THORNDON

Design Guidelines

AECOM

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FINAL REPORT

April 2019

Quality information

Project role	Name	Position	Action summary	Signature	Date
Qualifying body	James Hayward	Thorndon Parish Council	Review		23-04-2019
Director / QA	Ben Castell	Technical Director	Revision and approval of Draft Report	BC	26-04-2019
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Introduction

01

1. Introduction

This section provides context and general information to introduce the project and its location.

1.1. Introduction

Through the Ministry of Housing, Communities and Local Government (MHCLG) Neighbourhood Planning Programme led by Locality, AECOM has been commissioned to provide design support to Thorndon Parish Council.

The Steering Committee is making good progress in the production of its Neighbourhood Plan. Although the Local Plan has not allocated any new housing to Thorndon, the Parish Council has requested to access professional advice on design guidelines for any potential development within the parish. This document should support Neighbourhood Plan policies that guide the assessment of any future development proposals and encourage high quality design. It advises on physical development helping to create distinctive places integrated with the existing settlements.

1.2. Objective

The main objective of this report is to develop design guidelines that future development in Thorndon should follow to retain and protect the rural, tranquil character and scenic beauty of the area. In particular:

- The design of new buildings should respond to the scale, density, and position of existing buildings in relation to the streets and plots. It should enhance local distinctiveness without limiting originality and innovation;
- Development proposals should avoid the loss of trees, hedgerows, or woodland, and should provide a clear commitment to replace this vegetation should any loss occur;
- Any development should conserve and protect heritage assets and their settings;
- Where new domestic access points are required, small-scale features such as hedgerows, walls, fencing, and entrance gates should respond to the local vernacular to promote and enhance local distinctiveness;
- Proposals to alter historic buildings should demonstrate a thorough understanding of the history and design qualities of the buildings and provide a clear rationale for how this has been taken into account in the design of the proposed alterations, without limiting originality and innovation.

1.3. Process

Following an inception meeting and a site visit, AECOM and Thorndon Parish Group members carried out a high level assessment of the village. The following steps were agreed with the group to produce this report:

- Initial meeting and site visit;
- Urban design analysis;
- Preparation of design principles and guidelines to be used to assess future developments;
- Draft report with design guidelines; and
- Final report.

This work complements a Site Options Assessment (SOA) prepared by AECOM for Thorndon Parish Group in March 2019. The findings of the SOA are summarised in a separate report and will not be the subject of this report.

1.4. Area of Study

The Mid Suffolk parish of Thorndon lies about 4 km south of Eye, 10 km south of Diss, 25 km north of Ipswich, and about 30 km east of Bury St Edmunds. The settled area consists almost exclusively of detached and semi-detached residential properties, and is surrounded by arable farmland. The Grade II* listed All Saints Church serves as the parish church. Other community facilities include the Village Hall and Thorndon Primary School. There is one pub, the Black Horse Inn, and one community shop, both located on The Street. The nearest train stations are located in Diss and Stowmarket, respectively 10 km north and 14 km south of Thorndon. Two bus stops are located on The Street in front of the pub and the church, with services to Ipswich, Eye, and Diss.

The parish is situated in the Plateau Claylands and Rolling Valley Claylands landscape typology areas as defined by the Suffolk Landscape Character Assessment. The river Dove delineates the western edge of the parish.

At the 2011 census the population of the parish was 648.

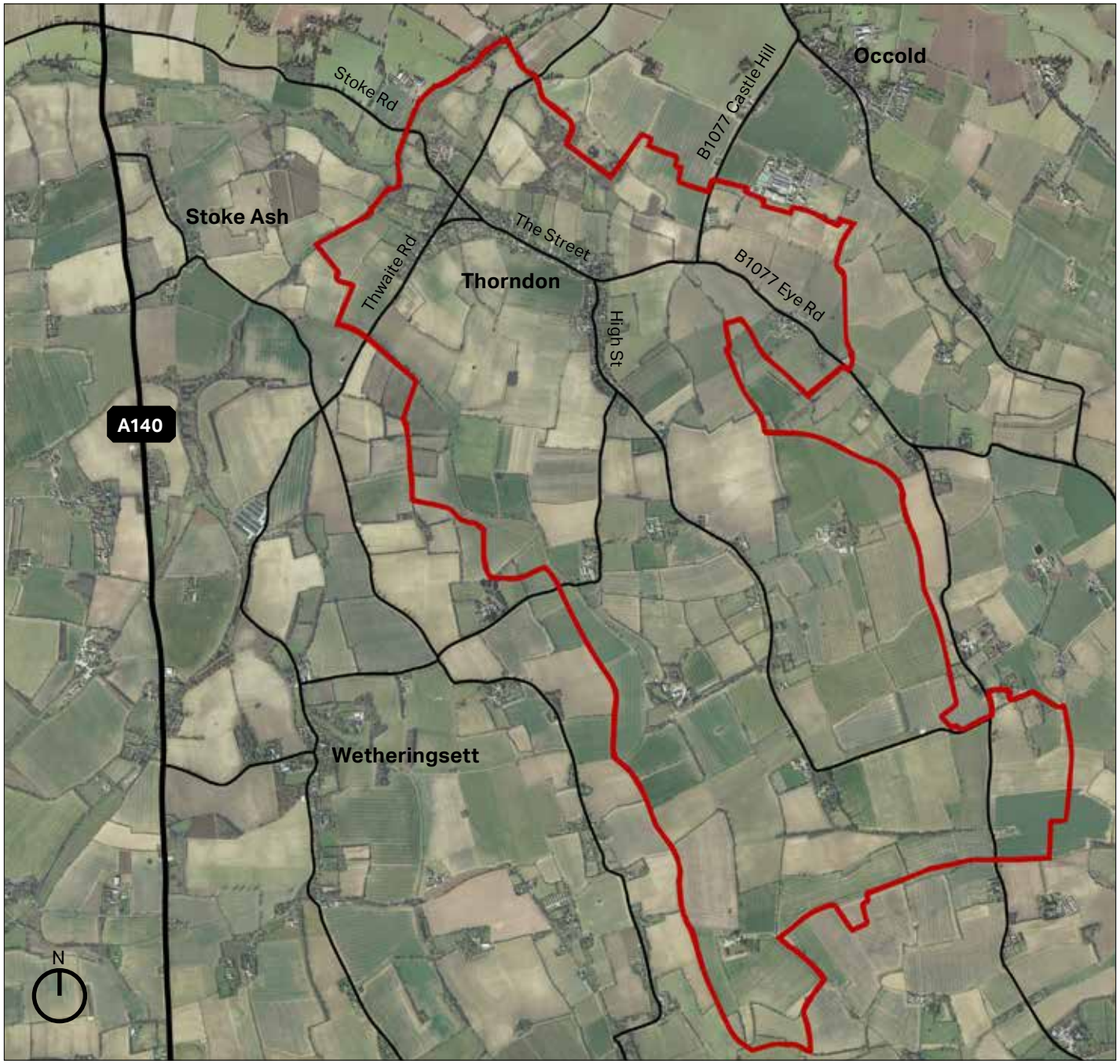


Figure 1: Thorndon Parish area, with parish boundaries shown in red (source: Google Earth).

1.5. Engagement

In 2016 local residents were consulted through a survey for the Neighbourhood Plan. Ideas and suggestions from the survey relevant to design are summarised in this section, and are reflected in the design guidance and concept plans that are the focus of this report.

1.5.1. Vision Statement

Most respondents agree with the vision statement: "Thorndon Parish will strive to celebrate its proud heritage whilst keeping the village a thriving rural community in a living, working countryside which is dependent on retaining our local services and community facilities such as schools, local shops, public houses and places of worship. Affordable and accessible rural housing is essential to ensure viable use of these local facilities. We will welcome appropriate housing development to ensure that our community continues to thrive."

1.5.2. Housing Stock

The survey suggests a need for more 1-2 bedroom and affordable houses.

A significant minority of households have members who are looking to move into their own accommodation over the next 3 years, either in the village or elsewhere.

There is very strong opposition to a high rate of new housing and businesses to support the development of additional services and keep existing services viable. A moderate rate of new constructions still faces opposition from some residents.

1.5.3. Housing Forms

Infill housing received support from residents but, in general, they do not want to see small estate-style developments behind existing properties, large estate-style developments in green fields, and new developments with their own road frontage.

New developments that follow traditional design styles, materials, and colours are favoured over contemporary 21st century designs. Blends of old and new styles are accepted.

1.5.4. Services and Facilities

Most existing services and facilities received an overall favourable rating from respondents. These include:

- The environment (countryside, cleanliness, pollution, watercourses, and ditches);
- Education;
- Medical, dental, and care services;
- Business (i.e. tourism, agriculture, and working from home);
- Facilities (i.e. community venues, shops, sports/leisure, and places to eat/drink); and
- Societal and local organisations.

Respondents are more split over transport (i.e. bus services and footpaths), but more rated it favourably than unfavourably.

Road and traffic was the only topic that respondents rated as average. Particular concerns include speeding, increasing traffic volumes, road maintenance, and parking.

Respondents were moderately supportive of more parking control measures such as waiting restrictions but were split over the provision of more parking spaces.

1.5.5. Travelling

Most respondents use the car to travel either to work or to study.

Figure 2: View south west towards Thwaite Road.

Figure 3: View north towards The Street.

Local Character Analysis

02

2. Local Character Area

This section outlines the broad physical, historical and contextual characteristics of Thorndon. It analyses the pattern and layout of buildings, hierarchy of movements, topography, building heights and roofline, and parking. Images in this section have been used to portray the built form of Thorndon.

2.1. Introduction

The array of listed buildings reflects the architectural diversity and historic quality of Thorndon. There are 35 listed buildings within the parish boundaries of Thorndon; two are Grade II* listed, with the rest being Grade II listed. In addition, there are a number of noteworthy (unlisted) buildings such as the primary school and the old reformatory building in the Kerrison Conference Centre.

Figure 4: Primary School on The Street.

Figure 5: Street edges framed by trees and tall hedgerows marking property boundaries.

Figure 6: Grade II* listed All Saints Church.

Figure 7: Village community shop in front of the Black Horse Inn.

Figure 8: Enclosed field on the northern edge of the village.

Figure 9: The Black Horse Inn, located in the centre of the village.

Figure 10: Thorndon Community Shop sign on The Street.

2.2. Local Character Analysis

2.2.1. Streets and Public Realm

The main streets are organic in nature and seemingly evolved from historic routes, natural features, and topography. Most streets are bordered with hedges, mature trees, and low walls. The village streets, except from the north side of The Street between the school and Fen View, have no pavements. There is no street lighting.

2.2.2. Pattern and Layout of Buildings

Most buildings in Thorndon are detached houses sited on wide plots, with a minority of semi-detached houses. Recesses of varying depths in the building line enable the formation of large front gardens or yards. There remains a high degree of openness to the open countryside and green spaces; most properties back onto or face open land. This arrangement results in a linear settlement with houses clustered along the main roads.

Some post-war development was achieved through infilling along roads. Other 20th and 21st century developments are arranged in small informal clusters with a vehicle access branching away from the main road.

Outside the settlement boundaries, the settlement pattern is characterised by dispersed farmsteads.

2.2.3. Building Height and Roofline

Building heights typically vary between one and two storeys. Typically the roofline is pitched and many buildings have prominent chimneys. There is a high diversity of roof and gable orientation, height, and materials - the most common being thatch, clay pantiles, and slate.

2.2.4. Car Parking

The prevalence of large parcels enable either on plot front yard parking or garage parking adjacent to houses. Front yard parking is partially screened by tall hedges. Streets are usually too narrow to accommodate on-street parking.

2.2.5. Open Space & Landscape

The village is set in an undulating landscape. Due to the linear settlement pattern, most properties adjoin open fields with long views towards the countryside. Settled areas are punctuated by smaller fields. The streets also feature tall hedges and a large number of mature trees. The abundance of tall trees and hedges at the back of properties enables the village to blend into the landscape with little obtrusion.

Figure 11: Landscaped boundaries and set back building lines.

Figure 12: Small clusters of houses sharing a common driveway.

Figure 13: The meandering layout of the tree-bordered road and the absence of footways contribute to the informal quality of the public realm.

Figure 14: View through a shallow parcel revealing an adjacent open field at the back of the property.

Figure 15: Thorndon village, with roads in solid lines and public rights of way in dotted lines (source: Google Earth).

2.3. Architectural Details

The following section showcases a good amount of local building details which should be considered as positive examples and inform the design guidelines that follow.

Primary school bicolour brick gable with lancet windows and decorated barge board.

Gothic church tower with flint infill and stone quoins and arches.

Thatched gable with "Suffolk" pink rendered wall.

Red brick boundary wall.

Building with Woolpit white brick walls.

Renovated house with black weatherboarding and pantile roofing and a pebble and red brick external wall.

Flint and red brick façade.

Circular red brick mill building converted into housing after renovation.

Yellow-rendered façade with pargetting and landscaped boundary treatment.

Wall with red brick trim, polychrome brick infill, and pantile roof.

House with off-white rendered walls, pantile roofing, and gabled porch.

Old reformatory building with red brick stepped gable and Tudor chimney.


The Old
Reading
Room

Design Guidelines

03

3. Design Guidelines

This section outlines key design elements and principles to consider when assessing a design proposal.

3.1. General questions to ask and issues to consider when presented with a development proposal

Based on established good practice, this section provides a number of questions against which the design proposal should be evaluated. The aim is to assess all proposals by objectively answering the questions below. Not all the questions will apply to every development. The relevant ones, however, should provide an assessment as to whether the design proposal has taken into account the context and provided an adequate design solution.

As a first step there are a number of ideas or principles that should be present in the proposals. The proposals or design should:

1. Integrate with existing paths, streets, circulation networks and patterns of activity;
2. Reinforce or enhance the established village character of streets, greens, and other spaces;
3. Respect the rural character of views and gaps;
4. Harmonise and enhance existing settlement in terms of physical form, architecture and land use;
5. Relate well to local topography and landscape features, including prominent ridge lines and long distance views;
6. Reflect, respect, and reinforce local architecture and historic distinctiveness;
7. Retain and incorporate important existing features into the development;
8. Respect surrounding buildings in terms of scale, height, form and massing;
9. Adopt contextually appropriate materials and details;
10. Provide adequate open space for the development in terms of both quantity and quality;
11. Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;
12. Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
13. Make sufficient provision for sustainable waste management (including facilities for kerbside collection, waste separation, and minimisation where appropriate) without adverse impact on the street scene, the local landscape or the amenities of neighbours; and
14. Positively integrate energy efficient technologies.

Following these ideas and principles, there are number of questions related to the design guidelines outlined later in the document.

Street Grid and Layout

- Does it favour accessibility and connectivity over cul-de-sac models? If not, why?
- Do the new points of access and street layout have regard for all users of the development; in particular pedestrians, cyclists, and those with disabilities?
- What are the essential characteristics of the existing street pattern? Are these reflected in the proposal?
- How will the new design or extension integrate with the existing street arrangement?
- Are the new points of access appropriate in terms of patterns of movement?
- Do the points of access conform to the statutory technical requirements?

Local Green Spaces, Views and Character

- What are the particular characteristics of this area which have been taken into account in the design; i.e. what are the landscape qualities of the area?
- Does the proposal maintain or enhance any identified views or views in general?
- How does the proposal affect the trees on or adjacent to the site?

- Has the proposal been considered in its widest context?
- Has the impact on the landscape quality of the area been taken into account?
- In rural locations, has the impact of the development on the tranquillity of the area been fully considered?
- How does the proposal affect trees on or adjacent to the site?
- How does the proposal affect the character of a rural location?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- Can any new views be created?
- Is there adequate amenity space for the development?
- Does the new development respect and enhance existing amenity space?
- Have opportunities for enhancing existing amenity spaces been explored?
- Will any communal amenity spaces be created? If so, how will this be used by the new owners and how will it be managed?

Gateway and Access Features

- What is the arrival point, how is it designed?
- Does the proposal maintain or enhance the existing gaps between villages?
- Does the proposal affect or change the setting of a listed building or listed landscape?
- Is the landscaping to be hard or soft?

Buildings Layout and Grouping

- What are the typical groupings of buildings?
- How have the existing groupings been reflected in the proposal?
- Are proposed groups of buildings offering variety and texture to the townscape?
- What effect would the proposal have on the streetscape?
- Does the proposal maintain the character of dwelling clusters stemming from the main road?
- Does the proposal overlook any adjacent properties or gardens? How is this mitigated?

Building Line and Boundary Treatment

- What are the characteristics of the building line?
- How has the building line been respected in the proposals?
- Have the appropriateness of the boundary treatments been considered in the context of the site?

Building Heights and Roofline

- What are the characteristics of the roofline?
- Have the proposals paid careful attention to height, form, massing, and scale?
- If a higher than average building is proposed, what would be the reason for making the development higher?

Household Extensions

- Does the proposed design respect the character of the area and the immediate neighbourhood, or does it have an adverse impact on neighbouring properties in relation to privacy, overbearing, or overshadowing impact?
- Is the roof form of the extension appropriate to the original dwelling (considering angle of pitch)?
- Do the proposed materials match those of the existing dwelling?
- In case of side extension, does it retain important gaps within the street scene and avoid a 'terracing effect'?
- Are there any proposed dormer roof extensions set within the roof slope?
- Does the proposed extension respond to the existing pattern of window and door openings?
- Is the side extension set back from the front of the house?

Building Materials and Surface Treatment

- What is the distinctive material in the area, if any?
- Does the proposed material harmonise with the local material?
- Does the proposal use high quality materials?
- Have the details of the windows, doors, eaves, and roof been addressed in the context of the overall design?
- Do the new proposed materials respect or enhance the existing area or adversely change its character?

Car Parking Solutions

- What parking solutions have been considered?
- Are the car spaces located and arranged in a way that is not dominant or detrimental to the sense of place?
- Has planting been considered to soften the presence of cars?
- Does the proposed car parking compromise the amenity of adjoining properties?

Architectural Details and Contemporary Design

- If the proposal is within a conservation area, how are the characteristics reflected in the design?
- Does the proposal harmonise with the adjacent properties? This means that it follows the height, massing, and general proportions of adjacent buildings and how it takes cues from materials and other physical characteristics.
- Does the proposal maintain or enhance the existing landscape features?
- Has the local architectural character and precedent been demonstrated in the proposals?
- If the proposal is a contemporary design, are the details and materials of a sufficiently high enough quality and does it relate specifically to the architectural characteristics and scale of the site?

3.2. Design Guidelines

3.2.1. Streets

- Streets must meet the technical highways requirements as well as be considered a 'place' to be used by all, not just motor vehicles. It is essential that the design of new development should include streets that incorporate needs of pedestrians, cyclists, and if applicable public transport users.
- Within the settlement boundaries streets should not be built to maximise vehicle speed. Streets must be designed with the safety and accessibility of vulnerable groups such as children and wheelchair users in mind.
- New streets, should any be built, should tend to be linear with gentle meandering - providing interest and evolving views. Routes should be laid out in a permeable pattern allowing for multiple connections and choice of routes, particularly on foot. Any cul-de-sacs should be relatively short and include provision for onward pedestrian links.
- Access to properties should be from the street where possible.
- The distribution of land uses should respect the general character of the area and street network, and take into account the degree of isolation, lack of light pollution, and levels of tranquillity.
- Pedestrian paths should be included in new developments and be integrated with the existing pedestrian routes.

Figure 16: Road framed by mature trees and planted hedges.

Figure 17: The informal quality of the High Street is highlighted by a narrow carriageway shared between vehicles and pedestrians.

3.2.2. Local Green Spaces, Views and Character

- Development adjoining public open spaces and important gaps should enhance the character of these spaces by either providing a positive interface (i.e. properties facing onto them to improve natural surveillance) or a soft landscaped edge.
- Any trees or woodland lost to new development must be replaced.
- The spacing of development should reflect the rural character and allow for long distance views of the countryside form the public realm. Trees and landscaping should be incorporated in the design.
- The existing quiet and peaceful atmosphere of Thorndon should be preserved.
- Green gaps between settlements and built up areas must be retained to avoid coalescence.
- Landscape scheme should be designed and integrated with the open fields that currently border the village.
- Native trees and shrubs should be used to reinforce the rural character of the village.

Figure 18: Green space at the back of the Kerrison Conference Centre.

Figure 19: Children's play area north of Fen View.

Figure 20: North-eastward view from Manor Farm Barn towards the tower of St Michael's Church in Occold.

Figure 21: View of the open countryside from the back of the Village Hall.

Figure 22: Entrance gates to the churchyard of All Saints Church.

Figure 23: Northward view from the open field at the back of Fen View.

3.2.3. Gateway and Access Features

- In the case of any future development, the design proposals should consider placing gateway and built elements highlighting the access or arrival to the new developed site.
- The gateway buildings or features should reflect local character. This could mean larger houses in local materials with emphasis on the design of chimneys and fenestration, as well as well laid and cared for landscape.
- Besides building elements acting as gateways, high quality landscaping features could be considered appropriate to fulfil the same role.

Figure 24: Gateways composed of iron gates and landscaped vegetation.

Figure 25: Brick and timber gateway framed by taller vegetation.

Figure 26: The old reformatory in the Kerrison Conference Centre - the gabled corner pavilions at the end of each wing create a sense of arrival and frame the view towards the central element of the courtyard.

3.2.4. Pattern and Layout of Buildings

- The existing rural character must be appreciated when contemplating new development, whatever its size or purpose.
- Where an intrinsic part of local character, properties should be clustered in small pockets showing a variety of types. The use of a repeating type of dwelling along the entirety of the street should be avoided.
- Boundaries such as walls or hedgerows, whichever is appropriate to the street, should enclose and define each street along the back edge of the highway, adhering to a consistent property line for each development group.
- Properties should aim to provide rear and front gardens or at least a small buffer to the public sphere where the provision of a garden is not possible.

Figure 27: Aerial photo showing loose building lines created by informal clusters of detached houses and street-defining hedges on The Street (source: Google Earth).

Figure 28: A small cluster of houses sharing a common driveway bordered by hedgerows.

Figure 29: Detached house set back from the planted property line (front).

3.2.5. Building Line and Boundary Treatment

- Buildings should have their main façade and entrance facing the street where this is in keeping with local character. The building line should have subtle variations in the form of recesses and protrusions but will generally form a unified whole.
- Buildings should be designed to ensure that streets and/or public spaces have good levels of natural surveillance from buildings. This can be ensured by placing ground floor habitable rooms and upper floor windows facing the street.
- Boundary treatments should reinforce the sense of continuity of the building line and help define the street, appropriate to the rural character of the area. They should be mainly continuous hedges with a minority of low walls made of flint with red brick cap on top or lined with bricks standing perpendicular to the wall. The use of either panel fencing or metal or concrete walls in these publicly visible boundaries should be avoided. Also, boundary treatments should not impair natural surveillance.
- Front gardens should be included where this is characteristic of the area.
- If placed on the property boundary, waste storage should be integrated as part of the overall design of the property. Landscaping could also be used to minimise the visual impact of bins and recycling containers.

Figure 30: Street edges and property boundaries are defined by landscaped hedges and trees rather than a regular building line.

Figure 31: Low flint and brick property wall.

Figure 32: Back edge of residential properties are delineated by a thick planted buffer that screens most houses from the open countryside.

3.2.6. Building Heights/ Roofline

Creating a good variety in the roof line is a significant element of designing attractive places. There are certain elements that serve as guidelines in achieving a good variety of roofs:

- The scale of the roof should always be in proportion with the dimensions of the building itself;
- Monotonous building elevations should be avoided, therefore subtle changes in roofline should be ensured during the design process;
- Locally traditional roof detailing elements should be considered and implemented where possible in cases of new development; and
- Dormers can be used as a design element to add variety and interest to roofs.

Figure 33: House and extension showing variety in roofline, orientation, and traditional roofing materials.

Figure 34: Small cluster showing a main building mass (thatched roof) and smaller secondary masses (pantile roofs).

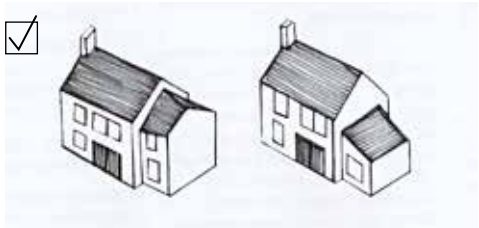
Figure 35: Houses on The Street showing a dynamic roofline with a diversity of roof orientations, pitches, and materials (slate, pantile, and plaintile).

3.2.7. Household Extensions

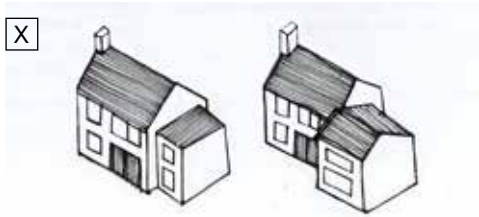
- The original building should remain the dominant element of the property regardless the amount of extensions. The newly built extension should not overwhelm the building from any given point.
- Extensions should not result in a significant loss to the private amenity area of the dwelling.
- Designs that wrap around the existing building and involve overly complicated roof forms should be avoided.
- The pitch and form of the roof used on the building adds to its character and extensions should respond to this where appropriate.
- Extensions should consider the materials, architectural features, window sizes, and proportions of the existing building and recreate this style to design an extension that matches and complements the existing building.
- In case of side extensions, the new part should be set back from the front of the main building and retain the proportions of the original building. This is in order to reduce any visual impact of the join between existing and new.
- In case of rear extensions, the new part should not have a harmful effect on neighbouring properties in terms of overshadowing, overbearing or privacy issues.

Figure 36: Successful contemporary side extension on The Street.

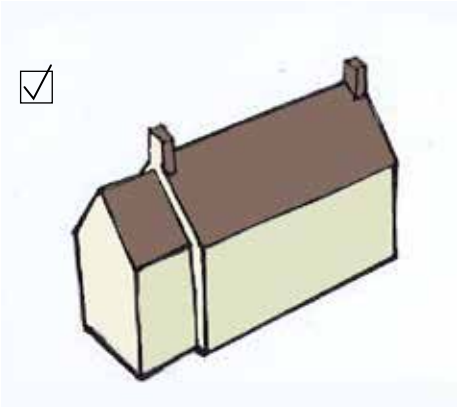
Figure 37: Positive design for contemporary side extension, habitable space and garage amenity.



Good example for side extensions, respecting existing building scale, massing and building line.

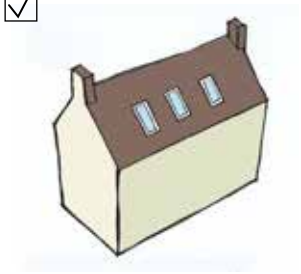


Both extensions present a negative approach when considering how it fits to the existing building. Major issues regarding roofline and building line.

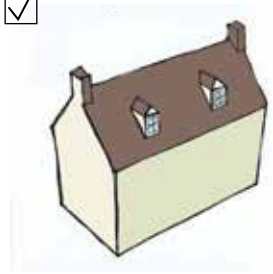


The extension has an appropriate scale and massing in relation to the existing building.

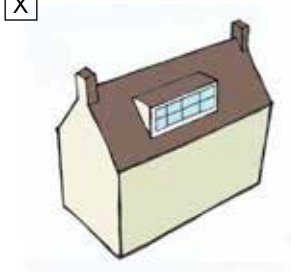
Design treatment in case of loft conversion:



Loft conversion incorporating skylights.



Loft conversion incorporating gabled dormers.



Loft conversion incorporating a long shed dormer which is out of scale with the original building.

Original roofline of an existing building.

Loft conversion incorporating gabled dormers.

Loft conversion incorporating gabled dormers which are out of scale and do not consider existing window rhythm nor frequency.

3.2.8. Materials and Building Details

The materials and architectural detailing used throughout Thorndon contribute to the rural character of the area and the local vernacular. It is therefore important that the materials used in proposed development are of a high quality and reinforce local distinctiveness. Any future development proposals should demonstrate that the palette of materials has been selected based on an understanding of the surrounding built environment.

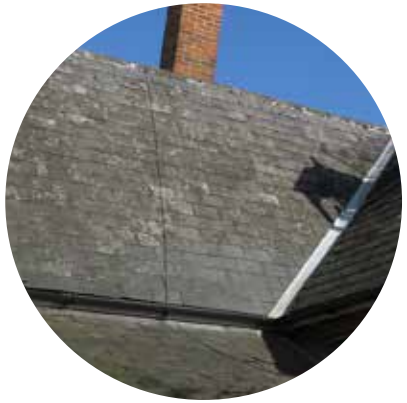
This section includes examples of building material that contribute to the local vernacular of Thorndon which could be used to inform future development.

RED BRICK

PEBBLE WALL WITH RED BRICK TRIM AND CAP

GABLED PORCH

BLACK WEATHERBOARDING



SLATE ROOF

FLINT FAÇADE WITH RED BRICK WINDOW TRIM

OFF-WHITE RENDER

“SUFFOLK PINK” RENDER

YELLOW OCHRE RENDER

THATCHED ROOF

GABLED DORMER

CLAY PANTILE ROOF

SIDE EXTENSION WITH LEAN-TO ROOF

BRICK CHIMNEY

STREET-FRONTING HEDGE

DECORATIVE BARGE BOARD

CLAY PLAINTILE ROOF

PAINTED WINDOW FRAMES

3.2.9. Parking

- Car parking solutions should be a mix of on plot and garage parking.
- For family homes, cars should be placed at the front or side of the property. For small pockets of housing a front or rear court is acceptable. Multiple garage parking is encouraged.
- Car parking design should be combined with landscaping to minimise the presence of vehicles.
- Parking areas and driveways should be designed to minimise impervious surfaces, for example through the use of permeable paving.
- When placing parking at the front, the area should be designed to minimise visual impact and to blend with the existing streetscape and materials. The aim is to keep a sense of enclosure and to break the potential of a continuous area of car parking in front of the dwellings by means of walls, hedging, planting, and use of differentiated quality paving materials.

Figure 38: House on The Street with on plot side parking.

Figure 39: Vegetation-screened on plot parking.

Figure 40: Side garage (right) with local building materials.

Figure 41: Effective screening with hedges, trees, and low walls avoid the creation of a streetscape dominated by vehicle parking and driveways.

3.2.10. Public Realm and Streetscape

- High quality landscaping and building materials should be used across the new development. Care should be taken when selecting the materials that will be used for the paved areas.
- High quality stone, gravel, granite, and bricks can provide durable and attractive hard surface throughout the public realm.
- Expensive materials such as sandstone and limestone could also be used to further enhance the quality of particular spaces.

Figure 42: Planted hedges and trees framing The Street, adding visual interest to the public interface between private and public areas.

Figure 43: Planted traffic triangle with a mature tree at the junction between The Street and the High Street.

Figure 44: Informal street edge created with landscaping and trees.

3.2.11. Building Scale and Massing

- Buildings should be sympathetic in scale to the context and should not pass 2-2.5 storey in residential areas.
- Subtle variation in height is encouraged to add visual interest, such as altering eaves and ridge heights. Another way of doing it could be by variation of frontage widths and plan forms. The application of a uniform building type throughout a development must be avoided.
- The massing of new buildings should ensure adequate privacy and access to natural light for their occupants, and avoid over shadowing existing buildings.

Figure 45: Examples of buildings in Thorndon showing a variety of heights and plans.

3.2.12. Fenestration

Fenestration on public/private spaces increase the natural surveillance and enhance the attractiveness of the place. Long stretches of blank (windowless) walls should be minimised. Overall, considerations for natural surveillance, interaction, and privacy must be carefully balanced.

Windows must be of sufficient size and number for abundant natural light.

Site layout and building massing should ensure access to sunshine and avoid over shadowing as many buildings as possible. New developments should also maximise opportunities for long distance views.

Consistent window styles and shapes must be used across one façade to avoid visual clutter.

In proximity to historic areas, fenestration must reflect an understanding of locally distinctive features such as scale, proportions, rhythm, materials, ornamentations, and articulation.

Figure 46: House displaying consistent window and door colour and styles.

Figure 47: Building displaying a consistent traditional window style and shapes across the main elevation.

3.2.13. Traditional Architecture

The gradual evolution of the parish over the centuries has resulted in an organic character to development. Each building has its own individuality resulting in variations in construction materials, height, the pattern of openings, and detailing. Buildings are predominantly 1 or 2 storeys and the change in roof heights and the presence of chimneys contribute to the visual interest of the historic village.

Figure 48: Examples of Suffolk traditional architecture in Thorndon.

3.2.14. Contemporary take on Traditional Architecture

Within the parish there are a few examples of successful contemporary architecture. These buildings are usually refurbished agricultural buildings with a contemporary extension built in high quality building materials. Although their design is contemporary, they demonstrate an intelligent understanding of materials, massing, and local traditional architecture that blends harmoniously with their physical context.

It is suggested that this trend continues to further expand with additional eco design features incorporated in future developments.

Figure 49: New houses using traditional materials (naturalised wood, red brick, and plaintile roofing) in a contemporary style.

Figure 50: New house with traditional Suffolk architectural elements such as pantile roofing, high-pitched gables, and yellow render.

Figure 51: Renovated building and wall using traditional materials such as flint, red brick, black weatherboarding, and pantile roofing.

3.2.15. Eco Design

Energy efficient or eco design combine all around energy efficient construction, appliances, and lighting with commercially available renewable energy systems, such as solar water heating and solar electricity.

Starting from the design stage there are strategies that can be incorporated towards passive solar heating, cooling and energy efficient landscaping which are determined by local climate and site conditions.

The aim of these interventions is to reduce overall home energy use as cost effectively as the circumstances allow for. Whereas, the final step towards a high performance building would consist of other on site measures towards renewable energy systems.

Figure 52: Examples of ecological housing using traditional and contemporary materials.

Please note that the requirements of Paragraph 3.2.15 do not apply to the Neighbourhood Plan and, in particular, Policy THN15.

3.2.16. Rainwater Harvesting

Rainwater harvesting refers to the systems allowing to capture and store rainwater as well as those enabling the reuse in-situ of grey water. These systems involve pipes and storage devices that could be unsightly if added without an integral vision for design. Therefore some design recommendation would be to:

a) Conceal tanks by cladding them in complementary materials;

b) Use attractive materials or finishing for pipes;

c) Combine landscape/planters with water capture systems;

d) Underground tanks;

e) Utilise water bodies for storage.

Figure 53: Examples of concealed tanks used for rainwater harvesting.

3.2.17. Permeable Pavement

Pavements add to the composition of the building. Thus permeable pavements should not only perform its primary function which is to let water filter through but also:

a) Respect the material palette;

b) Help to frame the building;

c) Create an arrival statement;

d) Be in harmony with the landscape treatment of the property;

e) Help define the property boundary.

Figure 54: Examples of permeable paving.

3.2.18. Servicing

With modern requirements for waste separation and recycling, the number of household bins quantum and size have increased. The issue poses a problem in relation to the aesthetics of the property if bins are left without a design solution. The images on this page illustrate design solutions for servicing units within the plot.

Figure 55: Example of bin storage.

Delivery

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4. Delivery

The Design Guidelines will be a valuable tool in securing context-driven, high quality development on the sites in question. They will be used in different ways by different actors in the planning and development process, as summarised in the table.

Actors	How They Will Use the Design Guidelines
Applicants, developers, and landowners	As a guide to community and Local Planning Authority expectations on design, allowing a degree of certainty – they will be expected to follow the Guidelines as planning consent is sought.
Local Planning Authority	As a reference point, embedded in policy, against which to assess planning applications. The Design Guidelines should be discussed with applicants during any pre-application discussions.
Parish Council	As a guide when commenting on planning applications, ensuring that the Design Guidelines are complied with.
Community organisations	As a tool to promote community-backed development and to inform comments on planning applications.
Statutory consultees	As a reference point when commenting on planning applications.

Figure 56: Grade II listed timber-framed barn with plastered and tarred façade.

About AECOM
AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A Fortune 500 firm, AECOM had revenue of approximately $17.4 billion during fiscal year 2016. See how we deliver what others can only imagine at aecom.com and @AECOM.

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