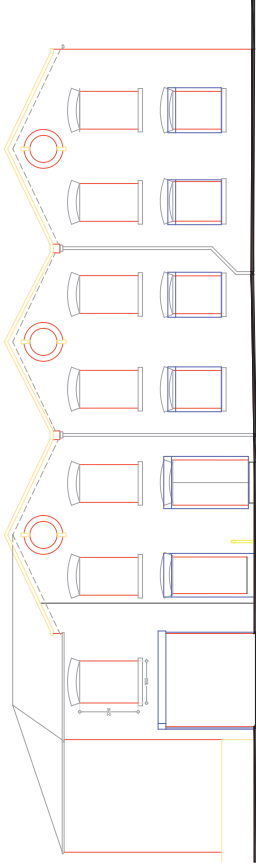
At this location there's a **Very low** chance of flooding to **60cm** (or 2ft)

Between 2040 and 2060 this stays at a **Very low** chance of flooding to **60cm** (or 2ft)

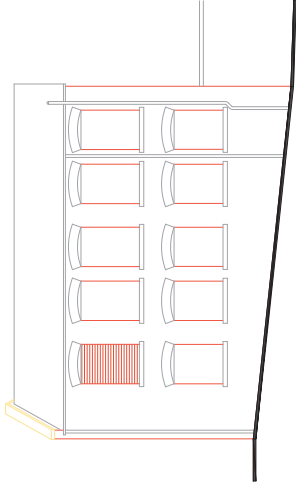
At 60cm, we expect flood water to get into homes and buildings. Water at this level can float most vehicles, including 4x4s.

Flood protection measures are usually effective up to 60cm. You should not try and keep flood water out of buildings if it's over 90cm. Water at this level can cause collapse or permanent structural damage.

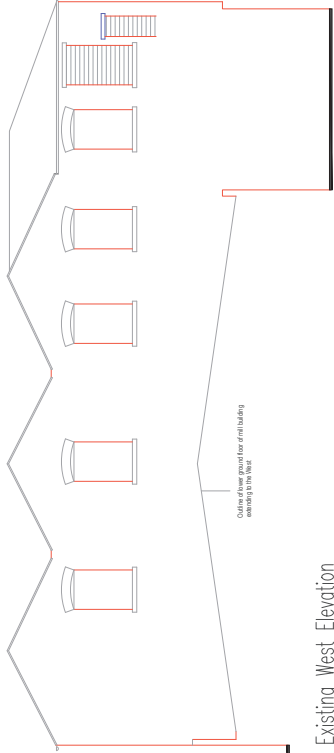
Return to [surface water \(/surface-water\)](/surface-water) to read advice on how to manage your risk from flooding.



Existing Manchester Road (West) Elevation



Existing Cotton Lane (North) Elevation



Existing West Elevation

[illegible]

GENERAL
No drawings are to be issued from this drawing. The contractor shall check and verify all building and site dimensions, levels, drainage (outdoors) / invert levels at all meetings prior before work commences.

This drawing must be read with and checked against any attached, special and architectural drawings provided. The contractor is to comply in all respects with the current building regulations as required and special code of practice on these drawings.

The architect shall investigate the locations of all domestic services and advise any necessary modifications to serve the proposed development.

Before work commences ensure all Planning conditions and Building Regulation conditions have been resolved to the satisfaction of the Local Authority/Registered Building Control Approver.

All works to comply with BS8000 series, all materials to be used and installed in accordance with the relevant manufacturers instructions and recommendations.

These drawings have been prepared only for the purpose of obtaining Local Authority approval.

The contractor shall inspect all adjoining properties which may be affected by the works prior to commencement of the works and record and report with the inspector all existing any defects.

BUILDING SAFETY ACT 2022
The Building Owner/Client MUST avail themselves of their responsibility under the Building Safety Act 2022 if it is a new CRIMINAL OFFENCE not to comply with this Act or the Building Regulations 2010. The Building Owner/Client MUST appoint a Principle Designer to ensure that ALL Dividers under the Act are competent for the project they are working on. Our Employer is ONLY to obtain final stage approval from the Registered Building Control Approver or Local Authority and has not been engaged to perform any function during or post the construction phase of the project. We will not undertake the role of Principle Designer under the Building Safety Act 2022, as we do not have the necessary competences to be subject to the new

The Act requires that all drawings submitted for approval must comply with the Act during the design stage to those that comply with the Building Regulations as amended QCLY when an approved drawing are issued by the Registered Building Control Approval Unit Authority. Town Approved drawings are not allowed if they do not comply with the requirement of the Act for design approval at that stage QCLY.

Proprietor Designers will be responsible for ensuring that the drawings submitted for approval comply with the requirements under the Act during the duration of the construction phase on ALL projects and we would like them to have been engaged throughout the role of Proprietor Designer under the Building Safety Act to these stages. The appointed Principal Designer for the construction phase and the Proprietor Contractor MUST provide Building Regulation Compliance advice in accordance with requirement 20 of the Building

PARTY WALLS: ARE ACT
This building owner shall serve notice on all adjoining owners who will be affected by the proposed works as detailed under the Party Wall Act 1996 and receive written consents or appoint surveyors to determine a party wall award, before such works commence on site.

[illegible]

The client has a NOT appointed/designed as the Designer (Principal Designer) to undertake the duties required under this role as required under the CDM Regulations 2015. The client is aware of their Legal Duty to appoint a competent person to undertake this role in good time BEFORE the construction work commences on site to ensure that the project has been effectively planned, managed, monitored and co-ordinated with respect to Health and Safety matters.

The client must ensure that all appropriate pre-construction information is obtained and provided in good time to the Contractors (Principle Contractors BEFORE construction activities commence on site and the Principle Contractor MUST prepare a suitable Construction Phase Plan on ALL projects BEFORE works commence on site.

His advice: survey has been underutilized and a level 3 (refusive) survey must be undertaken prior to commencing works, should any asbestos containing material be identified then appropriate action must be taken by licensed contractor to remove any risk to the contractors' occupants/ members of the public. In addition to the level 3 survey the contractor should report any material which he suspects may contain asbestos and ensure that samples of same are tested for.

All demolition works to be undertaken by CIB operatives using appropriate temporary supports. The contractor shall ensure that means of escape are maintained throughout the construction project. All construction activities are to be adequately signposted from members of the public and any occupiers of the building (adjacent rooms) in accordance with L100, 155 & 162 Section The presence of asbestos

No services investigations have been carried out, the contractor must undertake "trial before you dig", tel 0800 0265 8165, investigations to be commenced excavations on site. The client must undertake all necessary enquiries with sewerage and water utility companies to establish the exact location of the sewerage and water mains.

All work at height to be undertaken from appropriate working platforms.

All electrical work to be undertaken in accordance with BS 571 and the IEE Regulations, all installations to be inspected and certified by NICEIC / ECA registered engineers. A CO detector shall be installed in each room containing a gas appliance and a smoke detector shall be placed on each floor in all corridors, offered from 1 month, October 2015.

All work is gas applications/pipe work. If/If not to be undertaken by appropriately licensed engineers who are part of the Gas Safe Register.

BOUNDARIES

The client shall confirm the exact position of legal boundaries, any boundaries shown on these

P2	Issued for comment	Sept 25	DAP
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Rev.	Mod.	Notes	Date	By
Client				
Home Care Co Ltd				

Location Sudden Mill	Location Sudden Mill
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Manchester Road OL11 4QR

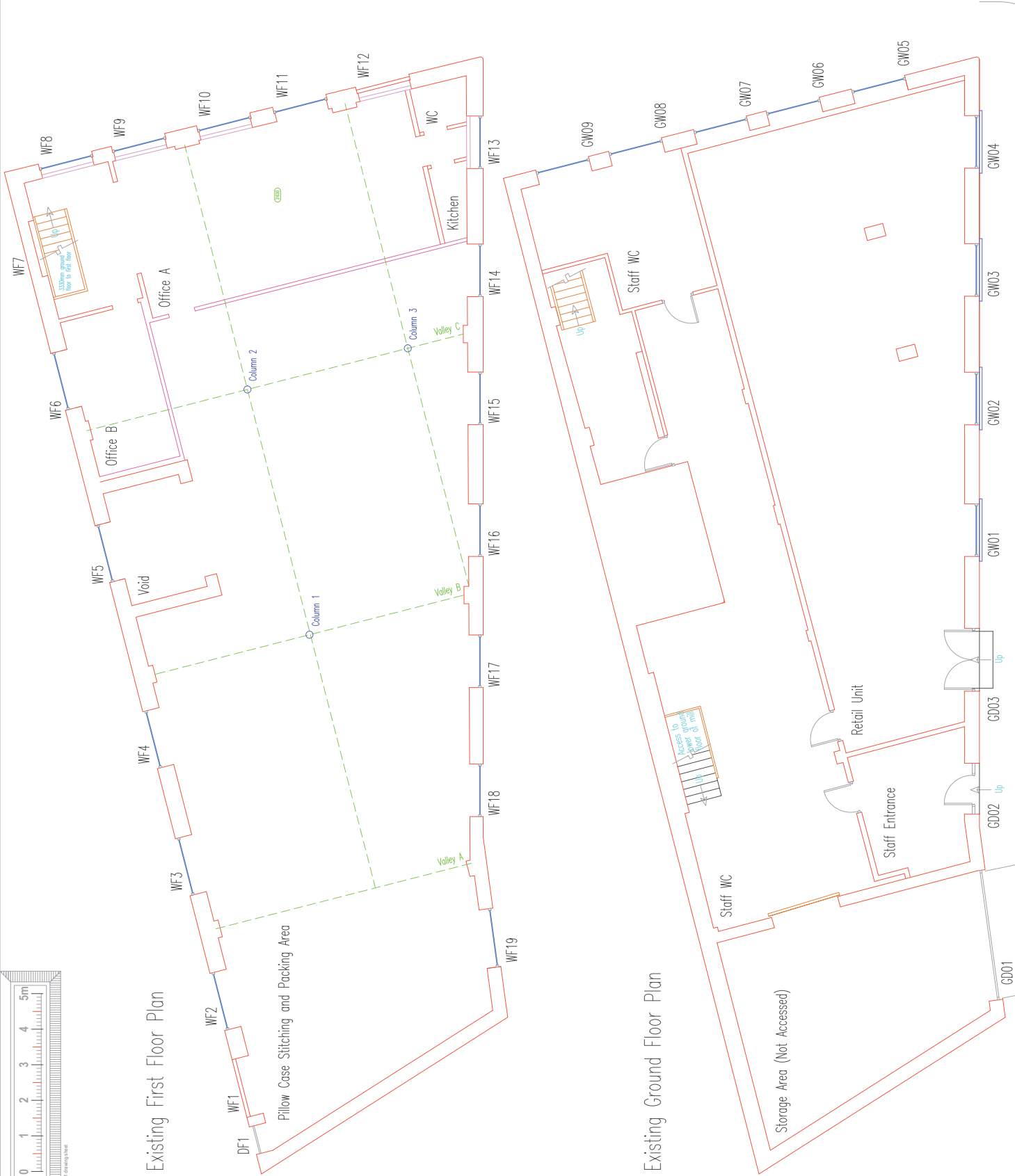
Formation of apartments to first floor and internal alterations

Drawing Title
Existing Floor Plans

Scale	See scale bar	Sheet A1
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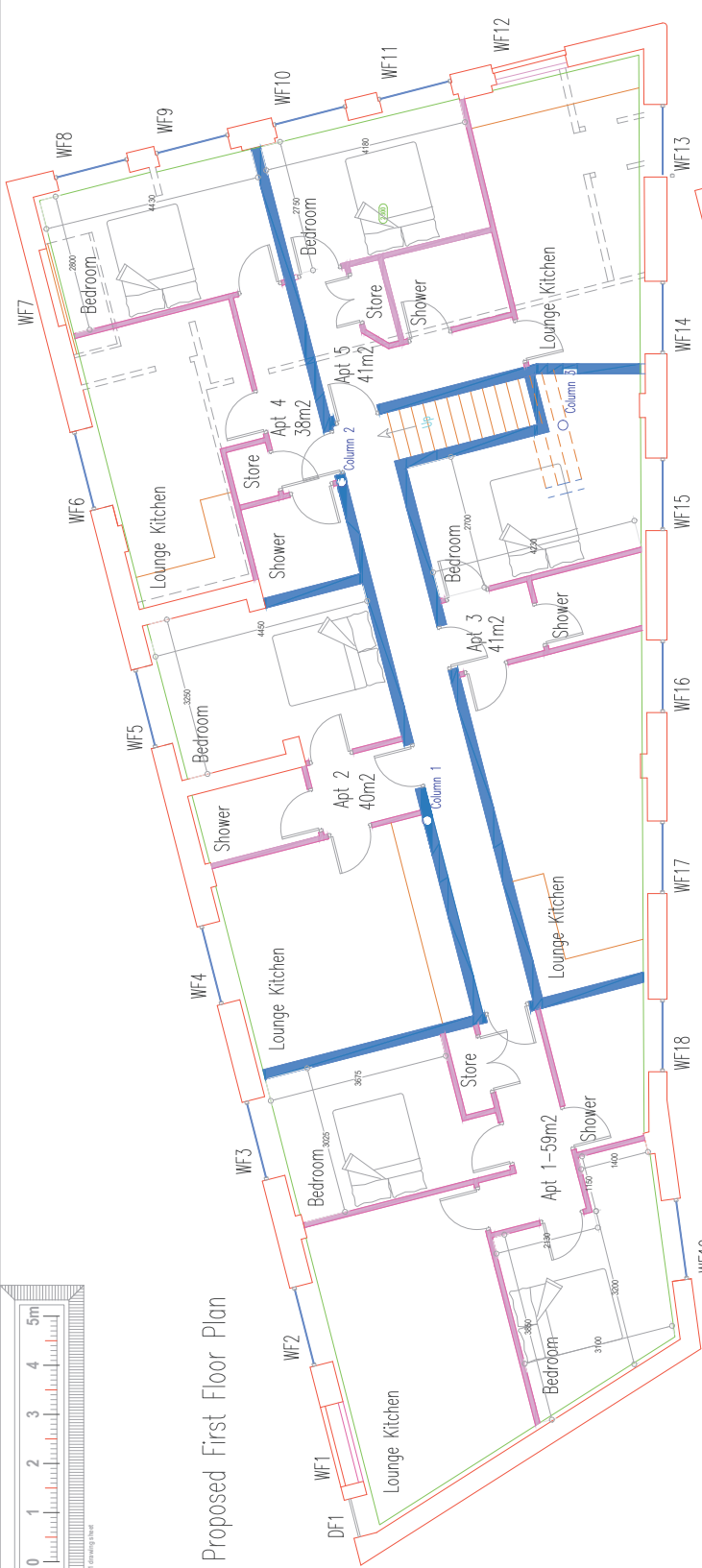
Date	May 2025	Drawn by	DAP
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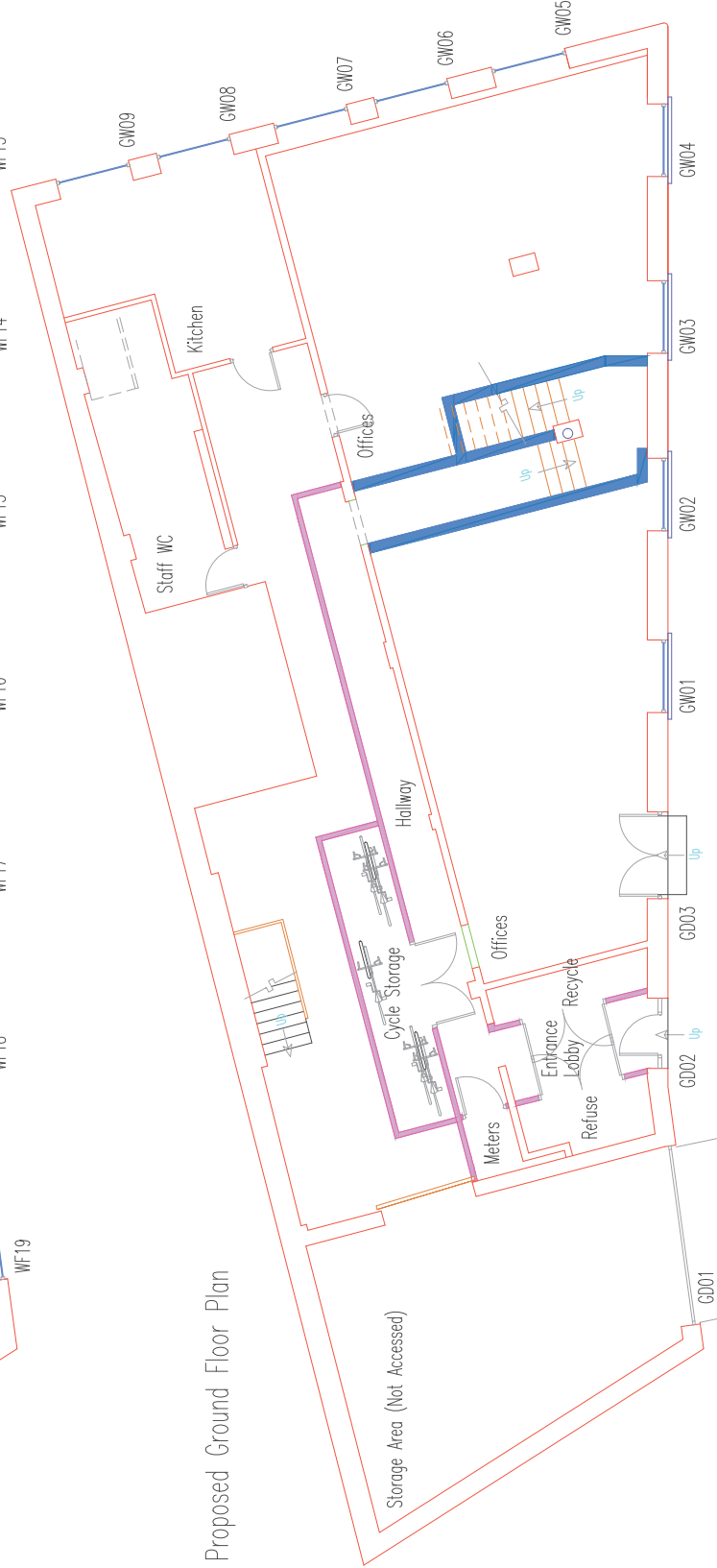




Proposed First Floor Plan



Proposed Ground Floor Plan



GENERAL

For information, the contractor is to be made from this drawing. The contractor is to make any building work necessary to complete the works, including any necessary alterations to the building work.

This drawing must be read in conjunction with the Bill of Materials, Specification and Schedule of Materials. The contractor is to make any necessary alterations to the building work, including any necessary alterations to the building work.

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REVISIONS

Rev.	Issued for comment	Date	By
P3	Issued for comment	Oct 25	DJP

Client: Home Grace Co Ltd

LOCATION

Sudden Mill
Manchester Road OL11 4QR

JOB TITLE

Formation of apartments to first floor and internal alterations

DRAWING TITLE

Proposed Floor Plans

Scale See scale bar

Date May 2025

Drawn by DAP

Proj. No. 24/89-02

Rev. P3

