Landscape Design Report

Planning Application to South Dublin County Council

Project: Forge Field Residential Development, Stocking Lane, Rathfarnham, Co. Dublin

Client: Frank and Roslain Norton

503-LDR-01 v1.0

23 August 2023

Prepared by:

MURPHY+SHEANON

Horticulture & Landscape Architecture

CONTENTS.

1. INTRODUCTION

1.1. OVERVIEW

Murphy+Sheanon Landscape Architects have been appointed to provide landscape architectural services for a proposed residential development at Forge field, Stocking Lane, Rathfarnham, Co. Dublin.

Portal Architects on behalf of the applicant, Frank and Roslain Norton, intend to apply to South Dublin County Council for planning permission for a residential development at this site.

The purpose of this document is to detail the landscape design proposal for this development.

This report should be read in conjunction with the Landscape drawings pack submitted with this application. This landscape planning pack consists of the following drawings;

503-PD-01	-	Landscape Masterplan (Scale: 1:250@A2)
503-PD-02	-	Planting Plan (Scale: 1:250@A2)
503-PD-03	-	Green Infrastructure Plan (Scale: 1:250@A2)
503-PD-04	-	Green Infrastructure Integration Plan (Scale: 1:250@A2)
503-PD-05	-	Tree Mitigation Plan (Scale: 1:250@A2)
503-PD-06	-	Landscape Details (Scale: As shown@A2)

This landscape pack should also be read in conjunction with accompanying Architect's drawings, and other information prepared and submitted by the design team.

1.2. DEVELOPMENT DESCRIPTION

The development description is as follows;

"Planning permission application for a modern sheltered dwelling providing efficient living space and to accommodate the future needs of the family residing at Forge field, Stocking Lane, Rathfarnham, Co. Dublin.

The site is situated southwest of Firhouse and is accessed off Stocking Lane. The proposed development will consist of a single-bed low-level dwelling, with access from the existing entrance gate to 'Forge Field' from the private shared lane way leading to Rathfarnham Golf Club. The development will include one parking space, the removal of an existing septic tank, and the addition of two new proprietary wastewater treatment units and new surface water soakaways.

2. SITE DESCRIPTION

2.1. SITE LOCATION AND CONTEXT

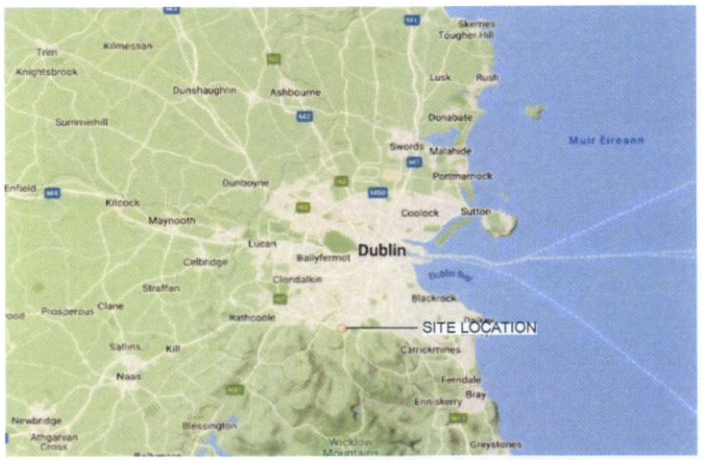
The proposed development site is located on Stocking Lane and is approximately 4km southeast of Tallaght town centre. The development site falls within the boundary of the South Dublin County Council Development Plan 2022-2028.

2.2. EXISTING SITE

The proposed net site area measures 3351 sqm. The proposed development is bounded by Stocking Lane to the North, agricultural land and Rathfarnham Golf Club directly to the East and South and an existing bungalow to the West of the site.

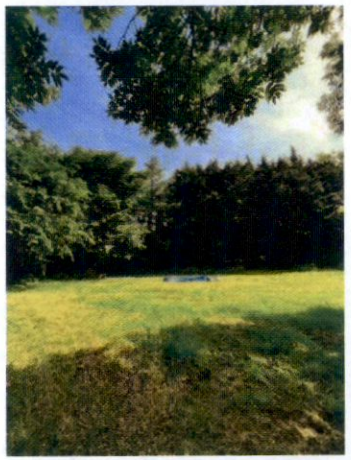
The site has an existing stepped bungalow rising to a two-storey living area over a ground level garage, this dwelling is to be retained. There is existing vegetation on the site. This vegetation follows the boundary of the site and consists of a variety of native and non-native tree species. See Drawing #503-PD-05 and the accompanying arborists reports/surveys for further information.

SITE BOUNDARY

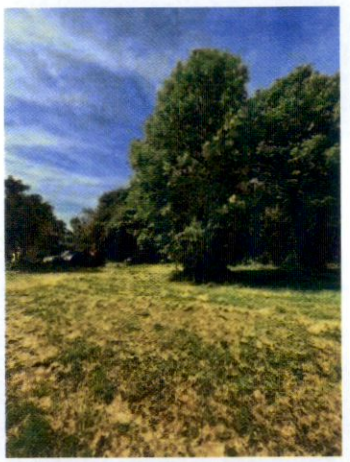


MAP SHOWING THE SITE IN REGIONAL CONTEXT.

CURRENT ON SITE CONDITIONS
VIEW: SOUTHEAST



CURRENT ON SITE CONDITIONS
VIEW: NORTHEAST



CURRENT ON SITE CONDITIONS
VIEW: SOUTHWEST

3. DESIGN OBJECTIVES

3.1. DESIGN OBJECTIVES

The following design objectives have been shaped through our analysis of the site and surrounding area, previous and current development initiatives within the area, and from consultations and information shared between the design team:

- To propose a palette of hard landscape materials that are appropriate for a residential development scheme and are complimentary to the proposed planting schemes.
- The proposed materials are of high quality, durable and maintenance-friendly.
- To propose a planting scheme that provides year-round colour and interest.
- Planting for bio-diversity: to propose a planting schedule that takes cognisance of the All-Ireland Pollinator Plans 2015-2020 & 2021-2025 as issued by the National Biodiversity Data Centre along with the most up-to-date 'Plants for Pollinators' plant lists as issued by the RHS.
- To propose wildlife friendly native tree species to mitigate against any loss of existing vegetation whilst providing efficient carbon sinks.
- To propose and integrate natural SUDs measures where feasible.
- The retention of existing trees, vegetation and existing green corridors where feasible.

3.2. DESIGN STRATEGY

The landscape design strategy for the development can be broken down as follows:

1 - Planting for Biodiversity
2 - Hard Landscaping Materials and Maintenance
3 - Green Infrastructure

The landscape design being proposed in this report has taken note of the South Dublin County Development Plan 2022 – 2028 and in particular the following sub-sections;

Chapter 4 - Green Infrastructure
Chapter 5 - Quality Design and Healthy Placemaking
Chapter 6 - Housing

The landscape design proposal has also been developed having regard to the following local and national policy documents:

- South Dublin County Council Biodiversity Action Plan 2020-2026
- South Dublin Green Space Factor Guidance Note
- National Biodiversity Data Centre - All-Ireland Pollinator Plans 2015-2020 and 2021-2025
- Sustainable Residential Development in Urban Areas (Cities, Towns and Villages) 2009 (issued by Dept. Of Environment, Heritage and Local Government)
- Gardening for Bats (issued by Bat Conservation Ireland)

How we implement the above strategy with be detailed in Section 4 of this document.

4. DESIGN PROPOSAL

4.1. LANDSCAPE MASTER PLAN -NTS

4. DESIGN PROPOSAL

4.2. PLANTING FOR BIODIVERSITY

A desire for more diversity in tree and plant species have been expressed by South Dublin County Council. We have developed a planting schedule that takes cognisance of this. We have also made reference to the All-Ireland Pollinator Plan 2021-2025 as issued by the National Biodiversity Data Centre, the most up-to-date 'Plants for Pollinators' plant lists as issued by the RHS, as well as 'Gardening for Bats' by Bat Conservation Ireland. We have put forward planting schemes with a range of species and plant types to encourage a variety of habitats which will support a diverse wealth of ecologies. Planting proposals have also been strategically located to provide screening in certain areas and to create buffer zones where required.

TREES

We have proposed a planting plan that includes five tree species, all of which are native species. T1 Ilex Aquifolium is an evergreen species while the four other species are deciduous and a variety of mature tree sizes. Tree sizes are all 18/20 cm girth.

PLANT MIXES

The following plant mixes have been proposed;

Plant Mix 1 - Ornamental Mix

An ornamental mix of shrubs, perennials and grasses. The evergreen shrubs and grasses will ensure year-round interest and structure

Plant Mix 2 - Border Mix

A functional and aesthetic mix of evergreen shrubs to provide soft planting buffers where required.

Plant Mix 3 - Understorey Mix

A mix specifically suited for planting under the canopy of the existing trees to be retained.

HEDGING

Hedge 1 - Ilex aquifolium (Holly). This native evergreen hedge is proposed to the south of the new dwelling, providing an effective soft boundary between the existing and proposed dwelling. This hedgerow will also provide refuge for local wildlife.

4. DESIGN PROPOSAL

4.2 PLANTING FOR BIODIVERSITY

Please refer to planting plan (503-PD-02) for further details

LEAF DETAIL

BARK DETAIL

LEAF DETAIL

BARK DETAIL

ACORN DETAIL

LEAF DETAIL

ILEX AQUIFOLIUM - HOLLY

2.5m feathered to base.
To be double staked.

CORYLUS AVELLANNA- HAZEL

Multi-stem. 18/20cm girth.
To be anchored by underground guying.

QUERCUS ROBUR - NATIVE OAK

Clearstem. 2m Height. 18/20cm girth.
To be double staked.

4. DESIGN PROPOSAL

4.2 PLANTING FOR BIODIVERSITY

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FLOWER DETAIL

LEAF DETAIL

LEAF DETAIL

BARK DETAIL

BETULA PENDULA- SILVER BIRCH

Clearstem. 2m height. 18/20cm girth.
To be double staked.

QUERCUS PETRAEA - SESSILE OAK

Clearstem. 2m height. 18/20cm girth.
To be double staked.

4. DESIGN PROPOSAL

4.2 PLANTING FOR BIODIVERSITY

Please refer to planting plan (503-PD-02) for further details

PLANT MIX 1 - ORNAMENTAL MIX

Shrubs:
Aucuba japonica 'Rozanne' ^
Aucuba japonica 'Variagata'
Sarcococca confusa ^*
Fatsia japonica ^*
Buddleja davidii 'Buzz Sky Blue' *

Perennials
Hydrangea paniculta 'Limelight' ^
Geranium 'Rozanne' ^*
Salvia 'Carandonna' ^*
Verbena bonariensis ^*

Grasses
Carex testacea 'Prairie Fire'
Libertia 'Grandiflora' ^


Sarcococca confusa (PM1)


Fatsia japonica (PM1)


Buddleja davidii 'Buzz Sky Blue' (PM1)


Hydrangea paniculta 'Lime-light' (PM1)


Geranium 'Rozanne' (PM1)

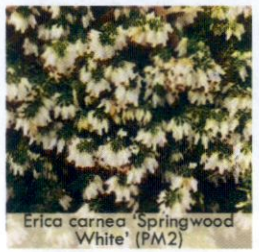

Salvia 'Carandonna' (PM1)

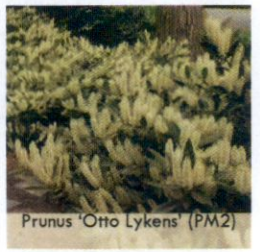

Carex testacea 'Prairie Fire' (PM1)


Libertia 'Grandiflora' (PM1)

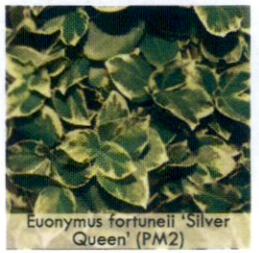
PLANT MIX 2 (PM2) - BORDER MIX

Euonymus fortuneii 'Silver Queen'
Erica carnea 'Springwood White' *^
Prunus 'Otto Lykens' *^
Skimmia japonica 'Rubella' *^


Erica carnea 'Springwood White' (PM2)


Prunus 'Otto Lykens' (PM2)


Skimmia japonica 'Rubella' PM2)


Euonymus fortuneii 'Silver Queen' (PM2)

^ RHS Award of Garden Merit

* RHS Plants for Pollinators

4. DESIGN PROPOSAL

4.2 PLANTING FOR BIODIVERSITY

Please refer to planting plan (503-PD-02) for further details

PLANT MIX 3 - UNDERSTOREY MIX

SHRUBS/PERENNIALS:
Helleborus 'Double Queen' *
Skimmia 'Rubella' *^

BULBS:
Aegopodium Podagaria
Allium Triquetrum
Arum Maculatum
Digitalis Purpurea *
Glechoma Hederacea
Hyacinthoides Non-Scripta
Lysimachia Nemorum
Stellaria Graminea
Galanthus Nivalis *
Muscari Armeniacum *^
Crocus (In Variety)
Colchicum (In Variety)


Helleborus 'Double Queen' (PM3)


Skimmia 'Rubella' (PM3)


Aegopodium Podagraria (PM3)


Digitalis Purpurea (PM3)


Galanthus Nivalis (PM3)


Hyacinthoides Non-Scripta (PM3)


ILEX AQUIFOLIUM 'BLUE PRINCE' - HOLLY HEDGE


LEAF DETAIL

1.8M high hedge for screening between the existing dwelling and the proposed dwelling. The position of this hedge delineates the spaces associated with each dwelling. The hedge will also provide refuge for wildlife traversing the site.

^ RHS Award of Garden Merit

* RHS Plants for Pollinators

4. DESIGN PROPOSAL

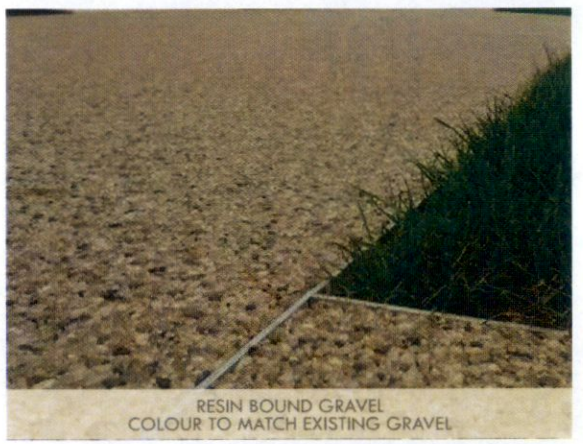
4.3. HARD LANDSCAPE ELEMENTS AND SURFACES

The overall aim of this landscape proposal is to create a high-quality, durable and aesthetically-pleasing landscape environment that integrates effectively with the proposed building development and the natural environment. To achieve this aim, a palette of hard landscape materials that are suitable for an external urban environment and that are complementary to the proposed planting schemes has been proposed.

Surface	Proposed For	Material Description	Material Details
Kilsaran 'Shelbourne Flag'	Paved area to rear of proposed new dwelling.	Ground Granite Aggregate Concrete Flag Paving. A modern alternative to porcelain and natural stone. Extremely robust due to its premium granite surface. Paving flag keeps the declared slip resistance throughout its life cycle.	Silver Granite. Ground granite aggregate finish. 600x300x50mm.
Tobermore 'Fusion Edge'	To Edge of resin bound gravel.	Tobermore's Fusion Edge is a cost-effective, premium kerb with the striking aesthetics of a granite kerb.	Silver Granite. 150x75x900mm.
Resin Bound Gravel	Vehicular access to proposed dwelling	Resin bound gravel (Permeable). Sub-base to be prepared to engineers/manufacturers specifications.	Colour to match existing gravel driveway on site.

KILSARAN 'SHELBOURNE FLAG'
SILVER GRANITE COLOUR

TOBERMORE 'FUSION EDGE'
SILVER GRANITE COLOUR



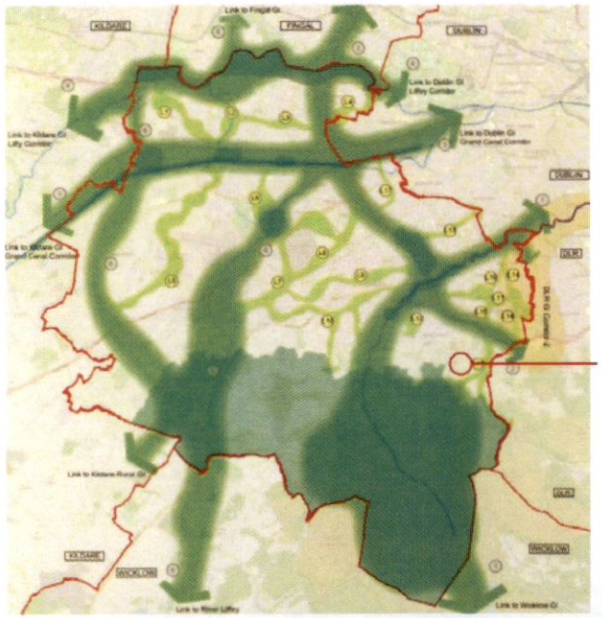
RESIN BOUND GRAVEL
COLOUR TO MATCH EXISTING GRAVEL

4. DESIGN PROPOSAL

4.4. GREEN INFRASTRUCTURE

Green Infrastructure is an integral part of this proposal. The South Dublin County Council green space factor tool was used to calculate the quality and quantity of landscaping and green infrastructure across the site, a score of 0.69 was achieved (See Drawing #503-PD-03 for further information). Interventions such as permeable paving, meadow grass, vegetation and soakaways, coupled with the retention of existing trees were used to achieve this score.

Where possible existing trees were retained (See arborists report/survey) to preserve green corridors within the site and surrounding area. Additional tree planting has been proposed to strengthen these links (See Drawing #503-PD-04 for further information).



GREEN INFRASTRUCTURE STRATEGY MAP
TAKEN FROM SDCC CDP 2022-2028

Green Space Factor Calculations (adapted SDCC tool)

Zoning Lookup	Minimum GI Score
RU	0.7

SITE AREA (sqm)		3351		
	Surface Type	Factor	Surface Area (sq. m.)	Factor Values
	Surfaces			
1	Short Lawn	0.3	608	182.4
2	Tall Lawn (Meadow Grass)	0.5	186	93
3	Resin Bound Gravel	0.3	32	9.6
3	Existing Gravel	0.3	230	69
	Vegetation			
4a	Shrubs below 30cm	0.4	18.75	7.5
4b	Hedgerow	0.5	14	7
4b	Shrubs above 30cm	0.5	150	75
4c	Pollinator friendly perennials	0.5	225	112.5
4d	Preserved hedgerows	1.2	0	0
	Trees			
	New trees			
5a	Small trees (10-14cm gth)	0.6	10	6
5a	Medium trees (16-20cm gth)	0.6	150	90
5a	Large trees (25cm+ gth)	0.6	30	18
5b	Preserved trees	1.2	1344	1612.8
	Natural SUDs interventions			
7	Soakaways	0.6	53	31.8
7	Bioretention tree pits	0.6	0	0
	Green Roofs			
9a	Intensive green roofs	0.7	0	0
9b	Extensive green roofs	0.6	0	0
10	Green wall	0.4	0	0
11	Retained open water	2	0	0
12	New open water	1.5	0	0
TOTAL GREEN FACTOR				2314.6
GREEN SPACE FACTOR SCORE			Total Green Factor/Site Area	0.69

APPENDICES

LANDSCAPE MAINTENANCE SCHEDULE (PAGE 1 OF 4)

COMPONENT	OBJECTIVES	TASK	TIME OF YEAR	FREQUENCY PER YEAR	YEAR 1-5	YEAR 5-15
General maintenance requirements to all planted areas, unless otherwise stated in the detailed schedule below.	To maintain high standard planting scheme across site and ensure healthy establishment of plants.	Inspection.	March - September.	Annually.	✓	✓
		Inspect tree stakes. ties and shelters and replace where necessary. Remove in Year 5.	February and after strong winds	Annually. In Year 5- Remove.	✓	
		Watering - during establishment and to ensure continued thriving	As necessary during dry spells, or indicated in the detailed schedule below.	As required- daily in dry spells mainly April- September.	✓	✓
		Refirm new tree / shrub planting.	February and after strong winds.	Annually and as required following inspection.	✓	
		Removal of debris and litter	Throughout the year.	Each maintenance visit.	✓	✓
		Plant replacements and reinstatement to Year 5 when instructed.	November to March	Annually next following planting season.	✓	
		Apply fertiliser manufacturers recommended.	March	Annually	✓	✓
		Top up rounded pea gravel (4-6mm) to 50mm depth.	November	Annually	✓	✓
		Ensure all Health & Safety considerations are taken into account.	Throughout the year	As required	✓	✓
		Rake-up fallen leaf litter; remove from site	Generally through September - December, and as required throughout the year.	As required	✓	✓

LANDSCAPE MAINTENANCE SCHEDULE (PAGE 2 OF 4)

COMPONENT	OBJECTIVES	TASK	TIME OF YEAR	FREQUENCY PER YEAR	YEAR 1-5	YEAR 5-15
New tree planting (incl. standard trees, EHS, semi-mature, multi-stemmed specimens and feathered trees)	To ensure that trees establish and remain in a healthy condition.	Establishment maintenance (weed control, fertiliser, tree guy wires, refirming, formative pruning).	As necessary, following inspection.	As necessary, following inspection.	✓	
		Maintain weed free 1m diameter area at base of tree using suitable organic herbicide or by hand weeding. Apply organic herbicide during growing season in favourable weather conditions as per manufacturer's instructions. Note: Avoid spray drift.	As necessary, following inspection.	As necessary, following inspection.	✓	✓
		Check tree for damaged limbs. Remove and treat wounds where necessary.	Annually or as required following inspection.	Annually or as required following inspection.	✓	✓
		Pruning where required to ensure appropriate habit and form.	Annually or as required following inspection.	Annually or as required following inspection.	✓	✓
		Check for failing or dangerous trees and remove/ replace with like for like (species/ specification).	Annually or as required following inspection.	Annually or as required following inspection.	✓	✓
		Remove all crossing branches.	Annually or as required following inspection.	Annually or as required following inspection.	✓	✓
		Inspect tree stakes, ties and shelters and replace where necessary. Remove in Year 5.	February and after strong winds.	Annually. In year 5 – remove.	✓	
		Check for leaning trees and re-straighten.	Annually or as required following inspection.	Annually or as required following inspection.	✓	✓
Existing Trees	To ensure continued healthy growth of trees and safety of the site.	Inspect to record pests and diseases, deadwood, impaired physiological and structural condition.	Late spring/summer and following severe weather (heavy snow, strong wind).	Annually.	✓	✓
		Tree management operations or removal as required.	As necessary in winter or immediately following receipt of inspection report if urgent action is required.	As required.	✓	✓
		Review tree survey information and tagging.	March - September.	Every 5 years.	(Year 5 only) ✓	(Year 10 and 15 only) ✓

LANDSCAPE MAINTENANCE SCHEDULE (PAGE 3 OF 4)

COMPONENT	OBJECTIVES	TASK	TIME OF YEAR	FREQUENCY PER YEAR	YEAR 1-5	YEAR 5-15
Bulbs	To display to best advantage	Areas of bulbs shall be left uncut until after they have finished flowering and their foliage yellowed and died back, after which they shall be cut as part of the routine grass cutting regime (see below)	Throughout, according to flowering time	As required.	✓	✓
Ornamental planting - shrubs and herbaceous material.	To provide attractive and healthy landscape year-round. To create healthy attractive plant mixes. To control weed growth.	Pruning to encourage best display of given species, taking into account of natural habit and form:				
		a) Winter flowering	Prune Spring	Annually	✓	✓
		b) Shrubs flowering between March and July	Prune immediately after flowering	Annually	✓	✓
		c) Shrubs flowering between July and October	Prune back to old wood in winter.	Annually	✓	✓
		Thinning	As necessary following instruction.	Annually if required.	✓	✓
		Weed control	March - September.	As required following inspection.	✓	✓
		Soil aeration	April	As required following inspection.	✓	✓
		Soil level readjustment/ edging	Spring	Annually.	✓	✓
		All herbaceous perennials and ornamental grasses that die back in winter to soil level can be cut back in autumn and winter, using the following guidance: Using a knife, shears or secateurs, cut stems close to the 'crown' or dormant base of the plant If there is any young growth, cut to just above it. Take the opportunity to remove weeds, digging out those with thick or fleshy roots. Cut back perennials that produce leaves and flower stems from below the soil level, to soil level. Less severely cut back perennials showing new basal shoot growth (e.g. Sedum) Any attractive dead stems or flower heads can be left until early spring to provide structural interest throughout the winter. Separate and dispose of diseased material (showing signs of leaf-spots, mildew and rusts, for example).	Autumn/Winter	Annually	✓	✓
		Evergreen perennials are not to be cut back, but should be tidied during spring and summer by removing dead foliage.	Spring and Summer	Annually	✓	✓
		Thinning herbaceous perennials	Spring	Annually	✓	✓