Any farmer contemplating investing in new silage clamps, slurry stores or other structures will need to think well ahead. The design must be developed, relevant consents obtained, contractors selected and prices agreed before work can start on site. This guide and the detailed construction guidance notes are intended to help farmers and contractors through this process.

Ensuring that any new development complies with all the relevant requirements is tremendously important, and it is vital to obtain up-to-date, impartial and reliable advice. Employing experienced and independent consultants can help to ensure that you get what you need from the project and that current and pending legislative requirements are met in a cost-effective manner.

The Planning System

The rules on planning relating to agricultural structures and buildings have become progressively more restrictive, and very few developments are permissible without either full planning permission, or approval under the ‘prior notification’ system.

Whether full planning application is required, or not, depends on a number of factors, including the size of the holding, the type and size of the development, and the proposed use of the structure. For example, if a slurry store is within 400m of a ‘protected building’ full planning permission will be required. (A ‘protected building’ is one normally occupied by people, but not one within the agricultural unit or on another agricultural unit and used in connection with agriculture.) Your local planning office or professional adviser should be able to advise as to whether a full planning application is required.

If the work constitutes ‘permitted development’ as defined in the relevant legislation, the local authority must be asked for a determination as to whether prior approval will be required on the siting, design and external appearance of the proposal. A plan and written description must be provided and a modest fee will be payable. Where full planning permission is required, submission requirements will normally be more onerous.

Obtaining planning consent can present a major hurdle; you can influence the length of time taken to obtain a favourable decision by managing the planning process effectively, by considering those issues likely to have a bearing on an application at an early stage and incorporating them in the design. A thorough, well thought out submission, in which key issues are identified and potential problems addressed, can greatly improve your chance of success.
The Role of the Environment Agency

The Environment Agency will normally be consulted as part of the planning process for any structure imposing a potential pollution risk. However, it is common practice for proposals to be discussed with the appropriate Area Office well before the submission of a planning application. The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 as amended 1997 set minimum legal standards for the construction of relevant stores. A guide to the Regulations is available. Note the legislative requirement for installations to be situated a minimum of 10 meters from any land drain or watercourse. The Environment Agency must be notified a minimum of 14 days prior to the use of any such structure. Failure to notify the Agency can incur a fine; polluting the environment carries significantly more severe penalties.

Other practical issues, such as the need to avoid building on land with a high water table or on unsuitable ground will also have a bearing on siting.

Health and Safety

Health and safety risks need to be properly assessed and managed right from the outset of the design of a project: the Construction (Design and Management) Regulations 1994 (‘the CDM Regulations’) impose responsibilities on the client/building owner in relation to construction projects above a certain size.

Amongst other obligations, a farmer will have a responsibility to ensure that only competent people are appointed to manage health and safety throughout all stages of a construction project. The designer of a structure has a responsibility to avoid or minimise risks to health and safety and to ensure that design drawings and specifications include adequate information on health and safety issues, regardless of the scale of the undertaking. With certain exceptions, if construction work lasts for more than 30 days, or involves more than 500 person days of work, or if 5 or more people are employed on site at any time, or if demolitions are required, the CDM Regulations will apply in full. In the majority of cases the Health and Safety Executive (HSE) must be given prior notification of commencement of work. Where the CDM Regulations apply in full, it is necessary for the client to appoint a planning supervisor to ensure that a pre-tender Health and Safety Plan and a Health and Safety File are prepared. Duties are also imposed on the principal contractor for the project, including development of the Health and Safety Plan for the construction phase of the project.

Further information is available from the Health and Safety Executive or from your professional adviser.

Contract Documentation

A standard form of building contract is strongly recommended as the basis of the agreement between the farmer and the contractor. Various forms of contract are available including JCT and ICE Minor Works. It is also important to establish that the contractor is familiar with the various standards required (see below) and these should be specified in writing as part of the contract. If in doubt seek professional help.
Sizing a Structure

Establishing the correct size of a structure to meet current and future needs of the business is critical. So often, in the past, too little thought has been given to future requirements. The result has been that many structures have become inadequate and additions and extensions have had to be built within a very short time.

The construction guidance notes contain some detail and references on sizing. The calculation of size of slurry stores is not covered and requires additional information.

**Slurry stores** will contain the excreta from livestock, some foul yard water and may also be intended to store parlour washings and other liquid effluents. You should also consider how long slurry will need to be stored so that it can be applied to land without causing run-off and water pollution. In Nitrate Vulnerable Zones storage will need to be sufficient to avoid spreading in closed periods.

The excreta output of various types of livestock is given in a number of publications, including the Water Code. It is important to assess fouled yard areas where the drainage is directed to the proposed store. Rainfall information, including ‘storm events’ is available from the Meteorological Office at Bracknell (01344 420242). It is important to plan for storm events and not just use average rainfall figures. The Environment Agency would expect rainfall figures to be based on 5 year return periods. Rainfall information will also be needed to calculate the amount of water falling directly on to the store. The amount of parlour washings on dairy farms is typically 18 litres per cow per day but can be as much as 45 litres per cow per day when a power hose is used. An assessment of each situation is recommended.

Finally, the calculation of store size needs to allow for a freeboard of at least 750 mm for an earth-banked store and 300 mm for other stores.

The Regulations require a minimum of 4 months storage unless it can be demonstrated that more frequent spreading would not cause pollution. For the purposes of good farm management a longer storage period may be needed.

Detailed guidance is given in the Water Code and in Manure Planning in NVZs.

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All information sheets are available from ADAS Building Design on 01626 892600 or 0845 766 0085 or by E-mailing Building.Design@adas.co.uk.
References

Design guidance is contained in British Standard 5502 Buildings and Structures for Agriculture, particularly Parts 22 and 50. Other Standards may apply to specific types of structure (see other sheets in this series). See also the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 as amended 1997, Guidance Notes for Farmers were published by the Department of the Environment and Welsh Office in April 1997. The HSE publish a number of relevant documents including: Having Construction Work Done MISC 193 10/1999 and Duties of Clients under the Construction (Design and Management) Regulations 1994. Reference should also be made to The Code of Good Agricultural Practice for the Protection of Water, October 1998 (for sizing of slurry stores and general advice on a wide range of topics) - available from MAFF, and to CIRIA Reports (see other sheets in this series for detailed guidance).

BSI
BS 1377, 5328, 5502, 5628, 6031, 6213, 8007, 8110, 8301. Web: www.bsi.org.uk
British Standards Institution, Information Technology Service (BITS), Linford Wood, Milton Keynes MK14 6LE. Tel 01908 221166

CIRIA
Report Nos 126, 163, 164. Web: www.ciria.org.uk
Construction Industry Research Information Association, 6 Storey’s Gate, Westminster, London SW1P 3AU. Tel 020 7222 8891

DETR
Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991, as amended 1997 - Guidance Notes for Farmers (Free publication). Web: www.detru.gov.uk
Department of Environment Transport and Regions, Water Quality Division, Ashdown House, 123, Victoria Street London SW1E 6DE.

Environment Agency
Web: www.environment-agency.gov.uk or www.environment-agency.wales.gov.uk
Pollution Prevention Guidelines, PPG. (Free publications)
Head Office, Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol. Tel 01454 624 400.

Health and Safety Executive
CDM Regulations, Guidance on pesticides AIS No16. Web: www.hsebooks.co.uk
HSE Books, PO Box 1999, Sudbury, Suffolk CO10 6FS. Tel 01787 881165.

ICE
(Contract for minor works) Web: www.ice.org.uk
Institution of Civil Engineers, Great George Street, Westminster, London SW1P 3AA.
Tel 020 7222 7722

Ministry of Agriculture, Fisheries and Food
Water Code (PB0585), Green Code (PB3528), Yellow Code (PB3259), Manure Planning in NVZ’s (PB38577). (Free publications). Web: www.maff.gov.uk
MAFF Publications, ADMAIL 6000, London SW1A 2XX. Tel 0645 556000

RIBA
(JCT Form of Contract) Web: www.riba.org.uk
Royal Institute of British Architects, 66 Portland Place, London W1N 4AP. Tel 020 7580 5533