ORKNEY
ISLANDS COUNCIL

Development and Infrastructure

Roads Management and Maintenance Plan

2013 – 2018

Contents

Part A - Introduction 2
Section 1 - Purpose of Plan 2
Part B - Framework 4
Section 2 - Policy Framework 4
Section 3 - Best Value and Continuous Improvement 6
Section 4 - Legal Framework 9
Part C - Roads Management and Maintenance Plan 11
Section 5 - Strategy and Hierarchy 11
Section 6 - Inspection, Assessment and Recording Regime 20
Section 7 – Condition Standards and Investigatory Levels 26
Section 8 - Performance Management 29
Section 9 - Programming and Priorities 30
Section 10 - Winter Service 31
Section 11 - Weather and Other Emergencies 32
Section 12 - Verge Maintenance 33
Part D – Sustainability, Procurement and Financial Management 36
Section 14 - Sustainable Roads Maintenance 36
Section 15 - Procurement and Service Delivery 41
Section 16 - Financial Management 42
Appendix 1 - Carriageway Hierarchy 43
Appendix 2 – Other Council Roads 62
Appendix 3 – Private Roads 63
Appendix 4 – Footway Hierarchy 64
Appendix 5 – Footpath Hierarchy 74
Appendix 6 – Cycle Hierarchy 75
Appendix 7 – Street Lighting 76
Appendix 8 - Illuminated Signs and Bollards 77
Appendix 9 - Non-illuminated Signs and Bollards 78
Appendix 10 - Structures 79
Appendix 11 - Drainage 81
Appendix 12 - Line Marking 82
Appendix 13 - Safety Barriers 83
Appendix 14 - Car Parks 84
Appendix 15 - Other Assets 85
Appendix 16 - List of Operational Plans 86
Appendix 17 - Defect Intervention Levels for Safety Inspections 87
Appendix 18 - Condition Standards for Service Inspections 89

Part A - Introduction

Section 1 - Purpose of Plan

1.1 Introduction

The first Roads Management and Maintenance Plan (2005-2008) was written following the restructuring of the Department of Technical Services and reflected the objectives of the best value review of Roads Services carried out in 2001 and the revised code of practice for Roads Maintenance 'Well Maintained Highways' published in 2005. This review reflects the 2005 code of practice as revised in November 2011.

It is intended that this review will reflect the changes in Council structure, the development of a draft asset management plan (RAMP) and the implementation of a pavement management system within Roads. The purpose of roads management and maintenance plan remains the same as before, to maintain the roads network in a safe and serviceable condition for the efficient movement of people, goods and services, both now and in the future. However it must reflect the current budgetary constraints that the Council has to work within and that, in the immediate future, expansion and improvement of the roads network is not possible.

The objective of this plan will continue to be to design a management and maintenance regime that will deliver a Safe, Serviceable and Sustainable road network that provides for the needs of present road users without compromising the ability of future generations to meet their own needs, and contributes to the wider objectives and corporate goals of the Council, demonstrates best value and continuous improvement.

1.2 The Importance of Roads Management and Maintenance

A safe and serviceable road network is an essential requirement of any community. The proper management of the various roads functions and maintenance of the asset is a vital requirement for the well-being of the community.

The roads not only carry all people, vehicles and goods, but also all the other service apparatus, such as water, sewerage, electricity and telephones that are essential to maintain our present standard of living.

In addition the roads network is the first thing most tourists or other visitors to Orkney will see and consequently will be the first impression that they receive of the area and the Council.

It is therefore vital that there is a structured approach to roads management and maintenance that ensures the safety of the network whilst minimising the need for reactive maintenance and ensures serviceability for road users by maximising the long term benefits of routine maintenance.

Roads management and maintenance must also meet the challenge of Sustainability, which requires that we achieve a balance of the social, economic and environmental implications of both individual schemes and the service as a whole that provides, as far as we are able, for both our present needs and for those of future generations.

1.3 Roads Management and Maintenance Vision

The Roads Management and Maintenance function must provide a Safe, Serviceable and Sustainable roads service in support of the Orkney Islands Council, Council Plan 2013- 2018, and the needs of local people, communities and businesses.

1.4 Roads Management and Maintenance Mission Statement

To Manage and Maintain the roads network to ensure the safe and efficient movement of people, goods and services for the long-term social and economic benefit of the whole community.

1.5 Roads Management and Maintenance Strategy

The Roads Management and Maintenance Plan (RMMP) will deliver the following:-

Roads Network Safety

- Complying with statutory obligations
- Meeting user's needs

Roads Network Serviceability

- Ensuring network availability
- Achieving network integrity
- Maintaining network reliability
- Enhancing network condition

Roads Network Sustainability

- Minimising cost over time
- Maximising value to the community
- Minimising environmental intrusion

Part B - Framework

Section 2 - Policy Framework

2.1 Objectives of the Roads Management and Maintenance Plan (RMMP)

Network Safety, Serviceability and Sustainability remain the three core objectives of the Roads Management and Maintenance Plan. However, the plan should also provide a framework for establishing outcomes against which service and asset performance can be measured and the development of local performance indicators for comparison and use in best value reviews. The RMMP will also contribute towards the implementation of the developments and improvements detailed in the Development and Infrastructure (D and I) Service Plan (SP).

2.2 Policy Co-ordination

The RMMP will, as directed by the Development and Infrastructure Service Plan, contribute to the wider corporate objectives of the Council Plan 2013-2018 'Our Plan', the Community Plan, Orkney 2020: Our Vision and the single outcome agreement agreed with the Scottish Government. If appropriate, maintenance priorities will be altered to assist the wider corporate strategic goals which may include: community regeneration projects, safer communities, social initiatives or similar types of projects.

In turn it is hoped that the RMMP will help influence the wider policy agenda and budget allocations of the Council through Corporate Resource Planning.

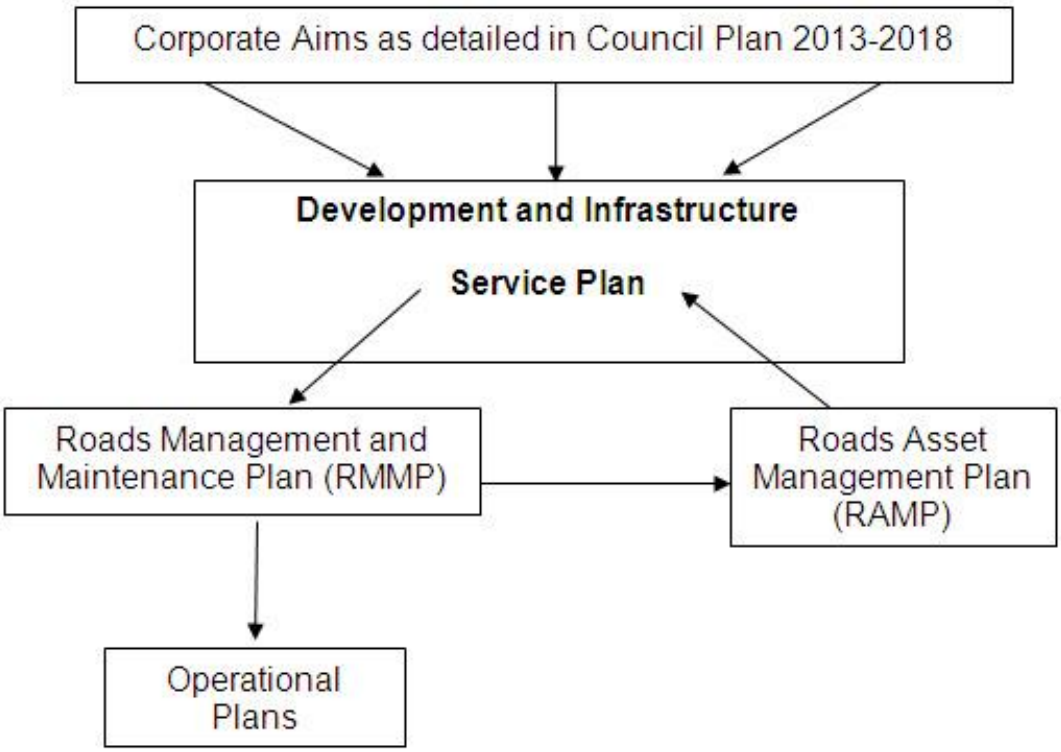
In developing the RMMP, account will be taken of other Council Services' objectives for transport integration and network management, including strategies for public transport, walking and cycling, again to give added value to these projects.

2.3 Roads Asset Management

The management of roads maintenance needs to be set within the context of the Development and Infrastructure Service Plan, the Roads Asset Management Plan and an overall asset management regime. The Service Plan will provide the strategic framework within which roads services are delivered and will form the link between the wider corporate aims of the Council, contained in the Council Plan 2013 – 2018 , the Community Plan and its local Transport Strategy and will focus primarily on its front line services.

The Roads Asset Management Plan (RAMP), which will include the roads and associated infrastructure replacement programme, will enable us to value the assets we have and identify the funding required to maintain the asset in its present condition. It will help identify the effects of budgetary constraints on the level of service provided and allow a considered assessment of the effects of the reduced level of service and ensure that they are mitigated through an efficient use of the available resources.

The Roads Management and Maintenance Plan (RMMP) will focus on the management and maintenance of the infrastructure itself at an operational level. It will contain detailed operational plans for the delivery of front line services and will establish an inspection regime to monitor and report on the condition of the asset.



2.4 Risk Management

The Code of Practice recommends that roads maintenance, including the establishment of inspection regimes, levels of service, determining priorities and programmes of work, and procuring the service, should all be undertaken against a clear understanding of the risks and consequences involved.

Although the most commonly understood risks affecting the service relate to the safety of the network and liability for accidents or injury to users or employees, there are a wide range of other risks that should be considered. These include:-

- Asset loss or damage.
- Service failure or reduction.
- Operational risks.
- Environmental risks.
- Financial risks.
- Contractual risks.

The risk register for the roads asset is being developed as part of the RAMP.

2.5 Sustainable Roads Management and Maintenance

Sustainability in relation to the RMMP means securing a balance of social, economic and environmental wellbeing in the delivery of the service that does not compromise the ability of future generations to meet their own needs. However, it must also mean securing sufficient investment and operational resources to avoid a progressive deterioration of the asset.

It may also, in the current economic climate, mean maintaining, as far as possible, the current asset in a steady state condition with a shrinking budget.

Section 3 - Best Value and Continuous Improvement

3.1 Service Improvement Plan, High Level Reviews (Best Value Reviews) and Management Reviews

Best Value reviews, now known as High Level Reviews and Management Reviews, will be used to identify opportunities for improvement and to add value to other services provided by the Council and others. Service conflicts will be reconciled where they exist. Best Value reviews will also be used as an aid to benchmarking the policies, strategies and practices of the Authority.

The Development and Infrastructure Service Plan will provide the strategic framework within which the RMMP exists.

3.2 Principles of Service Delivery

Our policies, programmes and service delivery arrangements for roads management and maintenance will provide for efficient, effective and economic management of the network, giving priority to the needs of the user and support to the wider corporate objectives of the Council. Network safety and statutory duties will however have to be the prime considerations.

3.3 Consultation

The views of users, the wider community and their representatives will be sought in the development and regular review of roads management and maintenance policies, programmes and priorities. These will be taken into account when setting levels of service and developing operational procedures.

In addition, consultation will also take place with other Local Authorities. This consultation will be particularly targeted to achieve consistency and identify the scope for joint or cross boundary working.

3.4 Information and Publicity

We will provide timely information and publicity about the nature and programming of road maintenance works to enable those affected, where necessary, to make arrangements to mitigate such effects. This information will be updated if works are delayed or extended.

3.5 Public Transport Service Reliability

Attention will be paid to the quality and the timeliness of information to providers and users of public transport in view of the importance of maintaining confidence in the timetable of advertised services. Closures and diversions will be for the minimum period required for efficient completion of the works.

3.6 Community Relations

Arrangements will be made for receiving regular feedback from samples of users and others affected by works in order to monitor performance and review priorities.

Arrangements will be established to receive and deal with compliments, service requests, complaints and other information from users and the community, including standards for response, arrangements for immediate or planned action and recording of all transactions.

3.7 Community Contact

Arrangements will be made for the regular monitoring of users' and community compliments, service requests, complaints and information on the nature and standard of responses, and the subsequent review of practice in the light of the monitoring.

Employees responsible for dealing with user and community contacts will be competent to determine the relative urgency of response and to enable immediate action to be taken where necessary. Checklists and procedures will be provided and relevant training and support provided.

3.8 Customer Care Code

The views people have of the Council can be influenced by the reception they receive from the employees they contact.

In accordance with the Council's policies we will carry out all our dealings with people, including other employees, in the following manner:

- Responsive.
- Effective.
- Supportive.
- Professional.
- Efficient.
- Caring.
- Tolerant.

3.9 Involvement of Employees, Contractors and Agents

Arrangements will be made to facilitate the involvement of all the elected members, employees, contractors and agents in building commitment and pride in the roads management and maintenance service, and to maximise individual contributions to the process of continually improving Best Value Service Delivery.

3.10 Training and Development

In addition to the need for Health and Safety training as noted above, standards can be improved and objectives achieved more easily if all those involved in the road maintenance functions receive training necessary to raise their level of competence in the field.

We will endeavour to have all relevant personnel trained to SVQ level in road maintenance management in addition to professional qualifications for other relevant personnel involved in the delivery of the road maintenance service.

Training will be given for Inspections and Surveys where the quality and treatment of data could have significant legal and financial implications.

Special training and familiarisation with operational procedures and equipment will be given for personnel involved in the delivery of Winter Services.

We will make sure that all those involved understand the extent and nature of the Authority's legal obligations for road maintenance and how these relate to their

particular responsibilities, including the important distinction between duties and powers.

3.11 Management of Claims

Arrangements will be made for recording and considering service requests and complaints which might develop into claims against the Council or others, including standards for the management of claims and provision of ongoing information.

Section 4 - Legal Framework

4.1 Road Maintenance Legal Framework

This section is not intended to be a comprehensive statement of the legal situation regarding roads management and maintenance. It is provided for general information and full legal advice should be sought elsewhere.

Many of the roads management and maintenance activities are based upon statutory powers and duties contained in legislation and precedents developed over time as a result of claims and legal proceedings.

Even in the absence of specific duties and powers, authorities have a general duty of care to users and the community to maintain the road network in a condition fit for its purpose. This principal should be applied to all decisions affecting roads management and maintenance.

In Scotland the key roads management and maintenance legislation is contained in the Roads (Scotland) Act 1984. Section 1 provides for a duty for local roads authorities to keep a "list of public roads" and to maintain and manage them. This Act does not provide for defence against alleged failure to maintain.

Section 34 of the above Act provides for a duty for authorities to "take such steps as they consider reasonable to prevent snow and ice endangering the safe passage of pedestrians and vehicles over public roads".

In 2005 the Transport (Scotland) Act 2005 was implemented. This created the position of the Scottish Road Works Commissioner whose main functions are to monitor the carrying out of road works in Scotland by Roads Authorities and Utilities and their compliance with the New Roads and Street Works Act 1991 and the obligations imposed under it. In addition, the Commissioner is the Keeper of the Scottish Road Works Register through which overall planning and co-ordination of works on roads is achieved.

In 2001, The Institute of Highways and Transportation published "Delivering Best Value in Highway Maintenance" A Code of Practice for Maintenance Management. This document has now been revised, updated and was republished as “Well-Maintained Highways” A Code of Practice for Highway Maintenance Management in July 2005. Well Maintained Highways was revised and reissued in November 2011. As with previous publications this document is supported, endorsed and recommended by national government and all the relevant local government organisations. The document is the latest guide to good practice in road maintenance management and,although it has no legal standing, its recommendations should be considered by an authority when carrying out its road maintenance function.

The Code of Practice states that it has been recognised that, in cases of claim or legal action, the contents of that Code of Practice may be considered to be a relevant consideration. In these circumstances, where authorities elect in the light of local circumstances to adopt policies, procedures or standards differing from those suggested by the Code, it is essential for these to be identified together with the reasoning for such differences.

The Code of Practice is based on the assumption that available funding for roads maintenance will provide some flexibility for authorities to pursue a regime of

assessment and rational planning of programmes and priorities. Where this is not the case, statutory obligations for network safety will need to take precedence.

Overall, to comply with legislation, regardless of the common sense need to maintain the asset, it would appear that authorities require to have appropriate written policies and procedures in place for road maintenance management.

In view of the legal situation and the present challenging environment, it is essential that the road revenue budget is allocated in a systematic logical manner based on a structured maintenance management plan. This Plan is prepared on this basis.

4.2 Health and Safety

The principle items of Health and Safety legislation affecting this plan are as follows;

- The Health and Safety at Work Act 1974.
- The Management of Health and Safety at Work Regulations 1992.
- The Construction (Design and Management) Regulations 2007.

These regulations make it a requirement for the Authority to establish suitable arrangements for the management of all construction works so as to ensure that all works are carried out in a safe manner.

In addition, there are a number of other regulations and Codes of Practice that relate to the management of Health and Safety on site, these include:-

- The Traffic Signs and General Directions; Chapter 8 - Traffic Signs Manual-Red Book.
- New Roads and Streetworks Act.

All those involved in the planning, management and delivery of the Roads Maintenance will receive appropriate training to ensure that all activities are carried out in accordance with relevant Health and Safety legislation.

Part C - Roads Management and Maintenance Plan

Section 5 - Strategy and Hierarchy

5.1 Roads Management and Maintenance Service

The Road Management and Maintenance Service is the responsibility of Development and Infrastructure, Roads Services. In addition to the maintenance and management of the Council's roads, the Service also undertakes all Street Lighting Maintenance and provides Winter Service activities, including the core resources to enable an Emergency Response Service in support of the Council's Corporate Emergency Plan.

The Road Maintenance Service look after 979 kilometres of carriageway, 123,000 square metre of footways, footpaths and cycleways, 46 bridges, 8.5km of fences and handrails and 3,126 streetlights and lit signs.

The road network is a very valuable asset. It is estimated that it would cost in excess of £1100 million to replace the road carriageway network in Orkney Islands Council's area. In addition, it is estimated that the replacement cost of the Churchill Barriers is in the region of £100 million. This replacement value is not practically achievable and maintaining the asset is of paramount importance to properly serve the present generation of pedestrians, cyclists, buses, cars, motorcycles and lorries who use the network increasingly every day, as well as for future generations.

The demands on the maintenance service are very challenging. Due to the changing nature of transport in Orkney since the introduction of ro-ro ferries in the mid-1970s, the strategy adopted has been to concentrate resources heavily towards structural and routine maintenance to minimise the cost of reactive maintenance.

5.2 Roads Management and Maintenance Strategy

Our roads management and maintenance strategy will be based upon;

- A robust framework of policies and objectives for the service (Development and Infrastructure Service Plan).
- A detailed inventory of all relevant components of the asset (RAMP).
- A defined hierarchy of all elements of the network (RMMP).
- A comprehensive management system of inspecting, recording data, analysing, prioritising and programming works (Pavement Management System, WDM).
- Arrangements to monitor, review and update as necessary, each component of the strategy and the performance of the strategy as a whole in delivering the core maintenance objectives (Development and Infrastructure Service Plan).
- All in accordance with sustainability and best value.

The strategy will be subject to alterations as required by changing circumstances, changes to the network or other relevant matters.

5.3 Designing to Minimise Maintenance

The design of new roads or alterations to existing roads will take account of the need to consider the future maintenance implications of the new construction.

5.4 Maintenance Management System

5.4.1 Introduction

The Roads Maintenance Management System comprises four main components, these are;

- The network model. This is the Street Gazetteer, all asset data is referenced against it.
- The Asset Database. An integrated Road Asset Management System has been procured from WDM Ltd. This will record information on the type, condition and location of all assets.
- Data Rules, which will define the standards, procedures and data processing parameters.
- Specialist Applications. These are the specialist programmes which process data relevant to the different technical areas such as Road Condition (SRMCS), Skid Resistance (SCRIMS), accidents, maintenance and lighting etc.

Although based on the recommendations contained in the Code of Practice, the roads maintenance management system will be designed and adapted to suit the particular needs of Orkney Islands Council.

The Network Model

Orkney Islands Council is obliged to maintain a Local Street Gazetteer (LSG) which contains a definitive, geo-referenced streets database for the authority's area. This will contain a list of all roads in the area, both public and private, whether maintained by the Roads Authority or not. The Gazetteer will be maintained in accordance with the agreed conventions and will comply with BS7666:2006.

The Asset Database

As noted above, the Council has procured an Integrated Road Asset Management System from WDM Ltd. This comprises four main elements, a pavement management system (PMS), a routine maintenance system (RMS), a lighting management system (LMS) and an accident management system (AMS).

Pavement Management System (PMS)

This is a database interface and is used to analyse the data collected by the annual Scottish Road Maintenance Condition Survey (SRMCS), and Skid Resistance Survey (SCRIMS). In addition, together with the Roads Asset Management Plan (RAMP), it will enable the Council to develop a more accurate assessment of the Roads Maintenance backlog, asset valuation and undertake whole life costing if required.

Routine Maintenance System (RMS)

This system will be used for the Management and administration of both cyclic and Non-cyclic maintenance operations. The database allows the user to enter, view and amend data using a variety of tools including map based overlays of the road network. This system will be used to record the results of safety inspections carried out in accordance with the RMMP.

When developed, this system will include a Works Instruction Manager (WIM) which is designed to accept the input of fault or maintenance instructions generated from the safety inspections and manage the response to these instructions.

Lighting Management System (LMS)

This database will hold the inventory data for the Councils lighting stock. In addition, when developed, will be used to record all faults and store the maintenance history of each piece of the lighting asset.

Accident Management System (AMS)

This system will hold data on all road traffic accidents in Orkney and is used to create a geographical overlay showing the locations of accidents over a 10 year period.

Data Rules

These define the standards, procedures and data processing parameters that are used by the Asset database.

Specialist Applications

The Scottish Road Maintenance Condition Survey (SRMCS) – Data from the annual survey will be used as the basis for planning future roads maintenance works and will provide an objective assessment of the condition of the road network.

Skid Resistance Survey (SCRIMS) – Surveys will be carried out as required to monitor and assess the condition of the road network. The survey will in time cover all Class A and principle Class B roads in Orkney. The results of the survey will be used to determine if future maintenance works are required.

5.5 Network Inventory

The Roads (Scotland) Act defines a road as any way over which the public has a right of passage and carriageways, footways, footpaths and cycle ways are all roads for the purposes of the Act. Where the public right of passage includes a right of passage by vehicle, the road is termed a carriageway. Where the right of passage is by foot only, the road is either a footway or a footpath. A footway is associated with a carriageway, that is, a traditional pavement. A footpath is independent of a carriageway.

As noted above, the Council, as Roads Authority, has a duty to prepare and keep a list known as the 'list of Public Roads' and has a statutory duty to manage and maintain all roads that are entered on to that list. A public road is defined as a road that is maintained by the local Roads Authority. This is distinct from a private road which is a road over which the public has a right of access but which is maintained by the landowner. The public or private status of a road is a matter of maintenance liability only.

As described above, the Local Street Gazetteer will provide the detailed asset inventory and database and all roads in the 'List of Roads' are referenced to it. The list of roads and their associated hierarchy are contained in Appendix 1 and the level of detail that will be used is shown below. This inventory is the basis of quantifying and establishing the annual maintenance programme to be carried out within the constraints of each year's budget. Any shortfall in available budget compared to the desirable works programme will be reported to the Transportation and Infrastructure Committee in the first instance. Inventories for other assets are being developed (Appendix 2, 3, and 10 to 15) and are listed under Part E – Appendices.

Inventory Information

Carriageway	By length and width
Footway	By length and width and side
Gullies	Number
Street Lighting Columns	Number, type and condition
Illuminated Signs and Bollards	Number
Road Signs	Number
Lines and Markings	Centre line length, edge lines, junctions and other markings
Grass Verges	By length, width and side
Bridges and Structures	By type and location
Boundary Fences and Walls belonging to Authority	By type and length
Safety Fences	By type and length
Drainage Ditches	By length and side
Pipe Drainage	By length and dia.
French Drains	By length and dia.
Manholes and Silt Traps	Number
Drainage Channel	By type and length
Culverts	By diameter, length and construction

This inventory will enable funding needs to be determined and support bids for such funding from either capital or revenue.

5.6 The Road Network Hierarchy

A hierarchy of all roads, pavements and cycle routes has been determined in accordance with the Code of Practice “Well-Maintained Highways” November 2011, modified where appropriate to reflect the Orkney environment, this will include specified roads within the conservation areas in Kirkwall and Stromness.

There are no Motorways or Trunk Roads in the Orkney Islands Council’s area and, as a consequence, Category 1 is not included in Table 1 below. An additional category 5 will be created for roads within the Kirkwall and Stromness Conservation areas to reflect their high pedestrian usage and special engineering requirements.

For the purpose of this Plan the road network hierarchy, which is the responsibility of Orkney Islands Council, is categorised as follows;

5.6.1 Carriageway Hierarchy - As detailed in Appendix 1

Table 1

Category	Hierarchy Description	General Description	Detailed Description
2	Strategic Route within Orkney	Principal "A" roads between Primary Destinations	Routes for fast moving traffic linking principle centres of population, transport hubs and service centres such as Hospitals and ferry terminals. Normally two lane with no footway out with urban areas
3a	Main Distributor	Main Urban network and routes connecting secondary centres of population to Main towns, the strategic network and services	Routes linking the larger villages and other centres of population to the strategic network and services within main population areas. They are of varying widths and are not always able to take two way traffic
3b	Secondary Distributor	Classified (B and C) class roads and some unclassified urban routes carrying local traffic with frequent junctions	Roads linking smaller villages and centres of population to the strategic and main distributor network. In urban areas these roads generally have 30mph speed limits and significant pedestrian activity including crossing points. On street parking is generally unrestricted.
4a	Link Road	Roads linking between the strategic, main and secondary distributor network with frequent junctions	In rural areas these roads provide links between the main distributor roads network. They are generally single track with passing places. In urban areas they are residential or industrial interconnecting roads with 30mph speed limits, random pedestrian movements and uncontrolled parking.
4b	Local Access Road	Roads serving limited numbers of properties carrying only access traffic	In rural areas roads providing access to small groups of houses or individual properties and land. Generally single track, dead end and often unsuitable for HGV's. In urban areas they are often residential loop roads or cul-de-sacs.
5a	Road within Conservation Area	Road, generally without footway within busy urban shopping, business area and residential areas.	Roads within Local conservation areas with high public space and streetscene contribution, heavy pedestrian usage and special engineering requirements.

5.6.2 Footway Hierarchy (This may also include footpaths if specified) – Appendix 4 and 5

Table 2

Category No	Category Name	Brief Description
2	Secondary Walking Route	Medium usage routes through local areas feeding into primary routes, local shopping centres, schools and industrial centres
3	Link Footway	Linking local access footways through urban areas and busy rural footways
4	Local Access Footway	Footways associated with low usage, short estate roads to the main routes and cul-de-sac

5.6.3 Cycle Route Hierarchy – Appendix 6

Table 3

Category	Description
A	Cycle lane forming part of the carriageway – There are no Cat A Cycle lanes in Orkney.
B	Cycle track; a route for cyclists not contiguous with the public footway or carriageway. Shared cycle/pedestrian paths; either segregated by a white line or other physical segregation, or unsegregated.
C	Cycle trails, leisure routes through open spaces. These are not necessarily the responsibility of the roads authority.

5.7 Maintenance Types and Categories

Road maintenance has traditionally been considered on an input basis. However it would be more effective if maintenance was targeted to produce outcomes focussing on the core maintenance objectives of safety, serviceability and sustainability. Targeting on outcomes rather than inputs will take some time to establish. This will be addressed through the development of the RAMP. Levels of service will be established to reflect the requirements of the roads network.

The typical types of maintenance functions which should be considered in terms of the output contribution to the core maintenance objectives are;

- Reactive
- Routine
    - Programmed
    - Regulatory
    - Winter Service

- Weather and other Emergencies

5.7.1 Reactive

Responding to safety inspections, complaints or emergencies.

Activity – Response	Description
All Assets - Emergencies	Assess - Sign and make safe for safety purposes
All Assets - Complaints	Assess - Make initial temporary repair (permanent repair if possible) for safety purposes
All Assets - Inspections	Provide permanent repair for safety purposes

5.7.2 Routine

A regular consistent schedule of Cyclic maintenance works such as: drainage works, patching and verge maintenance.

Activity	Description
Drainage	Cleaning of ditches, culverts (Incl' grills), offlets, gullies, safety channel and kerbs, storm water and french drains
Carriageway	Edge repairs and patching
Footway / Cycleways	Patching and kerb repairs
Verge Maintenance	Grass cutting, scrub cutting and verge repairs
Fences and Barriers	Painting, inspection and repair
Traffic Signs and Signals	Clean repair and replace if damaged
Road Marking and Studs	Refresh and replace if damaged
Street Lighting	Clean, repair and replace if damaged
Bridges	Minor works and repairs

5.7.3 Programmed

An annual programme of planned works, primarily surface treatments such as surface dressing and resurfacing, and including road reconstruction schemes and new drainage works.

Activity	Description
Carriageways	Minor works:- Reconstruction, Resurfacing, Surface Dressing, Edge Strengthening, including haunch reconstruction
Footway	Minor works:- Reconstruction, Resurfacing, Slurry Sealing and Kerbing

Drainage	Culvert Replacement, New Ditches / Cut off Ditches / French Drain
Bridges / Structures	Major Bridge Repairs, Walls, Embankment Repair
Lighting	Column and Cable Replacement

5.7.4 Regulatory

Inspecting and regulating the activities of others e.g. the New Roads and Streetworks Act (NRSWA).

Legislation	**Activity Description**
Road (Scotland) Act 1984	Keeping List of Roads up-to-date. Maintaining all public roads.
Road (Scotland) Act 1984	Road Opening Permits, Road Closures Skip Permits, Scaffolding Permits, Illegal Signs etc.
New Roads and Streetworks Act 1991	Enforcement of New Roads and Street Works Act including the co-ordination of road works, inspections of utilities reinstatements and Maintaining the Local Street Gazetteer.
Flood Prevention and Land Drainage (Scotland) Act 1997	Carry out an assessment of Water Courses. Ensure Maintenance of Water Courses. Publish Biannual Reports.
Road Traffic Act 1984	Temporary Traffic orders.
Transport (Scotland) Act 2005	Established the Scottish Road Works Commissioner whose purpose is to work with the road works community to oversee improvements to the planning, co-ordination and quality of road works in Scotland.

5.8 Winter

Winter Service

Activity	**Description**
Pre-Treatment	Preventative salting.
Treatment	Suitable treatment for prevailing conditions.
Snow	Clearing of snow from carriageway.

5.9 Emergencies

Weather and Other Emergencies

Activity	**Description**
Major	OIC Major Emergency Plan
Flooding, Spring/Surge tides	Clearing of floods and debris, signing to make safe.

High Winds/Storm Damage	Closure of Barriers and clearing of debris.
High Temperatures	Melting Bitumen (Surface Dressing) etc
Others	Road Crashes, Minor incidents, Oil spillages, debris etc.

Section 6 - Inspection, Assessment and Recording Regime

6.1 Inspection

The establishment of an effective regime of inspection, assessment and recording is the most crucial component of roads management and maintenance. The characteristics of the regime, including frequency of inspection, items to be recorded and nature of response, will be defined following an assessment of the relative risks.

The inspection, assessment and recording regime will provide the basic information for addressing the core objectives of network safety, serviceability and sustainability.

All elements of the inspection and assessment regime will be applied systematically and consistently in accordance with the principles of Quality Management Systems such as ISO 9000:2001. It is important to recognise that all information recorded may have consequential implications for safety and may therefore be relevant to legal proceedings.

6.2 Categories of Inspection

Inspections and surveys will be carried out as follows:-

Safety Inspections (SI's) These comprise frequent inspections of all road elements to identify any defects likely to create danger or serious inconvenience to users of the road or the wider community. They include scouting for road failures such as potholes and failure of road lighting and illuminated signs and less frequent specialised inspections for electrical safety.

Service Inspections These are more detailed than safety inspections and relate to the requirements for serviceability. These inspections may be restricted should resources be limited. They may be either;

- Course Visual Inspection (CVI).
- Detailed Visual Inspection (DVI).
- Inspection for regulatory purposes.

Road Condition Surveys These are primarily intended to identify deficiencies in the road fabric which, if untreated, are likely to adversely affect the networks long term performance and serviceability. The survey will include both an annual machine driven survey of large sections of the network and a coarse visual inspection of specific sections identified within the machine survey.

Safety inspections could be very valuable in court cases where the court would have regard to "whether the roads authority knew or could reasonably be expected to know, that the condition of the part of the road to which the action relates was likely to cause danger to users of the road". The defects identified in the safety inspections will of course need to be rectified in a timely fashion.

6.3 Safety Inspections

6.3.1 Roads, Footways and Cycleways

Safety inspections are specifically to identify defects which present a risk of immediate or imminent danger to users, or a risk of serious short term structural deterioration and which require urgent attention. Other less serious defects found may also be noted and reported.

Safety inspections of carriageways, out with the urban areas, will generally be undertaken in a slow moving vehicle. In urban areas, safety inspections will generally be undertaken on foot. All safety inspections of footways and footpaths will be undertaken on foot.

Additional safety inspections may also be necessary in response to defect reports or complaints, or to user or community concern, as a result of incidents, extreme weather events, or in the light of monitoring information.

The safety inspection regime will take account of potential risks to all road users, in particular the most vulnerable, and are designed to identify any defects likely to create an immediate or imminent danger to the network users.

The frequency with which these safety inspections are undertaken on any part of the network is determined by its position within the hierarchy shown in the list of roads. A list of frequency of safety inspections is set out in Table 4 below.

Table 4 – Frequency of Safety Inspections

Feature	**Description**	**Category**	**Frequency**	**Method**
Roads	Strategic Routes	2	3 Monthly	Driven out with Urban area Walked within Urban area
	Main Distributor	3a	4 monthly	Driven out with Urban area Walked within Urban area
	Secondary Distributor	3b	6 Monthly	Driven out with Urban area Walked within Urban area
	Link Roads	4a	Annually	Driven/Walked/Find and Fix
	Local Access Roads	4b	Annually	Driven/Walked/Find and Fix
	Road within conservation area	5a	1 Monthly	Walked
	Other shared surfaces	5b	3 Monthly	Walked
Footway	Secondary Walking Routes	2	6 Monthly	Walked
	Link Footway	3	Annually	Walked
	Local Access Footway	4	Annually	Walked
Cycleway	Cycle Lane	A	6 Monthly	Driven / Cycled

	Cycle Track	B	6 Monthly	Walked / Cycled
	Cycle Trail	C	N/A	

The adequacy of this safety inspection regime will be reviewed annually.

The basis of establishing the frequency of safety inspections is the balance between the rate of deterioration of the road and the degree of risk any defect has on road users.

As we will carry out limited Service Inspections we will also list other defects which require programmed attention.

A suggested schedule of road items to be included in safety and other inspections is attached as Appendix 4.

6.3.2 Electrical Installations, Lighting, Illuminated Signs and Bollards – Appendix 7 to 9

Electrical equipment relating to road lighting, illuminated traffic signs and bollards and road crossings requires particular attention to ensure the safety of users and the community. In addition, failure of any part of the system will have implications for the safety of users. An inspection and monitoring regime will be established in accordance with the Code of Practice for Road Lighting Maintenance – Well-Lit Highways and is detailed in Section 13 of this plan.

Immediate attention will be paid to any damage or defect that could result in structural failure of a lighting column or exposure to live cables.

6.3.3 Schedule of Defects to be Included in Safety Inspections

The following is a schedule of defects that may be identified during Safety Inspections. The list is not exhaustive and can be modified to suit local circumstances however it will form the basis for a check list to be used during inspections.

Note – the term ‘running surface’ applies to the carriageway, footway or cycle route;

- Debris, spillage or contamination on the running surface.
- Displaced road studs on running surface.
- Overhead wires damaged or unstable.
- Damaged or exposed electrical wiring.
- Unstable embankments or cuttings.
- Trees and bushes with loose branches, unstable or obscuring visibility.
- Signs or light columns damaged defective or unstable.
- Road markings or studs damaged, missing or badly worn.
- Signs, signals or lighting dirty or obscured.
- Sight-lines obscured by trees, bushes, unauthorised signs or other obstructions.
- Safety fencing, parapets, handrails or other barriers missing or defective.
- Abrupt level differences in the running surface.
- Potholes, cracks or gaps in the running surface.

- Crowning, depression or rutting of the running surface.
- Edge deterioration of the running surface.
- Kerbing, edging or channel defects.
- Rocking or otherwise unstable running surface.
- Apparently slippery running surface.
- Ironwork broken or missing.
- Gullies, drains, offlets or ditches blocked or defective.
- Standing water, water discharging onto or overflowing across the running surface.

6.3.4 Deficiency and Risk

Whether these defects should be treated, how they will be categorised in particular circumstances and the speed and nature of the response will depend, amongst other things, upon the assessed risk posed by it.

This will depend upon;

- The depth, surface area or other degree of deficiency of the defect;
- The volume, speed and other characteristics of traffic;
- The location of the defect;
- The number of defects and their interaction; and
- Forecast weather conditions, especially the potential for freezing of surface water.

6.3.5 Defects intervention levels for safety inspections

Defect intervention levels for safety inspections are detailed in Appendix 17 of this plan.

6.4 Service Inspections

6.4.1 Types of Service Inspection

Service inspections will be carried out primarily to identify deficiencies that compromise the reliability, quality, comfort and ease of use of the network. Although not intended for identifying defects that could compromise user safety, any such defects observed during service inspections will be recorded and dealt with in the same way as safety inspections.

Categories of Service Inspections available for use:-

- CVI (Course Visual Inspections);
    - DVI (Detailed Visual Inspections); and
    - Inspections for Regulatory Purposes e.g. NRSWA.

Details of the above types of service inspections are detailed in Table 5.

Table 5 – Service Inspections

Type	Description	Frequency
Course Visual Inspection	Normally carried out from a slow moving vehicle. Rather than recording detailed measurements of individual defects, the survey identifies and categorises lengths of features having generally consistent defects.	Annually after results of Machine Driven Survey are known.
	This survey would include all aspects of the network including Drainage, Embankments, Trees and Scrub, Fences, Traffic Signs and Road Markings	This may be undertaken in conjunction with safety inspection.
Detailed Visual Inspection	Records measured areas or lengths of more closely defined defects, aggregated within short sub-sections, 20m in length.	Will generally only be undertaken if required to determine finite details of programmed maintenance projects.
Inspection for Regulatory Purposes	The most significant of which involves responsibilities under the New Roads and Streetworks Act.	See inspection Code of Practice for New Roads and Streetworks Act.
	Management of List of Roads. Dealing with illegal and unauthorised signs, skip permits, temporary closures and other authorised occupation of the road. Adoption of new roads.	As required.

Condition standards for service inspections

Condition standards for service inspections are detailed in Appendix 18 of this plan.

6.5 Road Condition Surveys

6.5.1 Machine Driven Survey

In partnership with all other Local Authorities in Scotland, a programme that will examine the condition of our roads using a purpose built vehicle will be undertaken. This will not only give us information on the condition of our roads but will also give us benchmark comparisons with other local authorities.

The results of the survey are given in the form of three colour codes;

- Green – The condition is acceptable.
- Orange – There are defects that need to be accessed.
- Red – There are defects above the set intervention level.

The software used to view this information will also be used to determine the initial areas of the network that may require attention. Intervention levels can be set to suit the standards acceptable to the Council and that take account of available funding.

6.6 Defects and Response Times

Three categories of defects will be used for the safety inspections.

Category	Description	Timescale for repair
Cat 1	Those that require prompt attention because they represent an immediate or imminent hazard or because there is a risk of short-term structural deterioration.	Defects will be corrected or made safe at the time of inspection if practical or within 2 hours. A temporary repair will be carried out within 24 hours. Permanent repairs added to programme of works. Where the defects, which have potentially serious consequences for safety, have been made safe with temporary signs or repair, regular inspection of the repairs carried out.
Cat 2	Those that require to be repaired promptly because, although not an emergency, there is some potential for damage to vehicles or there is a potential hazard to pedestrians.	Defects will be corrected or made safe within 24 hours. This may involve displaying warning notices, coning off or guarding to protect the public from the defect. Temporary repair will be carried out within 5 working days.
Cat 3	Those that do not represent a serious short term danger but are considered to be serious enough to merit attention ahead of normal maintenance programmes.	Defects will be temporary repaired within a period of 28 days. And added to the programme of works if required for permanent repair.

Section 7 – Condition Standards and Investigatory Levels

Each element of the network has the potential to contribute to some extent to each of the core maintenance objectives of Safety, Serviceability and Sustainability.

It is necessary to define standards for the condition of each element of the network to meet the core objectives. The Condition Standards set the level at which the need for repairs is established. When funds are limited, the primary objective of safety may be the only one which can be addressed fully or at least substantially.

The following paragraphs set out the standard of conditions to be used in this Plan for the various elements. They will be developed further over time, in consultation with users, providers and the wider community. Many of the condition standards will be input values and consideration will be given to developing output values in due course.

The manner in which the various defects impinge on the key objectives of safety, serviceability and sustainability is shown in Table 7 below.

Table 7 – Condition of Network

A - Carriageway, Footway and Cycle Routes

Key Objectives	
Safety	1. Nature, extent and location of surface defects 2. Nature and extent of kerb and edge defects 3. Nature and extent of surface skidding resistance, where appropriate
Serviceability	1. Nature and extent of surface defects 2. Ride quality of the surface 3. Extent of encroachment and weed growth 4. The slipperiness of the surface 5. Noise and vibration
Sustainability	1. Nature and extent of surface defects 2. Nature and extent of carriageway deflection

B - Drainage Systems

Key Objectives	
Safety	1. Accumulation of water on carriageway, footway or cycle route
Serviceability	1. Accumulation of water on carriageway, footway or cycle route
Sustainability	1. Control flooding 2. Control pollution 3. Inadequate drainage will affect the integrity of the road, reduce the effective life and increase maintenance costs

C - Traffic Signs, Bollards and Pedestrian Crossings

Key Objectives	
Safety	1. Identification of risk to users 2. Separation of potential traffic conflicts 3. Key safety contributor for vulnerable road users
Serviceability	1. Contributes to network efficiency and ease of use 2. Contributes to network integrity
Sustainability	1. Support of sustainable transport mode 2. Contributes to local economy 3. Heavy traffic routeing can optimise maintenance

D - Fences and Barriers

Key Objectives	
Safety	1. Integrity and location of safety fencing for vehicles and pedestrians
Serviceability	1. Risk of livestock disrupting traffic
Sustainability	1. Appearance and condition of fencing

E - Road Markings and Studs

Key Objectives	
Safety	1. Route delineation in darkness and poor weather
Serviceability	1. Ease of use in darkness and bad weather
Sustainability	1. Support of sustainable transport modes 2. Edge delineation to reduce edge damage

F - Verges, Landscaped Areas and Trees

Key Objectives	
Safety	1. Obstruction to user visibility 2. Leaf fall and debris from trees and bushes causing slippery surfaces 3. Root growth affecting surface regularity
Serviceability	1. Improved quality of user experience
Sustainability	1. Landscape conservation 2. Support for habitat and biodiversity 3. Problems of root growth causing damage to road surface, structures and drainage

Each element of the network will be given a defined standard of condition, which is considered necessary to meet the requirements for safety, serviceability, and sustainability. Where it is not possible to meet these standards within the constraints of the available budgets, targets will be set for attaining and sustaining these standards in

the long-term. These standards will be consistently applied and will be reviewed at intervals in light of changing circumstances.

For full details of Condition Standards to be applied see Appendix 18.

Section 8 - Performance Management

8.1 Performance Management Systems

Service Plans for each Service within the Council have been developed as part of the Council's Performance Management System within the context of the Council Plan 2013-2018, Orkney 2020: Our Vision (the Community Plan 2007-13), the Corporate Strategic Plan 2008-13, and the Single Outcome Agreement with the Scottish Government.

The Performance Management System monitors and measures outcomes by means of several tools, including Service Plans (SP). Service Plans describe core services and activities and provide the mechanism for further planning to take account of new legislation, statutory guidance, political and management priorities and improvements identified through Specified Performance Indicators (SPI).

The mechanisms through which service priorities contained within service improvement plans are progressed, monitored and reported are by Service Plan Action Plans and Service Balanced Score Cards which are monitored by Service Management Teams, the Corporate Management Team and the relevant Service Committees of the Council.

8.2 Specified Performance Indicators

The Accounts Commission as part of their obligations under The Local Government Act 1992 requires that local authorities publish performance information on a range of Specified Performance Indicators.

SPI 22 reports on "The percentage of the road network that should be considered for maintenance treatment". The indicator shows the percentage of the road network that should be considered for maintenance treatment, together with the portion requiring further investigation and/or monitoring.

The condition of roads will be affected by budgetary constraints, traffic flows/usage and weather patterns. Section 6 of this plan deals with relevant inspection, assessment and recording regimes.

8.3 Roads Function Actions within D and I SP Action Plan

To be updated

8.4 Performance Indicators within D and I SP Balanced Scorecard

Indicator 8

Street Lighting: Target - To achieve a year on year improvement on the percentage of street light faults repaired within 7 days up to a limit of 85%.

Indicator 35

The percentage of the road network that should be considered for maintenance treatment: Target - Contain percentage of network to be considered for treatment to 25% or less.

Section 9 - Programming and Priorities

Developing and implementing an effective system for programming and prioritising roads maintenance is a key requirement of the roads service. It allows comparison of the overall maintenance requirement against the level of funding available and for appropriate choices to be made. It is especially important when dealing with claims and or awards against the Authority for failure to maintain the roads network properly.

The broad priorities for the respective types of roads maintenance (reactive, routine and programmed) will largely be determined by the outcome of safety and service inspections and condition surveys, assessed against local risks and policies identified within the Roads Service Plan. Priorities and programmes for the remaining categories of regulation, winter service and weather and other emergencies will largely arise out of the design of the service.

Reactive maintenance is primarily for the purpose of maintaining network safety and involves attending to Category 1 defects and other matters requiring urgent attention arising from inspections and user complaints in accordance with the specified standards of response.

Routine maintenance is primarily for the purpose of providing defined standards of network serviceability, maximising availability, reliability, integrity, and quality. The priorities and programmes will largely be determined from Category 2 and 3 defects identified during inspections and the implementation of good working practices.

Programmed maintenance will be undertaken to provide a sustainable roads network that minimises costs over time and adds value to the community and contributes to a sustainable environment. In the longer term it will also contribute to the safety and serviceability of the network.

Section 10 - Winter Service

10.1 Winter Service Policy

The Winter Service will be provided in accordance with the aims and objectives of the Council Plan, the Development and Infrastructure Service Plan and the Winter Service Policy Statement

Teams within the Roads function of Development and Infrastructure will prepare a Winter Service Plan which details the carriageway and footway hierarchy for precautionary treatment, post treatment and snow clearing operations. The plan will be reviewed annually following consultation with Community Councils and other stakeholders, and will be presented to the Development and Infrastructure Committee for approval prior to each winter season. The Service will monitor the standard of performance achieved and all fixed and variable costs incurred and the Road Services Manager will present an annual report to the Head of Transportation and Amenities.

Historically the Direct Services Division (DSD) of the Department of Technical Services provided the Winter Service on behalf of the Department of Technical Services as the Roads Authority. A Service Level Agreement (SLA) was drawn up to provide a formal agreement between the DSD as the provider of the service and Orkneydirect C&M as the deliverer of the service. It specified the level of service that was required and the method of payment for the delivery of that service.

Although there is no requirement for a SLA under the new structure within Development and Infrastructure, the present SLA will be retained and developed as an operational specification and plan.

Development and Infrastructure, on behalf of the Council as Roads Authority, will continue to ensure that the approved standards and levels of service are achieved. The operational management and delivery of the service will continue to be undertaken by the Roads Function who will utilise the in house resources of the Service supported by external contractors as appropriate.

10.2 Winter Service Operations

10.2.1 Service Level Agreement (SLA) for the Delivery of Winter Services

The Service Level Agreement will specify the level of service that has been approved by the Council and the method of payment for the delivery of the service. The SLA is included in the List of Operational Plans within Appendix 16 of this plan.

10.2.2 Winter Service Plan

The Winter Service Plan provides the detailed information required to deliver the Winter Service, such as periods of cover, treatment times and route priorities for all roads in Orkney, and is included in the List of Operational Plans within Appendix 16 of this plan.

Section 11 - Weather and Other Emergencies

There is a requirement as part of the delivery of the Winter Service to provide a 24 hour response to weather and other emergencies, and maintenance teams are required to provide assistance during periods of bad weather or other notified civil emergencies, such as road traffic accidents, oil pollution incidents or extreme weather events.

The effects of climate change must also be taken into account in planning for both roads maintenance and for emergency response. Evidence suggests that the general climate changes will be;

- The climate will become generally warmer.
- Hot, dry summers and mild wet winters will be more frequent. Very cold winters will become less frequent and snow amounts will decrease.
- Relative sea levels will continue to rise and extreme sea levels will occur more frequently.
- Severe gales and storms will occur more frequently.
- Heavy winter rain, with associated extreme rainfall events, will become more frequent.

The consequences of this will be an increased risk of flooding from both the sea and water courses and from the inability of the present drainage system to cope with the increased flows, together with deterioration and damage to the roads infrastructure and increased roads safety problems from adverse driving conditions.

In addition to the delivery of the Winter Service, maintenance teams will therefore be required to assist in various emergencies, including;

- High winds, including closure of the Churchill Barriers and the clearing of debris from the roads.
- Flooding from the sea due to high or surge tides.
- Flooding due to inadequate drainage following prolonged periods of heavy rain.
- Subsidence, landslips and high temperature.
- Road Accidents in association with the Cleansing Service.
- Oil or other pollution incidents in association with the Cleansing Service.
- Collapsed walls and buildings.
- Other Civil Emergencies.

Section 12 - Verge Maintenance

12.1 Introduction

Orkney Island Council, as Roads Authority for the area, has a duty to maintain the public roads and ensure that they are safe for road users.

The cutting of vegetation on roadside verges is done primarily for road safety purposes and to provide a refuge for pedestrians walking on the road. Vegetation on either the roadside verge or private land should not restrict visibility at junctions, access points or bends. In addition, sightlines and minimum stopping distances should be kept clear and signs, lights and marker posts clearly visible at all times.

The Roads Management and Maintenance Plan 2013-2018 is based on the good practice contained within the Code of Practice entitled “Well Maintained Highways”. In addition, the Council has a duty under the Nature Conservation (Scotland) Act 2004, and has made a commitment to conserve and enhance biodiversity in Orkney in the Community Plan, Orkney Structure Plan, Orkney Local Plan and the Orkney Local Biodiversity Action Plan.

The Verge Maintenance Plan 2013 recognises these aims and will contribute to the wider corporate objectives by managing the maintenance of the roadside verges in such a way that it enhances biodiversity whilst ensuring the safety of all road users. Roads Services will consult with the Environmental Policy Officer or other officers, as appropriate, when reviewing the plan.

The primary objectives of the verge cutting regime will be:

- To maintain safety;
- To prevent obstruction of sight lines, road traffic signs and other markers;
- To inhibit the growth of dangerous weeds (in accordance with the Weeds Act 1959);
- To prevent encroachment of vegetation onto the carriageway; and
- To manage the roadside verges in a manner that promotes biodiversity by conserving, wherever possible, special wildlife habitats and wild flowers.

12.2 Non Conservation Verges

All verges will be cut once per year except those identified as either conservation verges or special treatment areas for reasons of bio-diversity. Verge cutting will commence in June and be completed by the end of July.

Supplementary cuts may include any area that is not included as part of the annual roadside verge cutting in June and July. This will include designated conservation verges which are cut once at the end of the season. These are detailed in the schedules to the annual Verge Maintenance Plan.

12.3 Conservation Verges

Conservation verges will only be cut once per year at the end of the season. Conservation verges will be reviewed annually and are listed in Schedule A of the verge cutting specification referred to in Appendix 16.

12.4 Special Treatment Areas

A number of areas have been designated as special treatment areas and will be cut as detailed in the Verge Cutting Specification.

12.5 Safety Cuts

Safety cuts will be undertaken primarily to maintain sight lines at road junctions, sharp bends and blind summits to maintain a safe breaking distance applicable to the character of the road.

12.6 Consultation

The Verge Maintenance Plan will be reviewed annually following consultation with Community Councils and other stake holders, and presented to the Development and Infrastructure Committee for approval prior to the start of the following season.

Section 13 - Street Lighting

13.1 Purpose

The purpose of public lighting is to make the night time environment a safe place to be in for all users. This will include lighting to roads, footways and footpaths, Cycleways and public buildings. An appropriate level of lighting not only creates a safer environment but can also help improve the local economy and contribute to a more inclusive society.

13.2 Policy

Guidance on the provision of street lighting is contained in the Roads Development Guide.

13.3 Legal Framework

There is no statutory requirement on Local Authorities to provide public lighting. The Roads (Scotland) Act 1984 empowers a local Roads Authority to provide lighting for roads or proposed roads, which are, or will be, maintainable by them and which in their opinion ought to be lit.

The regulations and standards that affect the design and maintenance of road lighting include the Local Government (Scotland) Act 2003, the Health and Safety at Work Act 1974, the Construction (Design and Management) Regulations 2007, the New Roads and Street Works Act 1991 and the Electricity Safety, Quality and Continuity Regulations 2002.

13.4 Strategy and Hierarchy

All elements of the public lighting system require inspection and maintenance to ensure that they are safe, operate correctly and continue to provide their designed performance and maximise their life. Maintenance can be divided into two categories:

- **Cyclical** – Preventative maintenance carried out on a cyclical basis to reduce or eliminate failures and to ensure that the system is operating safely in the way it is designed to.
- **Reactive** – Repair or replacement of equipment that has failed or been damaged.

Historically the majority of maintenance that was carried out was reactive as a result of faults and outages identified by staff or reported by the public. An inspection and testing regime will be developed to meet both the statutory requirements for electrical inspection and testing and to improve the reliability of the street lighting asset. If fully developed and implemented this will reduce the amount of reactive maintenance that is required.

13.5 Inspection, Assessment and Recording Regime

An inspection and testing regime will be developed as detailed above.

13.6 Performance Management

Although the previous Scottish Council Statutory Performance Indicator (SPI) 75 Street Lighting Repairs, defined as ‘the percentage of repairs completed within seven days’ is no longer required, this measurement of performance has been embodied within the Balanced Scorecard for Development and Environment Services, reference item 8.

Part D – Sustainability, Procurement and Financial Management

Section 14 - Sustainable Roads Maintenance

14.1 Sustainable Development Policy

Roads maintenance has a significant role to play, and impact to make, in the achievement of sustainable development. To ensure delivery of this objective, authorities should develop policies for sustainable development in roads maintenance that ensure that there is a linkage between the strategic objectives of the authority at the highest level, and the materials, practices and processes used in an ongoing way on the roads network.

Sustainable development for roads maintenance involves living within environmental limits whilst achieving a sustainable economy and includes effective protection of the environment and the prudent use of natural resources.

14.2 Quality of Life

The third core objective of the RMMP is network sustainability which can be defined as:-

- Minimising costs over time (whole life costs)
- Maximising community value
- Maximising environmental contribution

These are based on the principle that roads maintenance should not be just about repairing and replacing the roads infrastructure in the most efficient way possible but, in doing so, should add value to the community and benefit to the environment. These benefits may include improving the quality of public spaces, improving community safety or improved accessibility.

Not all maintenance will make a direct contribution and, in most cases, the contribution will be small, however the cumulative effect of an efficiently managed maintenance programme will be significant.

In addition, sustainability will be fundamental to a Best Value review of roads maintenance. We will carry out a sustainability appraisal of our current practices and delivery arrangements to open up new areas for consideration of continuous improvement.

14.3 Materials, Products and Treatments

In order to meet the core objectives of the RMMP, materials, products and treatments used for roads maintenance must meet the required standards for both effectiveness and durability. However, the specification of materials and processes should take into account the availability of locally sourced materials, goods or services whenever possible, even where this may incur a financial penalty or require the adoption of a modified technical standard. In the context of Best Value, the right balance of materials or treatments used in any particular circumstance should not just be a financial or technical issue, but should take account of sustainability and their contribution to the wider community.

14.4 Technical Specifications and Guidance

All roads maintenance will be designed to current technical standards and guidance. Where appropriate however, and based on sound engineering judgment, this will be modified to take account of local needs or circumstances.

14.5 Quality Management Training and Development

Quality management systems are intended to encourage and facilitate consistent management and organisational processes. A substantial proportion of the activities carried out within Roads Services are already accredited under ISO 9001 2000 and it is the intension that all Roads Management and Maintenance will in time be subject to a quality management regime based on the same principles which will integrate all Roads Management and Maintenance Systems.

In addition, in pursuing the objective of network sustainability, the environmental contribution made by roads maintenance will be crucial. Consideration will therefore be given to the establishment of an Environmental Management System to ISO 14000 to address the range of issues affecting the environment. These may include;

- Noise.
- Materials utilisation.
- Pollution control.
- Nature conservation and biodiversity.
- Environmental intrusion.

14.6 Noise

Road traffic noise is not generally an issue within Orkney however, significant problems may occur with badly specified or maintained ironwork within urban areas.

14.7 Materials Utilisation, Waste Management and Recycling

Roads maintenance activity consumes significant quantities of processed raw materials and manufactured products. Policies for materials purchasing and utilisation, waste management and recycling, can all make a major contribution to the objective of network sustainability.

Wherever possible we will maximise the use of local materials to minimise transport cost and support the local economy. This will also help to maintain the local character, particularly in the conservation areas. Sustainable purchasing and materials utilisation may however have both cost and technical implications which must be balanced against the environmental and economic benefits to the community.

The introduction of a landfill tax in 1996 and the subsequent increases in the tax have encouraged the development of a sustainable waste management policy within roads maintenance. Wherever possible, waste materials arising from the reconstruction of roads and footpaths or from other road surface treatments will either be reused directly or reprocessed at Cursiter Quarry for subsequent reuse as secondary materials. This includes all road plannings and other bitumen products and all stone and concrete waste materials, including road sweepings. The introduction of the Waste Electrical and Electronic Equipment (WEEE) Directive will also affect the disposal or recycling of street lighting equipment. Materials that cannot be reused or recycled will be disposed of to a licensed tip or facility. This will include inert excavated material at the Bossack landfill or

other licensed landfill site, and silt and other oily wastes arising from gully emptying at the reed bed facility at Chinglebraes waste transfer station.

Wherever practicable we will;

- Retain and reuse materials on site.
- Maximise the value of re-used materials.
- Support the market development of recycled materials through their use wherever possible.
- Ensure that any materials that cannot be reused or recycled are disposed of in accordance with statutory requirements.

14.8 Pollution Control

A number of maintenance operations have the potential to cause noise, air or water pollution. Advice will be sought from the Environmental Health Service, SEPA and other appropriate environment agencies regarding statutory requirements.

We will ensure that the Best Value principal that services should be provided to "meet the needs of users and the community" is applied in all cases.

Scarifying or major resurfacing can cause environmental damage which is inevitable but where possible we will phase and schedule works to avoid sensitive periods, including the tourist season in main tourist locations and potentially difficult weather conditions.

Fuel and other material storage areas both in depots and sites will be located with care. They will not be sited where they could cause damage to landscape or nature conservation or where they could pollute watercourses or groundwater.

Arrangements will be available to deal with diesel spills particularly on major sites.

All planning and environmental requirements will be complied with.

The use of rock salt for winter maintenance activities will be carefully managed to reduce the impact on the environment.

14.9 Nature Conservation and Biodiversity

Biodiversity is simply ‘the Variety of Life’ from the smallest bug to the mightiest whale, along with the ecosystems they live in. Conserving biodiversity is not just about rare and threatened species and habitats, but the common place as well such as, our road side verges and wider ‘soft estate’. All those who care about the countryside are in fact appreciating biodiversity. It is important for maintaining the quality of our lives and is intimately bound up with it.

Although the countryside may still appear visually attractive, it has become apparent that much of its richness and diversity is under threat; some plants and animals that were once familiar are now rare. Nature has an in-built propensity to change, continually evolving new variants and new species, but all of this occurs naturally over a very long period of time. Biodiversity cannot evolve fast enough to compensate for the losses and declines we are currently experiencing.

In 2005, Scotland launched ‘Scotland’s Biodiversity: It’s in Your Hands’ a 25 year strategy for the conservation of the biodiversity of Scotland for all. The strategy has been given

support from the highest level through the new Biodiversity Duty in the Nature Conservation (Scotland) Act 2004. This marks a major step in the conservation of biodiversity. Our Orkney Local Biodiversity Action Plan is now in its third year and we have already seen great success in achieving our local targets and actions. It is now more important than ever to keep the forward momentum and encourage more participation in the delivery of the local plan and national strategy.

Orkney Islands Council has made a commitment to conserving and enhancing biodiversity in our Orkney 2020: Our Community Plan, Orkney Structure Plan 2001, Orkney Local Plan 2004 and Orkney Local Biodiversity Action Plan 2002.

The Roads Management and Maintenance Plan will contribute to the wider corporate objectives of the Council by managing the maintenance of road verges and the wider "soft estate" in accordance with the plans noted above, whilst ensuring that the safety of road users is not/never compromised.

14.10 Dealing with Noxious Weeds

The control of injurious and noxious weeds is a statutory responsibility under the Weeds Act 1958 and the Wildlife and Countryside Act 1981. Where injurious weeds on road land are a nuisance to adjacent landowners we will work with the landowner to control the weeds and prevent recontamination across the road boundary. The prescribed weeds are;

- Ragwort.
- Broad leaved dock.
- Curled dock.
- Creeping thistle.
- Spear thistle.

Advice on controlling ragwort is given in 15.10 of the Code of Practice. Further professional advice will be sought on the methods of control to be used for the control of the above weeds.

14.11 Environmental Intrusion

Depots and material storage are often the most visible evidence of the environmental awareness of the service. Whilst these depots must meet the operational requirements of the service, we will ensure that they are located, designed, managed and maintained to the highest practicable environmental standards.

Excessive and redundant sign "clutter" will also cause visual intrusion, opportunities will be taken to remove or simplify redundant signing as part of planned maintenance works.

Light pollution caused by street lighting and the provision of illuminated signs are another source of environmental intrusion and will be reduced wherever possible without compromising the safety of road users.

Signs will not be illuminated unless statutorily required and the latest revision to the "Traffic Signs Regulations and General Directions", which is currently being prepared, will remove the legal requirements for lighting some traffic signs.

Where possible, we will use new and improved street lighting to reduce overall light pollution and energy use. This is dealt with in detail in the recently published Code of Practice for Road Lighting Management – Well-Lit Highways – and policies and operational plans will be developed based on this.

14.12 Environmental Consultation and Assessment

Environmental issues cover a very wide range, each of which is a specialist area and on which experience and best practice is continuing to develop.

We will consult local environmental and conservation groups to develop advice and environmental competence, and also to give greater understanding of road maintenance problems. Environmental advisers within the Council will also be consulted. Such consultees on road maintenance and policies are a fundamental requirement for Best Value reviews.

Section 15 - Procurement and Service Delivery

The Roads Management and Maintenance function will be delivered from within Development and Infrastructure, as specified in the Roads Service Plan, and detailed in this plan. It will include operational details such as programmes for routine roads maintenance, street lighting maintenance and renewal, structural maintenance and the delivery of the winter service. It will detail inspection frequencies, intervention levels and the programmed replacement of all assets.

Operational plans will be also be developed for each area of the service, specifying the level of service required and detailing how the service will be delivered.

Section 16 - Financial Management

The Head of Finance will report on the financial performance of the service measured against a budget profile developed from a needs based management and maintenance programme, as specified in the Roads Service Plan.

Appendix 1 - Carriageway Hierarchy

Kirkwall and St Ola - Urban Roads

Class	Hierarchy	Road Name	Road Length
A	5a	Albert Street	198
A	2	Ayre Road	587
A	2	Bignold Park Road	649
A	5a	Bridge Street	132
A	3a	Broad Street	154
A	3a	Castle Street	117
A	2	Deerness Road (to 40mph Signs)	554
A	3a	Dundas Crescent	339
A	2	Hatston Brae (Pickaquoy Rd – speed limit)	880
A	2	Holm Branch Road	503
A	2	High Street	108
A	2	Holm Road	1493
A	2	Junction Road	769
A	2	New Scapa Road	406
A	2	Old Scapa Road (to speed limit)	342
A	3a	Palace Road	261
A	2	Wellington Street	156
B	2	B9148	81
B	3a	East Road	36
B	2	Harbour Street	109
B	3a	King Street	119
B	3a	Queen Street	138
B	3a	School Place	143
B	2	Shore Street	122
B	3a	St. Catherine's Place	168
C	2	Clay Loan	392
C	3b	Glaitness Road	650
C	4a	Great Western Road	445
C	2	Pickaquoy Road	924
C	2	Union Street	103
U	4b	Annfield Crescent	378
U	4b	Annfield Park	109
U	4b	Bellevue Park	218
U	3a	Berstane Road Lower (Part)	700
U	4b	Berstane Road Upper (Part)	795
U	4b	Bosquoy Road	131
U	4b	Bridge St. Wynd	121
U	4b	Broadsands Road	179
U	4a	Burgh Road	180
U	4b	Burnmouth Road	198
U	4b	Burnside	481
U	4b	Burrian	23
U	4b	Buttquoy Crescent	257
U	4b	Buttquoy Drive	102
U	4b	Buttquoy Park	63
U	4b	Buttquoy Place	237
U	3b	Carness Road	76
U	4b	Carter's Park Road	196
U	4b	Clay Loan (Part)	61

Kirkwall and St Ola - Urban Roads (Continued)

Class	Hierarchy	Road Name	Road Length
U	4b	Claymore Brae	90
U	4b	Claymore Court	87
U	4b	Clumly Avenue	151
U	4b	Craigie Crescent	343
U	4b	Crantit Park	96
U	4b	Cromwell Court	30
U	4b	Cromwell Crescent	93
U	4b	Cromwell Drive	197
U	3b	Cromwell Road (Shore Street – Islands View Rd)	642
U	4b	Cromwell Road (St Catherines Place – Shore Street)	170
U	4b	Crowness Crescent	752
U	4b	Crowness Park	93
U	4b	Crowness Place	94
U	4b	Crowness Road	609
U	4b	Cursiter Crescent	279
U	4b	Dakota Road	103
U	4b	Earl Sigurd Street	105
U	4b	Earl Thorfinn Street	194
U	4b	Easdale Loan	241
U	4b	Easdale Close	99
U	3a	East Road (Lower) (Part)	130
U	3b	East Road (Upper)	562
U	4b	Eastabist	22
U	4b	Eastquoy Road	91
U	4b	Eunson Kloss	228
U	4b	Faraclett	35
U	4b	Garden Street	56
U	4b	Garrioch Street	143
U	4b	Garrison Road	290
U	4b	George Street	268
U	4b	Gladiator Road	181
U	4b	Glaitness Park	121
U	4b	Grainbank Road	317
U	4b	Grainepark	432
U	4b	Grainshore Drive	445
U	2	Grainshore Road	2250
U	4b	Grassick Court	59
U	4b	Grimsetter Drive	39
U	4b	Grimsetter Place	131
U	4b	Helliar	22
U	4b	Hermaness	43
U	4b	Hordaland	120
U	4b	Hornersquoy	198
U	4b	Ingale	65
U	4b	Inganess Road (to 30mph)	680
U	4b	Ingavoe Drive	132
U	4b	Isbister Road	51
U	4b	Islands View Road	338
U	4b	King Haakon Street	116

Kirkwall and St Ola - Urban Roads (Continued)

Class	Hierarchy	Road Name	Road Length
U	4b	King Harald Kloss	287
U	4b	Kirklands Road	313
U	4b	Laing Street	114
U	4b	Lambaness	30
U	4b	Laverock Road	296
U	4b	Linklet	68
U	4b	Lother	35
U	4b	Lynn Park	465
U	4b	Lynn Road	310
U	4b	Lynn Crescent	313
U	4b	Mackenzies Drive	168
U	4b	Mackenzies Park	26
U	4b	Mackenzies Place	26
U	5a	Main Street	144
U	4b	Manse Lane	133
U	4b	Manse Road	275
U	4b	Marwick Drive	239
U	4b	Meadowbank	372
U	4b	Meadow Drive	132
U	4b	Mill Street	178
U	4b	Mooney Drive	138
U	4b	Mount Drive	151
U	4b	Muddisdale Road	744
U	4b	Muir Drive	245
U	4b	Nicolson Street	217
U	4b	Otterswick	44
U	4b	Otterswick Crescent	135
U	4b	Papdale Close	136
U	4b	Papdale Crescent	170
U	4b	Papdale Drive	179
U	4b	Papdale Loan	123
U	4b	Papdale Place	88
U	4b	Papdale Road	246
U	4b	Park Loan	86
U	4b	Peerie Sea Loan	160
U	4b	Pickaquoy Loan	482
U	4b	Pipersquoy Drive	70
U	4b	Pipersquoy Road	292
U	4b	Pipersquoy Terrace	68
U	4b	Quarryfield Road	106
U	4b	Quoyangry Road	88
U	4b	Quoybanks Crescent	480
U	4b	Quoybanks Drive	98
U	4b	Quoybanks Place	83
U	4b	Queen Sonja Kloss	303
U	4b	Reid Crescent	737
U	4b	Ronaldsvoe	70
U	4b	Rope Walk	401
U	4b	Rosebank	140
U	4b	Royal Oak Court	80
U	4b	Royal Oak Road	584
U	4b	Sabiston Crescent	61

Kirkwall and St Ola - Urban Roads (Continued)

Class	Hierarchy	Road Name	Road Length
U	5a	St. Olaf's Wynd	70
U	4b	St. Rognvald Street	246
U	4b	St. Rognvald's Way	119
U	4b	Scapa Court	250
U	4b	Scapa Crescent	858
U	4b	Scott's Road	550
U	4b	Seafire Road	80
U	3b	Shore Street (St Catherine's Place – Cromwell Road)	125
U	4b	Skaill Road	76
U	4b	Skua Road	171
U	4b	Slater Street	163
U	4b	Sparrowhawk Road	669
U	4b	Springfield Drive	180
U	4b	Soulisquoy Loan	265
U	4b	Soulisquoy Place	325
U	4b	Stromberry	70
U	4b	Summerdale Drive	217
U	4b	Sutherland Park	150
U	4b	Swordfish Road	189
U	4b	Tankerness Lane	117
U	4b	The Crafty	294
U	4b	The Keelies	141
U	3a	The Meadows	1004
U	4b	The Quadrant	216
U	3b	Thoms Street	648
U	4b	Torness	59
U	4b	Upper Crantit Road	203
U	4b	Vasa	47
U	4b	Victoria Road	142
U	5b	Victoria Street	277
U	4b	Viewfield Drive	151
U	4b	Viking Place	140
U	4b	Willowburn Road	384
U	4b	Warrenfield Crescent	205
U	4b	Warrenfield Drive	108
U	4b	Wasdale Crescent	120
U	4b	Watersfield Road	54
U	4b	Watergate	189
U	4b	Watson Close	77
U	4b	Watson Drive	124
U	4b	Watson Park	39
U	4b	Watson Place	51
U	4b	West Castle Street	82
U	4b	West Tankerness Lane	79
U	4b	Weyland Bay	456
U	4b	Weyland Terrace	272
U	4b	White Street	144
U	4b	Willow Road	385
U	4b	Willowburn Road	384
U	3b	Work Road (East Road to speed limit)	179

Kirkwall and St Ola – Rural Roads

Class	Hierarchy	Road Name	Road Length
A	2	A961	3326
A	2	A965	4031
A	2	A964	3367
A	2	A960 (speed limit – airport)	2926
B	2	B9148	1908
B	4a	Scapa Bay Road	1115
C	3b	Glaitness Road	156
C	3b	Old Finstown Road	3569
U	4b	Berstane Loan	795
U	4b	Berstane Lodge Road	531
U	4b	Blackhill Road	744
U	4b	Bloomfield Road	2643
U	4b	Cannigal Road	744
U	3b	Carness Road (30mph to Craigiefield Road)	515
U	4b	Carness Road (Craigiefield Road – Carness)	1140
U	4b	Craigiefield Park	203
U	3b	Craigiefield Road	859
U	4b	Dyke-end Road	887
U	4b	Heathery Loan	999
U	4b	Inganess Road	961
U	4b	Orquil Road	720
U	4b	Quoydandy Branch Road	370
U	4b	Sunnybank Road	1728
U	3b	Work Road (30mph to Craigiefield Road)	686
U	4b	Work Road (Craigiefield Road – Work)	1442

Stromness – Urban Roads

Class	Hierarchy	Road Name	Road Length
A	5a	Alfred Street	224
A	5a	Dundas Street	175
A	5a	Graham Place	41
A	5a	John Street	279
A	4b	Ness Road	325
A	3a	North End Road (Roundabout – Back Road)	327
A	2	North End Road (Speed limit – Cairston Road)	660
A	2	North End Roundabout	66
A	5a	South End	101
A	5a	Victoria Street	317
C	3a	Back Road	1818
C	3b	Cairston Road	654
U	4b	Brownstown Road	198
U	4b	Cairston Industrial Estate	84
U	4b	Church Road	114
U	4b	Citadel Crescent	103

Stromness – Urban Roads (continued)

Class	Hierarchy	Road Name	Road Length
U	4b	Citadel Drive	103
U	4b	Citadel Road	171
U	4b	Christie's Brae	95
U	4b	Coplands Drive	292
U	4b	Coplands Road	183
U	4b	Downie's Lane	306
U	4b	Faravel	79
U	2	Ferry Road	705
U	4b	Franklin Road	688
U	4b	Garson Drive	265
U	4b	Garson Way	187
U	4b	Garson Park	275
U	4b	Garson Place	255
U	3b	Garson Road	594
U	4b	Grieveship Brae	255
U	4b	Grieveship Road	187
U	4b	Grieveship West	469
U	4b	Hamnavoe	600
U	4b	Hellihole Road	256
U	4b	Hillside Park	224
U	4b	Hillside Road	751
U	4b	Hillside Terrace	121
U	4b	Hoymansquoy	159
U	4b	Nethertown Road	610
U	4b	Outertown Road	333
U	4b	Pumpwell Park	72
U	4b	Quholm Road	81
U	4b	Springfield Crescent	163
U	4b	St. Peters Park	79
U	4b	Wardhilll Road	141
U	4b	Whitehouse Lane	161

Stromness – Rural Roads

Class	Hierarchy	Road Name	Road Length
A	2	A965	3267
A	3a	A967	4976
C	4b	Deepdale Branch	889
C	4a	Howe Road	1925
U	4b	Braehead Road	355
U	4b	Brownstone Road	530
U	4b	Bu Road	695
U	4b	Clook Road	268
U	4b	Garth Road	336
U	4b	Heatherybraes Road	603
U	4b	Hutter Road	1148
U	4b	Kirbister Road	2085
U	4b	Miffia Road	850
U	4b	Nethertown Road	463
U	4b	Croval Road	332

Stromness – Rural Roads (continued)

Class	Hierarchy	Road Name	Road Length
U	4b	Outertown Road	2970
U	4b	Quholm Road	3990
U	4b	The Loons Road	2216
U	4b	Warbeth Road	1131
U	4b	Wardhill Road	1017
U	4b	Waterworks Road	475
U	4b	Weaverhall Road	635

Holm – Urban Roads

Class	Hierarchy	Road Name	Road Length (M)
A	2	A961	1245
U	4b	Breckan Brae	238
U	4b	Ferryhouse Road	65
U	4b	Graeme Park	108
U	4b	Lochhouse Road	69
U	4b	St Mary's Road	181
U	4b	Station Square	232
U	4b	Sutherland Drive	60
U	4b	West Greaves Road	490

Holm – Rural Roads

Class	Hierarchy	Road Name	Road Length
A	2	A961	4786
B	4a	B9052	4363
C	4b	Cornquoy Road	2668
C	4b	Greenwall Road	1101
C	4a	Moss Road	3388
C	4b	The Tieve Road	825
U	4b	Benshall Road	704
U	4b	Biggings Road	807
U	4b	Ferryhouse Road	761
U	4b	Graemeshall Road	2175
U	4b	Hunclett Road	823
U	4b	Italian Chapel Access Road	312
U	4b	Little Hunclett Road	1253
U	4b	Ocklester Road	1792
U	4b	Stratheast Road	950
U	4b	Warthill Road	840
U	4b	West Bu Road	750
U	4b	Woodstock Road	925

Burray – Urban Roads

Class	Hierarchy	Road Name	Road Length (M)
A	2	A961	803
U	4b	Leaburn Housing	60
U	4b	Pier Road	147
U	4b	Sunfield Housing	47
U	4b	Upper Waston Road	50
U	4b	Village Road	409
U	4b	West Shore Road (to speed limit)	352

Burray – Rural Roads

Class	Hierarchy	Road Name	Road Length
A	2	A961 No3 Barrier – speed limit	2893
A	2	A961 speed limit – No 4 barrier	305
A	2	Churchill Causeway No 3	322
A	2	Churchill Causeway No 4	608
U	4b	Berryhill Road	322
U	4b	Bloomfield Road	1312
U	4b	Bu Road	861
U	4b	Hillfield Road	178
U	4b	Littlequoy Road	2670
U	4b	Ness Road	1850
U	4b	Northfield Road	381
U	4b	Southbreck Road	617
U	4b	Viewforth Road	626
U	4b	Westshore Road	1237

South Ronaldsay – Urban Roads

Class	Hierarchy	Road Name	Road Length
A	2	A961	441
B	2	Back Road	272
B	2	Church Road	350
B	2	Cromarty Square	61
B	4b	School Road	363
C	4b	Haybrake Road	62
U	4b	Doctor’s Road	95
U	4b	Front Road	291
U	4b	Industrial Estate Road	103
U	4b	Link Road	33
U	4b	Marengo Road	133
U	4b	Ontoft Road	472
U	2	Pier Road	605
U	2	St Margarets Road	538
U	4b	School Access	117
U	4b	Thorfinn Place	41
U	4b	Wards Park	56

South Ronaldsay – Rural Roads

Class	Hierarchy	Road Name	Road Length
A	2	A961	13114
B	4b	B9042	4468
B	4b	B9043	3055
B	4b	B9044 – Grimness Road	2079
B	4b	Cleat Road	1806
C	4b	Aikers Road	4249
C	4b	Haybrake Road	2025
C	4b	Kirkhouse Road	1034
C	4b	Oback Road	1308
U	4b	Barswick Road	153
U	4b	Brough Road	1207
U	4b	Claybraes Road	469
U	4b	Crook Road	396
U	4b	Flaws Road	976
U	4b	Halcro Road	331
U	4b	Herston Road	772
U	4b	Holland Road	1363
U	4b	Honeysgoe Road	2164
U	4b	Hools Road	1561
U	4b	Hoxa Road	1084
U	4b	Liddle Road	865
U	4b	Lowertown Road	1379
U	4b	Lythes Road	1653
U	4b	Ontoft Road	192
U	4b	Ourigar Road	402
U	4b	Quoyeden Road	302
U	4b	Quoys Road	1067
U	4b	Sandwick Bay Road	232
U	4b	Sandwick Road	1143
U	4b	Serrigar Road	841
U	4b	Stews Road	905
U	4b	Uppertown Road	1624
U	4b	Windwick Road	2248

St Andrews – Urban Roads

Class	Hierarchy	Road Name	Road Length
A	3a	A960 (speed limit – speed limit)	1089
B	4a	B9052 (A960 – speed limit)	218
U	4b	Greenfield	90

St Andrews – Rural Roads

Class	Hierarchy	Road Name	Road Length
A	3a	A960 – Greenfield 40mph	5069
A	3a	A960 – Greenfield 40mph to Melborne Cottage Driveway	1960
A	2	A960 – West Waterhall to Airport	624
B	4a	B9052	1237
C	4a	Churchyard Road	1051
C	4b	Groatsetter Road	1355
C	4a	Shore Road	2353
U	4b	Biggings Road	1129
U	4b	Garralanga Road	830

St Andrews – Rural Roads (continued)

Class	Hierarchy	Road Name	Road Length
U	4b	Old Voy Road	686
U	4b	Stembister Road	1444

Tankerness – Rural Roads

Class	Hierarchy	Road Name	Road Length
C	3b	Tankerness Hall Road	3320
C	4b	Tankerness Hall Road – Shore Road to Rerwick Road	3405
U	4b	Annfield Road	270
U	4b	Copenago Road	512
U	4b	Gransetter Road	265
U	4b	Liddie Road	1059
U	4b	Newark Road	581
U	4b	Rerwick Road	792
U	4b	Swarsquoy Road	585
U	4b	Vedder Road	582
U	4b	Weethick Road	400
U	4b	Whitecrest Park	40
U	4b	Woodside Road	366
U	4b	Yinstay Road	4600

Deerness – Rural Roads

Class	Hierarchy	Road Name	Road Length
A	3a	A960	2037
B	4b	B9050	3499
B	4b	Halley Road	2872
U	4b	Aikerskaill Road	2102
U	4b	Braebuster Road	1147
U	4b	Denwick Road	2641
U	4b	Geo Road	810
U	4b	Horries Road	695
U	4b	Keigar Road	757
U	4b	Link Road	1381
U	4b	Malisburgh Road	677
U	4b	Manse Road	1485
U	4b	Millhouse Road	274
U	4b	Mussaquoy Road	311
U	4b	Newark Road	1219
U	4b	North Halley Road	560
U	4b	Quoybelloch Road	165
U	4b	Quoys Road	1419
U	4b	Sandside Road	887
U	4b	Sands Park	169
Class	Hierarchy	Road Name	Road Length
U	4b	Stonehall Road	731
U	4b	Stove Road	1123
U	4b	Watermoss Road	528

Firth – Urban Roads

Class	Hierarchy	Road Name	Road Length
A	2	A965 (speed limit – speed limit)	1648
A	2	A966 (A965 to speed limit)	826
C	3b	Old Finstown Road (A965 – Speed limit)	361
U	4b	Acrelea Road	296
U	4b	Grandon Road	140
U	4b	Grimond Place	50
U	4b	Grimond Road	192
U	4b	Grimond Square	50
U	4b	Heddle Road (A965 – speed limit)	623
U	4b	Hill of Heddle	118
U	4b	Jib Park	109
U	4b	Grandon Road (to speed limit)	97
U	4b	Parkside	98
U	4b	Seafield	135

Firth – Rural Roads

Class	Hierarchy	Road Name	Road Length
A	2	A965	5924
A	2	A966	2759
C	3b	Old Finstown Road (Zions Loan - Speed limit)	2194
U	4b	Burness Road	3039
U	4b	Cruan Road	524
U	4b	Grandon Road	2199
U	4b	Heddle Road	2548
U	4b	Holland Road	478
U	4b	North Horaldshay Road	164
U	4b	Redland Road	2753
U	4b	Wald Road	868
U	3b	Zion’s Loan	452

Sandwick – Urban Roads

Class	Hierarchy	Road Name	Road Length
A	3a	A967	7823
A	2	A986	367
A	3a	A986	308
B	4a	B9055	1842
B	4a	B9056	9626
B	4a	Vetquoy Road	188
B	4a	Hillside Road	453
U	4b	Back Road	223
U	4b	Market Green Housing	73
U	4b	Quilco	311

Sandwick – Rural Roads

Class	Hierarchy	Road Name	Road Length
B	4a	B9057	2270
B	4a	Brodgar Road	3438
B	4a	Vetaquoy Road	3522
C	4b	Lyking Road	2757
C	4b	Quoyloo Road	5456
C	4b	Swartland Road	2886
U	4b	Borwick Road	896
U	4b	Bristol Road	750
U	4b	Bryameadow Road	1497
U	4b	Daisy Bank	53
U	4b	Housegarth Road	673
U	4b	Howaback Road	562
U	4b	Kingshouse Road	432
U	4b	Linklater Road	969
U	4b	Netherstove Road	521
U	4b	Northdyke Road	658
U	4b	Pow Road	915
U	4b	Rosemount Road	461
U	4b	Roundadee Road	482
U	4b	Smithy Road	201
U	4b	Stockan Road	830
U	4b	Tenston Road	2277
U	4b	Unigarth	288
U	4b	Warth Road	402
U	4b	Yesnaby Road	2552

Evie - Urban Roads

Class	Hierarchy	Road Name	Road Length
A	3a	A966	583
B	4b	Hillside Road (to 30mph)	20

Evie - Rural Roads

Class	Hierarchy	Road Name	Road Length
A	3a	A966	7931
B	4a	Hillside Road	1933
U	4b	Aikerness Road	918
U	4b	Arwick Road	1142
U	4b	Benlaw Road	201
U	4b	Brough of Gurness Road (part)	50
U	4b	Georth Road	1048
U	4b	Jubidee Road	738
U	4b	Whitemire Road	3502

Birsay - Urban Roads

Class	Hierarchy	Road Name	Road Length
A	3a	A966	387
A	3a	A986	228
U	4b	Linkshouse Road	340

Birsay - Rural Roads

Class	Hierarchy	Road Name	Road Length
A	3a	A966	8407
A	3a	A967	6404
A	3a	A986	4045
B	4a	B9056	4458
C	4b	Durkadale Road	5195
C	4b	Hundland Road	5535
C	4b	Loons Road	2794
C	4b	Wattle Road, Birsay	3700
U	4b	Beaquoy Road	954
U	4b	Brockan Road	1662
U	4b	Cloke Road	1188
U	4b	Community Centre Road	942
U	4b	Fidgarth Road	976
U	4b	Greenay Road	786
U	4b	Hillhead Road	838
U	4b	Hillquoy Road	320
U	4b	Howe Road	1551
U	4b	Howquoy Road	301
U	4b	Langskaill Road	1451
U	4b	Lochside Road	1188
U	4b	Marwick Road	1309
U	4b	Midhouse Road	535
U	4b	Newan Link Road	483
U	4b	Nisthouse Road	1038
U	4b	Northside Road	1710
U	4b	Ravie Hill Road	1161
U	4b	Skidge Road	361
U	4b	Waird Road	310

Stenness - Urban Roads

Class	Hierarchy	Road Name	Road Length
A	2	A964	4195
A	2	A965	386
U	4b	Clouston Corner	73
U	4b	Ireland Road (to 30mph)	378

Stenness - Rural Roads

Class	Hierarchy	Road Name	Road Length
A	2	A965	5889
B	4a	Brodgar Road	3627
C	4a	Germiston Road	3883
C	4b	Ireland Road (speed limit – A964)	2244
U	4b	Aglath Road	292
U	4b	Bigswell Road	3027
U	4b	Button Road	270
U	4b	Churchyard Road	389
U	4b	Heath House Road	1233
U	4b	Heddle Road	784
U	4b	Knockhall Road	500
U	4b	Ness Road	612
U	4b	Stoneyhill Road	1755

Stenness - Rural Roads (continued)

Class	Hierarchy	Road Name	Road Length
U	4b	Stymilders Road	878
U	4b	Upper Twatt Road	1083

Harray – Urban Road

Class	Hierarchy	Road Name	Road Length
B	4a	Hillside Road (B9057), Dounby	623

Harray - Rural Roads

Class	Hierarchy	Road Name	Road Length
A	2	A986	8405
B	4a	Hillside Road (B9057)	6665
C	4a	Lyde Road	4143
C	4b	Stoneyhill Road	2784
C	4b	Russland Road	3584
C	4b	Netherbrough Road	826
U	4b	Appietown Road	320
U	4b	Ballarat Road	1260
U	4b	Bigging Road	756
U	4b	Bimbister Road	969
U	4b	Church Road	688
U	4b	Corrigall Road	2235
U	4b	Corston Road	966
U	4b	Eastgarth Road	283
U	4b	Geroin Road	2801
U	4b	Grimeston Road	3177
U	4b	Gueth Road	306
U	4b	Midhouse Road	567
U	4b	Nearhouse Road	450
U	4b	Ness Road	288
U	4b	Netherhouse Road	680
U	4b	Newark Road	978
U	4b	Nistaben Road	616
U	4b	North Bigging Road	2853

Orphir Urban Roads

Class	Hierarchy	Road Name	Road Length
A	2	A964 Orphir	683
C	4b	Gyre Road to speed limit	225
U	4b	Kirk Park	177

Orphir Rural Roads

Class	Hierarchy	Road Name	Road Length
A	2	A964	14599
C	4a	Germiston Road	4257
C	4b	Gyre Road	2644
C	4b	Scorradale Road	3792
U	4b	Breck Road	1255
U	4b	Buxa Road	573
U	4b	Fea Road	343
U	4b	Galaha	162

Orphir Rural Roads (continued)

Class	Hierarchy	Road Name	Road Length
U	4b	Groundwater Road	1310
U	2	Houton Road (To ferry terminal)	195
U	4b	Houton Road (Part)	650
U	4b	Kebro Road	400
U	4b	Linnadale Road	439
U	4b	Orakirk Road	495
U	4b	Petertown Road	1034
U	4b	Scows Road	397
U	4b	Smoogro Road	2290
U	4b	Sower Road	786
U	4b	Tower Road	880
U	4b	Waulkmill Road	891

Rendall Rural Roads

Class	Hierarchy	Road Name	Road Length
A	3a	A966	1627
A	2	A966 (inc Norseman Village)	5678
C	2	Gorseness Road (A966 to Tingwall)	772
C	4b	Gorseness Road (Tingwall to A966)	8015
C	4a	Lyde Road	2190
U	4b	Cottisgarth Road	923
U	4b	Hackland Road	3182
U	4b	Hammer Road	430
U	4b	Hinderayre Road	1230
U	4b	Kewing Road	430
U	4b	Lyking Road	274
U	4b	Lyron	58
U	4b	Ness Road	567
U	4b	Puldrite Road	4602
U	4b	Skiddy Road	993
U	2	Tingwall Road	320
U	4b	Woodwick Road	1783

Islands – Rural Roads

Class	Hierarchy	Road Name	Road Length
Eday			
B	4a	B9063	10087
C	4b	Veness Road	2283
C	4b	Westside Road	5451
U	4b	Carrick Road	1159
U	4b	Cusbay Road	2968
U	4b	Essonquoy Road	520
U	4b	Guith Road	3154
U	4b	Kirk Road	664
U	4b	Mill Bay Road	259
U	4b	Noneyha Road	300
U	4b	Ruah Road	590
U	4b	Southside Road	683
Egilsay			
U	4b	North Road	990
U	4b	Onziebust Road	1859

Egilsay (continued)			
U	4b	Pier Road	724
U	4b	Warsett Road	130
Flotta			
B	4a	B9045 Ro-Ro Terminal – Church Road	3014
B	4a	B9046 Damhouse Road – Pan Pier	1777
U	4a	Balaclava Road	1122
U	4b	Banks Road	219
U	4a	Bow Road	744
U	4b	Burnside (east)	75
U	4b	Burnside (west)	42
U	4a	Church Road	359
U	4b	Damhouse Road	472
U	4b	Lingal Road	507
Graemsay			
U	4b	Breckan Road	1026
U	4b	Kirk Road	1132
U	4b	Pier Road	1049
U	4b	Sandside Road	707
U	4b	School Road	485
U	4b	West Hill Road	964
Hoy			
B	4a	B9047	32748
B	4b	B9049	1308
B	4a	French Road	1125
C	4b	East Branch Road	1227
C	4b	Kings Road	1052
C	4b	Sandsdale Road	4504
U	4b	Artillery Road	406
U	4b	Baldreys Road	1295
U	4b	Braebuster Road	3017
U	4b	Brims Road	1207
U	4b	Cantick Road	205
U	4b	Crockness Road	1612
U	4b	Daystar Road	323
U	4b	French Road Housing	82
U	4b	Garson Road	166
U	4b	Haven Road	448
U	4b	Hillside Road	1129
U	4b	Hutts Road	415
U	4b	Manse Road	1294
U	4a	Moaness Road	644
U	4b	North Ness Road	149
U	4a	Pier Road	92
U	4b	Quoyness Road	854
U	4b	Rackwick Road	6823
U	4b	Rinnigill Road	1303
U	4b	Shop Road	270
U	4b	Snelsetter Road	411
U	4b	St Colms(N)	112
U	4b	St Colms(S)	165
U	4b	Upper Seatter Road	455
North Ronaldsay			
U	4b	Antabreck Road	340

North Ronaldsay (continued)			
U	4b	Barrenha Road	594
U	4b	Brides Ness Road	1931
U	4b	Easting Road	2746
U	4b	Garso Road	205
U	4b	Greenspot Road	216
U	4b	Hooking Road	740
U	4b	Howar Road	1715
U	4b	Lighthouse Road	537
U	4b	Main Road	2782
U	4b	North Gravity Road	214
U	4b	South Gravity Road	572
U	4b	Trebb Road	238
U	4b	Vincoin Road	190
U	4b	Waterhouse Road	324
U	4b	Westness Road	1171
Papa Westray			
U	4b	Backaskaill Road	366
U	4b	Central Road	3987
U	4b	Eastshore Road	1133
U	4b	Hyndgreenie Road	1128
U	4b	Pier Road	1201
U	4b	School Road	1092
Rousay			
B	4a	B9064	14224
B	4a	B9065	555
C	4b	Brinian Road	1026
C	4b	Westside Road	6491
U	4b	Bigland Road	990
U	4b	Church Road	122
U	4b	Courquoy Road	1262
U	4b	Hullion Road	247
U	4b	Hurtiso Road	428
U	4b	Johnston's Road	125
U	4b	Nethermill Road	402
U	4b	Scockness Road	1374
U	4b	Sourin Road	720
U	4b	Wasbister Road	2040
Sanday			
B	4a	B9068	7364
B	4a	B9069	12191
B	4a	B9070	10107
C	4b	Measer Road	1101
C	4b	Otterswick Road	2283
U	4b	Airfield Road	2642
U	4b	Airon Road	2305
U	4b	Backaskaill Road	574
U	4b	Bressigarth Road	1244
U	4b	Cleat Road	2210
U	4b	Coo Road	2042
U	4b	Hegglie Ber Road	351
U	4b	Howe Road	910
U	4b	Laminess Road	596
U	4b	Langbigging Road	1140

Sanday (continued)			
U	4b	Marston Road	193
U	4b	North Loch Road	4864
U	4b	Ortie Road	2583
U	4b	Oyce Road	1287
U	4b	Rue Road	1521
U	4b	School Road	1170
U	4b	Sellibister Road	637
U	4b	Stove Road	1654
Shapinsay			
B	4a	B9058	7997
B	4b	Hillock Road	252
B	4a	B9059	5740
U	4b	Brecks Road	274
U	4b	Bruch Road	405
U	4b	Chapelbrae Road	1343
U	4b	Girnigoe Road	1005
U	4b	Helliar View	20
U	4b	Hill Road	1865
U	4b	Millbank	53
U	4b	Sandyhill Road	2920
U	4b	Strathore Road	1730
U	4b	Swartaquoy Road	1024
U	4b	Waterhouse Road	1157
U	4b	Westhill Road	1001
U	4b	Linkness Road	1467
Stronsay			
B	4a	B9060	6748
B	4a	B9061	5622
B	4a	B9062	2128
C	4b	Everbay Road	4083
C	4b	Whitehall Road	1705
U	4b	Airafea Road	875
U	4b	Bay Road	188
U	4b	Burrowgate Road	128
U	4b	Cleat Road	1463
U	4b	Dishes Road	532
U	4b	Fairhill Road	512
U	4b	Furrowend Road	512
U	4b	Hescombe Road	993
U	4b	Holland Road	1808
U	4b	Huip Road	1362
U	4b	Kirbuster Road	740
U	4b	Lower Leaquoy Road	157
U	4b	Lower Whitehall Road	1198
U	4b	Midhouse Road	385
U	4b	Odiness Road	1456
Westray			
B	4a	B9066	12740
B	4a	B9067	5392
C	4b	Noup Road	3438
C	4b	Smittaldy Road	2293
C	4b	Swartmill Road	3500
U	4a	Aikerness Road	3888

Westray (continued)			
U	4b	Autquoy Road	412
U	4b	Balaclava Road	1219
U	4b	Branstane Road	1134
U	4b	Breckaskaill Road	904
U	4b	Broughton Road	655
U	4b	Bu Road	371
U	4b	Cleat Road	1593
U	4b	Furrigarth Road	1162
U	4b	Goltaquoy Road	635
U	4b	Gretna Green Road	1115
U	4b	Grimbust Road	839
U	4b	Howanbreck	102
U	4b	Iphs Road	279
U	4b	Kirbist Road	981
U	4b	Langskaill Road	426
U	4b	Langskaill Road	744
U	4b	Lastigar	97
U	4b	Lochend Road	1348
U	4b	Ness Road	2201
U	4b	Newark Road	223
U	4b	Pharays Park Road	480
U	4b	Rackwick Road	1458
U	4b	Russland Road	228
U	4b	Sandy Road	237
U	4b	Sandy Road, Pierowall	71
U	4b	Swanson Road	452
U	4b	Tirlot Road	283
U	4b	The Quarry Road, Pierowall	88
U	4b	Tuquoy Road	1339
U	4b	Twiness Road	635
Wyre			
U	4b	Russness Road	2122

Appendix 2 – Other Council Roads

Class		Road Name	Road Length
		KGS access Road	
		Hostel access Road	
		Papdale House access	
		Orkney College access road	
		St Rognvald House access road	
		St Colms Centre access road	
		Smiddybrae access roads	
		Kalisgarth access roads	
		Palace Gardens	
		Castleyards	
		Ayre Mills access road	
		Grays Noust	
		Mayburn Court	
		Raes Close	
		Market Green Dounby	
		Weaverhall Road ext	
		Wardhill – Downies Lane	
		Gloup access road	
		Covenanters access road	
		Point of Buckquoy access road (Brough of Birsay)	
		Inganess Beach Road	
		Lochside view point road	
		Muddisdale Farm access road	
	4b	Cemetery Road, Burray	393
	4b	Daystar Road, Hoy	3223
	4b	Evie Housing Scheme, Evie	40
	4b	Hamarhill, Eday	36
	4b	Geramount Road, Stronsay	151
	4b	Upper Seatter Road, Hoy	456
		Council Through Access Road	160
		Flett Park	
		Flett Road	
		Jewadale Drive	
		Lairds Road, Burray	
		Meadow Park	
		Taftingurs Place, St Margaret’s Hope	
		Weyland Drive	

Appendix 3 – Private Roads

Class	Hierarchy	Road Name	Road Length
		Auster Road Braedon Court Brandyquoy Park Earls Court Firth Court Glaitness Court Glaitness Place Greenvoe Hatston Park Highbury Villas Hornersquoy Lane Kingfisher Road Langskaill Place Linklater Drive Manse Park Neuketineuks Lane Norseman Phoenix Terrace Pickaquoy Place Somerville Square Sutherland Court Sutherland Place Weyland Gait Weyland Park	

Appendix 4 – Footway Hierarchy

Kirkwall and St Ola

Road Name	Start Point	End Point	Category Left Side	Category Right Side	Length
A964, St Ola	40mph	Scapa Bay Road	4	4	
A965, St Ola			4	N/A	
Annfield Crescent	Work Road	Berstane Road	4	4	377
Annfield Park	Watersfield Road		4	4	
Ayre Road	Hatston Roundabout	Kiln corner roundabout	4	4	630
Bellevue Park	Inganess Road	Inganess Road	4	4	210
Berstane Road Lower (Part)	East Road	The Meadows	3	3	710
Berstane Road Upper (Part)	The Meadows	Berstane Loan	4	4	800
Bignold Park Road	Clay Loan	Inganess Road	3	3	640
Bosquoy Road	Islands View Road		4	4	80
Broad Street	Albert Street	Victoria Street	3	2	170
Bridge St. Wynd	Queen Street	Bridge Street	N/A	3	128
Broadsands Road	Pipersquoy Road	Manse Road	4	4	176
Burgh Road	Ayre Road	Great Western Road	4	4	184
Burnmouth Road	Junction Road	Burgh Road	4	4	235
Burnside	Holm Road	Lyne Road	4	4	200
Buttquoy Crescent	Dundas Crescent	Buttquoy Place	3	3	250
Buttquoy Drive	Buttquoy Crescent		4	4	105
Buttquoy Park	Buttquoy Crescent		N/A	4	52
Buttquoy Place	Clay Loan	Watergate	4	4	230
Carness Road (to 30mph)	Islands View Road	Weyland Bay	N/A	4	400
Carness Road, St Ola	Craigiefield Road		N/A	4	
Carter's Park Road	Berstane Road	Willowburn Road	4	4	130
Castle Street	Junction Road	Broad Street	2	2	116
Castleyards	Castle Street	Magnus Lane	4	4	-
Clay Loan	Dundas Crescent	Main Street	3	3	397
Clay Loan	King Haakon Street	Bignold Park Road	4	4	
Claymore Brae	Bignold Park Road		4	4	
Claymore Court	Holm Road		4	N/A	
Clumly Avenue	Islands View Road		4	4	151
Council Car Park	Mill Street				238
Council Through Access Road	Mill Street	The Keelies	4	4	
Craigie Crescent	Quoybanks Crescent	Earl Thorfinn Street	4	4	338
Craigiefield Park, St Ola	Craigiefield Road		4	4	100
Craigiefield Road, St Ola	Carness Road		4	N/A	
Crantit Park, St Ola	Old Scapa Road		4	N/A	50

Road Name	Start Point	End Point	Category Left Side	Category Right Side	Length
Cromwell Court	Cromwell Drive		4	4	30
Cromwell Crescent	Cromwell Road		4	4	98
Cromwell Drive	Cromwell Road	Weyland Terrace	4	4	197
Cromwell Road (Part)	St Catherines Place	Mount Drive	4	4	144
Cromwell Road (Part)	Mount Drive	Weyland Bay	4	4	302
Crowness Crescent	A965 Grainbank	Grainshore Road	4	4	744
Crowness Park	Crowness Crescent		4	4	93
Crowness Place	Crowness Road		4	4	94
Crowness Road	Graineshore Road		4	4	609
Cursiter Crescent	Berstane Road	Berstane Road	4	4	279
Dakota Road	Gladiator Road	Skua Road	N/A	4	
Deerness Road (to 30mph Signs)	Inganess Road		N/A	3	325
Dundas Crescent	Thoms Street	Clay Loan	3	3	320
Earl Sigurd Street	Earl Thorfinn Street	King Hakkon Street	4	4	110
Earl Thorfinn Street	Clay Loan	Craigie Cresent	4	4	252
Easdale Loan	Holm Road	Deerness Road	3	3	244
Easdale Close	Easdale Loan		4	4	99
East Road Lower (Part)	Willowburn Road	Berstane Road	3	3	121
East Road Upper (Part)	Berstane Road	Annfield Crescent	4	4	373
Eastquoy Road	Weyland Terrace		4	4	80
Eunson Kloss	Pickaquoy Loan		4	4	
Faraclett	Ronaldsvoe		4	4	35
Garden Street	East Road	St Olafs Wynd	4	4	70
Garrioch Street	Willow Road	Thoms Street	3	3	112
Garrison Road	Grainshore Road		4	4	
George Street	Thoms Street	Dundas Crescent	3	3	273
Gladiator Road	Sparrowhawk Road	Crowness Crescent	4	4	107
Glaitness Park	The Crafty		4	4	257
Glaitness Road	Old Scapa Road	Corse Loan	3	3	338
Grainbank, St Ola	Hatston Brae		4	4	
Grainepark	Grainbank Road	Grainbank Road	4	4	720
Grainshore Drive	Grainshore Road		4	4	
Grainshore Road	Ayre Road	A965 Saverock	4	4	2099
Grassick Court	Bignold Park Road		N/A	4	59
Great Western Road (south)	Pickaquoy Road	West Castle Street	4	4	450
Great Western Road (north)	West Castle Street	Burnmouth Road	4	4	102
Grimsetter Drive	Inganess Road		4	4	
Grimsetter Place	Grimsetter Drive		4	4	
Harbour Street	Junction Road	Bridge Street	2	2	115

Road Name	Start Point	End Point	Category Left Side	Category Right Side	Length
Hatston Brae (Pickaquoy Road - Sunnybank Road)	Pickaquoy Road	Sunnybank Road	4	N/A	1280
Helliar	Muir Drive		N/A	N/A	22
Hermaness	Marwick Drive		N/A	N/A	50
Holm Branch Road	New Scapa Road	Holm Road	4	4	660
High Street	Hornersquoy	Old Scapa Road	3	3	118
Holm Road (to 30mph)	Bignold Park Road		4	4	530
Hordaland	The Meadows		4	4	92
Hornersquoy	High Street	New Scapa Road	4	4	92
Ingale	Marwick Drive		4	4	50
Inganess Road (to 30mph)	Deerness Road	Berstane Loan	4	4	560
Ingavoe Drive	Berstane Road		4	4	
Isbister Road	Islands View Road		4	4	56
Islands View Road	Carness Road	Weyland Bay	4	4	320
Junction Road	Kiln corner	Main Street	2	2	780
KGS Access Road (to Bollards) Un-adopted Rd					370
King Haakon Street	Clay Loan	Earl Sigurd Street	4	4	116
King Harald Kloss	Pickaquoy Loan		4	4	
King Street	Strynd	Laing Street	3	3	125
Kirklands Road	Pipersquoy Road	Quoybanks Crescent	4	4	315
Laing Street	Albert Street	King Street	2	3	108
Lambaness	Muir Drive		4	4	30
Laverock Road	Clay Loan	Pipersquoy Road	3	3	296
Linklet	Marwick Drive		4	4	68
Lother	Muir Drive		4	4	35
Lynn Crescent	Lynn Road		4	4	
Lynn Park	Holm Road		4	4	240
Lynn Road	Deerness Road		N/A	4	
Mackenzies Drive	Lynn Road	Watson Drive	4	4	
Mackenzies Place	Mackenzies Drive		4	4	
Mackenzies Park	Mackenzies Drive		4	4	
Main Street	Union Street	New Scapa Road	3	3	140
Manse Lane	Clay Loan	Manse Road	4	4	125
Manse Road	New Scapa Road	Laverock Road	4	4	202
Manse Road	Laverock Road		4	4	50
Marwick Drive	The Meadows	Muir Drive	3	3	212
Meadowbank	Thoms Street		4	4	371
Mill Street	King Street	Willow Road	3	2	110
Mooney Drive	Marwick Drive	Vasa	4	4	142
Mount Drive	Cromwell Road	Weyland Terrace	4	4	146
Muddisdale Road	Pickaquoy Road		4	4	360
Muir Drive	Linklet	Otterswick	3	3	266
New Scapa Road (to Holm Branch Road)	Main Street	Scapa Junction	3	3	406

Road Name	Start Point	End Point	Category Left Side	Category Right Side	Length
Nicolson Street	Old Scapa Road	Scapa Court	4	4	216
Old Finstown Road	Corse Loan	Walliwall	3	3	
Old Scapa Road (to Crantit Park)	Glaitness Road	40mph limit	3	3	342
Orquil Road, St Ola	Old Scapa Road		N/A	4	
Otterswick	Muir Drive		4	4	27
Otterswick Crescent	Muir Drive		4	4	150
Palace Road	Broad Street	School Place	2	3	262
Papdale Close	Papdale Road		4	4	135
Papdale Crescent	Papdale Drive	Papdale Place	4	4	170
Papdale Drive	Papdale Road		4	4	164
Papdale Place	The Meadows		4	4	88
Papdale Road	The Meadows	Papdale Loan	4	4	245
Park Loan	Bignold Park Road		4	4	82
Peerie Sea Loan	Pickaquoy Road		4	4	
Pickaquoy Loan	Pickaquoy Road		4	4	
Pickaquoy Road	Ayre Road	Junction Road	2	2	900
Pipersquoy Drive	Pipersquoy Road	Quoybanks Drive	4	4	67
Pipersquoy Road	New Scapa Road	Quoybanks Crescent	4	4	290
Pipersquoy Terrace	Pipersquoy Road	Pipersquoy Drive	4	4	64
Quarryfield Road	Crowness Crescent		4	4	106
Queen Sonja Kloss	Pickaquoy Loan		4	4	
Queen Street	Laing Street	Willowburn Road	3	3	148
Quoybanks Crescent	Craigie Crescent	Holm Road	3	3	414
Quoybanks Drive	Quoybanks Crescent	Pipersquoy Drive	4	N/A	98
Quoybanks Place	Quoybanks Crescent		4	4	81
Reid Crescent	The Meadows	The Meadows	4	4	737
Ronaldsvoe	Muir Drive	Faraclett	4	4	70
Rope Walk	Deerness Road		4	4	263
Royal Oak Court	Holm Road		4	4	
Royal Oak Road	Holm Road		4	4	
St. Catherine's Place	East Road	Shore Street	3	3	154
St. Olaf's Wynd	Bridge Street	Garden Street	N/A	N/A	69
St. Rognvald Street	George Street	Thoms Street	4	4	247
St. Rognvald's Way	Glaitness Road		4	4	119
Sabiston Crescent	Islands View Road		4	4	
Scapa Bay Road	Old Scapa Road		4	N/A	
Scapa Court	New Scapa Road		4	4	250
Scapa Crescent	New Scapa Road	Holm Branch	4	4	818
School Place	Palace Road	Strynd	4	3	147
Seafire Road	Grainshore Road	Sparrowhawk Road	4	4	80

Road Name	Start Point	End Point	Category Left Side	Category Right Side	Length
Shore Street	Bridge Street	St Catherines Place	3	3	118
Shore Street	St Catherines Place	Mount Drive	4	4	102
Slater Street	Thoms Street	Willow Road	4	4	145
Skaill Road	Islands View Road		4	4	80
Soulisquoy Loan	Glaitness Road		4	4	
Soulisquoy Place	Glaitness Road		4	4	
Sparrowhawk Road	Scotts Road	Gladiator Road	4	N/A	
Springfield Drive	Berstane Road		4	4	180
Skua Road	Sparrowhawk Road	Swordfish Road	4	4	94
Strombery	Marwick Drive		4	4	66
Summerdale Drive	Quoybanks Crescent	Craigie Crescent	4	4	219
Sunnybank Road	A965		4	N/A	
Sutherland Park	Pickaquoy Loan		4	4	
Swordfish Road			4	4	
Tankerness Lane	Broad Street	Junction Road	2	2	112
The Crafty	Junction Road	Glaitness Park	4	4	294
The Keelies	Willow Road	Council Through Access Road	N/A	4	128
The Meadows	Bignold Park Road	Berstane Road	3	3	940
Thoms Street	Dundas Crescent	The Meadows	3	3	666
Torness	Mooney Drive		4		54
Union Street	Junction Road	Victoria Street	3	3	98
Upper Crantit Road	Holm Branch Road		4	4	195
Vasa	Mooney Drive		4		38
Victoria Road	Victoria Street	Buttquoy Place	4	4	136
Victoria Street	Broad Street	Union Street	2	2	
Viewfield Drive	Berstane Road		4	4	151
Viking Place	Glaitness Road		4	4	140
Warrenfield Crescent	Craigie Crescent		4	4	242
Warrenfield Drive	Warrenfield Crescent	Earl Sigurd Street	4	4	72
Wasdale Crescent	Islands View Road		4	4	116
Watergate	Palace Road	Victoria Road	4	4	184
Watson Drive	Deerness Road		4	4	
Watson Place	Watson Drive		4	4	
Watson Park	Watson Drive		4	4	
Watson Close	Watson Drive		4	4	
Watersfield Road	Work Road		4	4	
Wellington Street	New Scapa Road	Hornersquoy	3	3	150
West Castle Street	Junction Road	Great Western Road	3	3	73
West Tankerness Lane	Junction Road	Great Western Road	4	4	72

Road Name	Start Point	End Point	Category Left Side	Category Right Side	Length
West Tankerness Lane	Junction Road	Great Western Road	4	4	72
Weyland Bay	Carness Road		4	4	450
Weyland Terrace	East Road	Cycle Track	4	4	272
White Street	Thoms Street	Willow Road	4	4	143
Willow Road	Mill Street	KGS access road	4	3	369
Willowburn Road	Queen Street	Willow Road	4	4	372
Work Road, Kirkwall	Annfield Crescent	St Ola Boundary	4	4	
Work Road, St Ola	Kirkwall Boundary		4	N/A	
Stromness - Schedule of Footways					
Back Road	North End Road	Ness Road	4	4	1830
Cairston Road	Ferry Road	30 mph limit	4	4	678
Church Road	Victoria Street	Franklin Road	4	4	112
Citadel Drive	Citadel Road		4	4	
Citadel Crescent	Citadel Road		4	4	
Citadel Road	Back Road		4	4	
Coplands Drive	Coplands Road		4	4	
Coplands Road	Garson Road		4	4	
Downie's Lane	Back Road	30 mph limit	4	4	307
Faravel	Back Road		4	4	75
Ferry Road	Cairston Road	Pier Head	3	3	624
Franklin Road (Part)	Hellihole Road	Bank Lane	4	N/A	600
Garson Drive	Cairston Road		N/A	4	193
Garson Park	Garson Road		4	4	275
Garson Place	Garson Road		4	4	255
Garson Road	Cairston Road	Coplands Road	4	4	486
Garson Way	Cairston Road		4	N/A	147
Gray's Noust	Dundas Street		4		23
Grieveship West	Back Road		4	4	180
Hamnavoe	Garson Road		4	4	587
Hellihole Road	Back Road	Dundas Street	N/A		260
Hillside Park	Hillside Road		4	4	
Hillside Road	North End Road	Wardhill Road	4	4	700
Hoymansquoy	Back Road		4	4	160
John Street	North End Road	Victoria Street	N/A	4	276
Manse Park	Springfield Crescent		4	N/A	20
Ness Road	South end	Back Road	4	N/A	310
North End Road	Back Road	Ferry Road	3	3	390
North End Road (A965)	Cairston Road	40 mph speed limit	4	4	800
Pumpwell Park	Springfield Crescent		N/A	4	46
South End	Alfred Street	Ness Road			140
Springfield Crescent	Back Road	Franklin Road	3	3	158

Road Name	Start Point	End Point	Category Left Side	Category Right Side	Length
St. Peters Park	Back Road		4	4	82
Victoria Street	John Street	Graham Place	N/A	2	308
Wardhill Road	Hillside Road		4	N/A	
St Mary's - Schedule of Footways					
A961	Cleat Road	30mph speed limit	4	4	838
Breckan Brae	A961		4	4	
Graeme Park	St Marys Road		4	4	251
Station Square	A961		4	4	232
Sutherland Drive	Breckan Brae		4	4	
Burray - Schedule of Footways					
A961	Village Road	Ness Road	N/A	3	320
Leaburn Housing	A961		4	4	78
Sunfield Housing	Westshore Road		N/A	4	47
Upper Waston	Westshore Road		4	4	
Village Road	A961		4	4	450
Westshore Road (Part)	Village Road	Sunfield	N/A	4	363
St Margaret's Hope - Schedule of Footways					
Back Road	Marengo Road	Cromarty Square	3	3	270
Church Road (Part)	St Margaret’s Road	Marengo Road	4	4	340
Cromarty Square	Back Road	St Margaret’s Road	4	4	60
Doctors Road	St Margaret’s Road		N/A	4	
Front Road	Back Road		4	4	343
Marengo Road	Church Road		4	4	95
Pier Road (Part)	Cromarty Square	Pier Road	4	4	125
St Margaret’s Road	A961	Cromarty Square	4	4	
School Road	Doctors Road	30 mph limit	4	4	320
Thorfinn Place	Church Road		4	N/A	41
Link Road	Front Road	Back Road	4	4	
Wards Park	School Road		4	N/A	70
Finstown - Schedule of Footways					
A965	30 mph east	30 mph west	3	3	1213
A966 to Bridge	A965		3	3	300
Acre Lea	Old Finstown Road		N/A	4	
Grimond Place	Grimond Road		4	4	50
Grimond Road	Heddle Road		4	4	192
Grimond Square	Grimond Road		4	4	50
Heddle Road (Part)	A965	30 mph	4	4	340
Hill of Heddle Road	Heddle Road		4	4	95

Road Name	Start Point	End Point	Category Left Side	Category Right Side	Length
Jib Park	Old Finstown Road		4	4	109
Old Finstown Road	A965	30 mph limit	4	N/A	0.375
Parkside	A965		4	4	98
Seafield Housing	A966		4	4	65
Sandwick – Schedule of Footways					
Daisy Bank	Bristol Road		4	4	
Rendall – Schedule of Footways					
Lyron	A966		N/A	4	
A966	Norseman Village		4	4	
Dounby - Schedule of Footways					
A986	30 mph south	30 mph north	4	4	0.725
B9057 – Vetquoy Road	A986	30 mph limit	4	4	187
B9057 – Hillside Road	A986	Quilco	4	4	253
Back Road			4	4	
Market Green Housing	B9057		4	4	73
Behind Market Green Housing (O.A.P.'s)	A986		4	4	70
Quilco	B9057		4	4	206
Evie - Schedule of Footways					
Evie Housing Scheme	A966		4	N/A	0.039
Birsay - Schedule of Footways					
A966	30 mph	Linkshouse Road	4	N/A	413
Stenness - Schedule of Footways					
A965	A964	Brig o Waithe	4	N/A	
A965	30 mph	30 mph	4	4	238
Clouston Corner	Ireland Road		4	4	33
Ireland Road (to 30mph)	A965		4	4	293
Orphir – Schedule of Footways					
A964	30mph		4	4	
Kirk Park	A964		4	4	
Lynnad					
Linnadale Road	A964		4	N/A	

Road Name	Start Point	End Point	Category Left Side	Category Right Side	Length
Mainland Rural Areas - Schedule of Footways					
Deerness					
Sands Park	B9050		4	4	
Tankerness					
Whitecrest Park	Tankerness Hall Road		4	4	0.04
St Andrews					
A960	40	40	4	N/A	
Greenfield	A960		4	4	
Islands - Schedule of Footways					
Eday					
B9063 Adjacent to Hamarhill	Hamarhill		4	N/A	0.03
Hamarhill	B9063		4	4	0.03
Hoy					
French Road	B9048		4	4	0.086
Kings Road	B9047		N/A	4	
Pier Road	B9047		4	4	0.1
St Colms(N)	Manse Road		4	4	0.11
St Colms(S)	Manse Road		4	4	0.173
Flotta					
B9046	Flotta Primary School		N/A	4	
Burnside East	B9046		4	4	0.066
Burnside West	B9046		4	4	0.062
Rousay					
B9065	Johnstones Road	Brinian Road	4	N/A	
Johnstones Road	Pier Road		N/A	4	0.164
Sanday					
B9070	Ro-Ro Terminal	B9068	4	N/A	
Marston Road	B9069		4	N/A	0.104
Shapinsay					
B9059 Balfour Village	Pier	Sandyhill Road	4	4	0.596
Helliar View	Sandyhill Road		4	4	0.028
Millbank	Sandyhill Road		4	4	0.048
Sandyhill Road	B9059		4	4	

Road Name	Start Point	End Point	Category Left Side	Category Right Side	Length
Stronsay					
B9060 Whitehall	Whitehall Road	Lower Whitehall	4	4	0.832
Westray					
B9066 Pierowall	30 mph limit	30 mph limit	4	4	1.1
Balaclava Road	B9066		N/A	4	
Howanbreck	B9066		4	4	0.093
Lastigar	Balaclava Road		4	4	0.092
Noup Road	B9066		N/A	4	
The Quarry Road	B9066		4	N/A	

Appendix 5 – Footpath Hierarchy

Schedule of Footpaths and Lanes

Class	Hierarchy	Name	Length
		KIRKWALL	
	4	Bridge Street Lane	
	2	Burn Lane	
	2	Dunnets Close	
	2	Mounthoolie Lane	60
	2	Mounthoolie Place	50
	2	Big Tree Lane	
	3	Gas Wynd	
	2	Strynd	130
	2	St. Magnus Lane	110
	4	Whitechapel	100
	3	Frasers Close	
	3	Gunn's Close	100
	3	Walls Close	100
	3	Victoria Lane	144
	2	Copelands Lane	
		STROMNESS	
	4	Alfred Terrace	
	3	Ashey Lane	63
	2	Bank Lane	106
	2	Boy's Lane	110
	3	Donkey's Lane	18
	4	Franklin Lane	86
	4	Free Kirk Lane	52
	4	Wellpark	71
	4	The 44 Steps	20
	4	Khyber Pass	60
	2	Leslie's Close	60
	4	Leslie's Close to Khyber Pass	25
	4	Loganlea	164
	2	Manse Lane	78
	4	Marwick's Lane	50
	4	Melvin Place	30
	4	Miller's Close	65
	4	Millar's Steps	8
	4	Peedie Lane	12
	4	Pigeon Creek	37
	4	Porteous Close	83
	3	Puffers Close	80
	4	Raes Close	
	4	Speedings Lane	15
	4	Sutherland's Lane	60
	3	The Burn	60
	2	Stromness Academy footpath	
	4	Faravel Housing Scheme Footpaths	
	4	Grieveship Housing Scheme Footpaths	
	4	Hammnavoe Housing Scheme Footpaths	

Appendix 6 – Cycle Hierarchy

Schedule of Cycle Routes

Category	Cycle Route Name	Length
	KIRKWALL	
B	KGS cycle track (Thoms Street – Willow Road)	0.105
B	KGS cycle track (Willow Road – Papdale Loan)	0.113
B	Papdale cycle track (Willowburn Road – Grammar School)	0.348
B	Papdale cycle track (Papdale Loan – Berstane Road)	0.189
B	Weyland cycle track (East Road – Weyland Terrace)	0.258
B	Weyland cycle track (Weyland Terrace – Wasdale Crescent)	0.252
B	Glaitness Cycle track (Glaitness Road – Pickaquoy Loan)	0.191
B	Glaitness Cycle track (Pickaquoy Loan)	0.155
B	Glaitness Cycle track (Muddisdale Road – Pickaquoy Loan)	0.430
B	Glaitness Cycle track (Pickaquoy Loan – Glaitness Park)	0.260
B	Hatston Cycle Track (Ayre Road car park – Hatston slip)	0.729
B	Peerie Sea cycle track	
B	Papdale East Cycle Track	
	STROMNESS	
B	Market green cycle track (A965 – Cairston Road)	0.367

Appendix 7 – Street Lighting

Item	ID no	Location	Control Point
Column Column Column Column Control	BV01-10 SH01-14 HV01-08 MB01-04 CX01-02	Balfour Village Balfour Village Balfour Village Balfour Village Balfour Village	CX01 CX01 CX01 CX02
Column Column Control	BN01-06 JR01-03 CX01	Rousay Rousay Rousay	CX01 CX01
Column	HH01-04	Hamarhill Eday	HH03
Column Column	LD01-10 KT01-11	Lady Sanday Kettletoft Sanday	LD03 KT05
Column Control	WH01-17 CX01	Whitehall Stronsay	CX01
Column Control	PW01-20 CX01	Pierowall Westray	CX01
Column Control	GP00-07 CX02	Gill Westray Gill Westray	

The above table is an example of the information available from the Council's pavement management system, WDM.

Appendix 8 - Illuminated Signs and Bollards

The Council maintains 316 illuminated road signs and bollards.

Further information is available in the council's pavement management systems, WDM.

Appendix 9 - Non-illuminated Signs and Bollards

The council maintains 3867 non- illuminated road signs and 207 bollards.

Further information is available in the council's pavement management systems, WDM.

Appendix 10 - Structures

Ref No	Type	Bridges	Route
BR01	Masonary	Eildon, Tankerness	A960
BR02	Masonary	Millfield, St Andrews	A960
BR03	Masonary	Sebay Mill, St Andrews	A960
BRO4	Masonary	Bow O'brig, St Ola	A964
BR05	Masonary	Kirbister Mill, Orphir	A964
BR06	Masonary	Mill Of Ireland, Stenness	A964
BR07	Masonary	Rennibister East, St Ola	A965
BR08	Masonary	Rennibister West, St Ola	A965
BR09	Masonary	Ingashowe, Firth	A965
BR10	Masonary	Tormiston East, Stenness	A965
BR11	Masonary	Tormiston West, Stenness	A965
BR12	Masonary	Housequoy, Stenness	A965
BR13	Masonary	Brig O Waithe, Stenness	A965
BR14	Masonary	Burnside, Stromness	A965
BR15	Masonary	Ouse Finstown, Firth	A966
BR16		Ouse Footbridge	
BR17	Concrete	Georth, Evie	A966
BR18	Masonary	Palace, Birsay	A966
BR19	R.C Slab	Boardhouse North, Birsay	A967
BR20	R.C Slab	Boardhouse South, Birsay	A967
BR21	Masonary	Corrigal Burn, Harray	A986
BR22	R.C Slab	Graemeshall, Holm	B9052
BR23	R.C Slab	Decca, Harray	B9057
BR24	Concrete	Hillside Burn, Birsay	B9057
BR25		Scows	
BR26	Masonary	Rossmyre, Firth	C1
BR27	Masonary	Breck, Orphir	C2
BR28	Masonary	Burnside, Orphir	C2
BR29	Masonary	Skaill, Orphir	C2
BR30	Masonary	Millhouse, Firth	C6
BR31	Masonary	Cairston, Stromness	C11
BR32	Masonary	Deasbreck, Birsay	C13
BR33	Masonary	Millhouse, Holm	C17
BR34	Masonary	Stratheast, Holm	C17
BR35	Masonary	Ess, Sandwick	C19
BR36	Masonary	Burness, Firth	U/C
BR37	Piped Culvert	Hackland, Rendall	U/C
BR38	Masonary	Beaquoy Grainshore, Harray	U/C
BR39	P.C Box Culvert	Whaness, Hoy	B9047
BR40	Masonary	Lyrawa, Hoy	B9047
BR41	Masonary	Pegal, Hoy	B9047
BR42	P.C Box Culvert	Rysa Mill, Hoy	B9047
BR43	Masonary	Oreburn, Hoy	B9047
BR44	Masonary	Heldale, Hoy	B9047
BR45	R.C Slab	Rackwick, Hoy	U/C

BR46 BR47 BR48	Masonary Masonary P.C Arch	Feolquoy, Rousay Sourin, Rousay Hatston Underpass, Kirkwall	B9064 B9064 Grainshore Road
		Culverts	
		For further information relating to culverts maintained by the council as Roads Authority please refer to WDM	
		Retaining Walls	
		For further information relating to retaining walls maintained by the council as Roads Authority please refer to WDM	
		Causeways	
		Churchill Barrier No1 Churchill Barrier No2 Churchill Barrier No3 Churchill Barrier No4	A961 A961 A961 A961

Appendix 11 - Drainage

To be developed.

Appendix 12 - Line Marking

To be developed.

Appendix 13 - Safety Barriers

The Council maintains 5880m of safety barriers and 3630m of pedestrian railings.

Further information is available in the council's pavement management systems, WDM.

Appendix 14 - Car Parks

Pay and Display	
Kirkwall	Albert Street Burgh Road Castle Street Great Western Road North Gunns Close St Magnus Lane
Stromness	Ferry Inn Ferry Terminal
Short Stay	
Kirkwall	Broad Street St Olafs Wynd
Stromness	Pier head Victoria Street (opposite town house)
Long Stay	
Kirkwall	Ayre Houses (Burgh Road) Ayre Mills Bignold Park Road Clay Loan Crafty Cromwell Road East Kirk Great Western Road South King Street (councillors) 10 King Street (oic) Mill Street (oic offices) Muddisdale St Catherines Place The Meadows North The Meadows South
Stromness	Ferry Road East/West Ferry Road North Ferry Road South Stromness Lorry Park Old Academy
Finstown	Maitland Place
Dounby	Swartland Road
South Ronaldsay	Burwick Church Road

Appendix 15 - Other Assets

To be developed.

Appendix 16 - List of Operational Plans

16.1: Winter Service Plan.

16.2: Winter Service Service Level Agreement (SLA).

16.3: Verge Maintenance Plan.

16.4: Peerie Sea Operational Plan.

16.5: Churchill Barriers Traffic Management Operational Plan.

Further Operational Plans to be listed when approved following development.

Appendix 17 - Defect Intervention Levels for Safety Inspections

Road Defects and Intervention Levels Guide

Note – All measurements are in mm.

Carriageway

		Response time code for Carriageway Category			
	Investigatory level	**2 & 3a**	**3b & 4a**	**4b**	
Potholes > 150 dia, missing slabs, sunken tracks, failed reinstatements and low, loose or damaged slabs or ironwork	> 50 < 100 > 100	2 1	2 1	2 1	
Depression or Hump > 2000 long and 600 wide	> 50 < 100 > 100	2 1	2 1	2 1	
Ironwork	Missing <150 Missing >150	2 1	2 1	2 1	
Damaged safety barrier	Bent Broken Missing	3 2 1	3 2 1	3 2 1	
Blocked Gullies	All	3	3	3	
Flooding, standing water	>25 < 50 > 50 < 100 > 100	2 1 1	2 2 1	2 2 1	
Road Signs Damaged or Missing	Warning All other signs	2 3	2 3	2 3	
Road Markings or Studs	Missing	3	3	3	
Vegetation obscuring site lines		2	2	2	

Footpaths, Footways and Roads in Conservation Areas

		Response time code for Footway Category		
Defect	**Investigatory level**	**1**	**2, 3 & 4**	**5**
Potholes > 100mm dia, missing slabs or kerbs, Vertical Projections (Trips), sunken tracks, failed reinstatements and low, loose or damaged slabs or kerbs	> 20 < 50 > 50	2 1	2 1	2 1
Depressions or Humps > 600 wide (subsidence or heave)	> 20 < 50 > 50 <100 >100	3 2 1	3 2 1	3 2 1
Ironwork	Missing	1	1	1
Damaged Pedestrian Barriers and handrails	Bent Broken or missing	2 1	2 1	2 1
Standing Water > 50% of Footpath width	>25 < 50 > 50	2 1	2 1	2 1

Road Sign	Obstructing FP	2	2	

Public Lighting, Lit Signs or Bollards

Defect		
Missing or open door	All	1
Broken or exposed wiring		1
Column, Significant structural damage		1
Lantern, Loose		1
Lamp out or missing		2

Response codes

Category	**Description**	**Action**	
Cat 1	Requiring prompt attention due to immediate or imminent hazard or risk of short-term structural deterioration.	Defects will be corrected or made safe	At time of inspection or within 2 hours
		Temporary Repair	24 hours Where there is serious consequences for safety, temporary signs or repair will be subject to regular inspections
		Permanent Repair	Add to works Programme
Cat 2	Defects that require to be repaired promptly, although not an emergency, but the potential for damage to vehicles or a potential hazard to pedestrians.	Defects corrected or made safe which may involve signing and guarding of the defect.	Within 24 hours.
		Temporary Repair	5 Working Days
		Permanent Repair	Add to works Programme
Cat 3	Not serious short term danger but considered serious enough to merit attention ahead of normal maintenance programmes	Temporary Repair	Within a 28 day period
		Permanent Repair	Add to works Programme

Appendix 18 - Condition Standards for Service Inspections

Carriageways

Hierarchy Ranking	Location	Description	Condition Standard (per 100m length)
2/3a	Carriageway	Minor deterioration: - potholing, fine cracking or fretting of existing surfaces.	Where > 30% of surface area then consideration of surface treatment.
		Major Deterioration: - Cracking, coarse crazing, serious loss of aggregate, serious permeability.	Where > 10% of surface area Patch or surface treat Where > 30% of surface area Patch or resurface.
		Previously patched surface resulting in numerous joints.	Where > 40% then consideration for surface treatment.
		Loss of Skid Resistance / texture over whole surface area.	Consideration for Surface Dressing or other proprietary treatment.
		Edge Deterioration	> 20% of length of carriageway edge patching required. > 50% of length then Edge Strengthen and or kerb.
		Wheel Track rutting	> 20mm deep over 10% of length then patch or local resurfaces. **> 20mm deep over 90% of length of road then Reshape effected lane**
3b	Carriageway	Minor deterioration: - potholing, fine cracking or fretting of existing surfaces.	Where > 30% of surface area then consideration of surface treatment.
		Major Deterioration: - Cracking, coarse crazing, serious loss of aggregate, serious permeability.	Where > 15% of surface area Patch or surface treat Where > 40% of surface area Patch or resurface
		Previously patched surface resulting in numerous joints.	Where > 50% then consideration for surface treatment.
		Loss of Skid Resistance over whole surface area.	Consideration for Surface Dressing
		Edge Deterioration	> 20% of length or area of carriageway edge patching required > 50% of length or area then Edge Strengthen and or kerb
		Wheel Track rutting	> 20mm deep over 25% of length then patch or local resurfaces. > 20mm deep over 90% of length of road then resurface effected lane
4a/4b	Carriageway	Minor deterioration: - potholing, fine cracking or fretting of existing surfaces.	No specified minimum standard.

Hierarchy Ranking	Location	Description	Condition Standard (per 100m length)
		Major Deterioration: - Cracking, coarse crazing, serious loss of aggregate, serious permeability.	> 25% of surface area Patch and surface treat > 50% of surface area Patch or resurface
		Edge Deterioration	> 50% of length of carriageway edge patching to be considered
		Wheel Track rutting	> 40mm deep over 90% of length of road then resurface effected lane
Footways			
1a/1	Footways	Course cracking of the surface. Course crazing, depressions > than 25mm	> 40 % of surface area then consideration for surface treatment
2/3/4	Footways	Course cracking or crazing of the surface. Depressions > 25mm	> 40% then consideration for surface treatment.
Drainage			
2		Culverts and manholes and Silt Traps	Inspected and Cleaned every two years.
3a		Culverts and manholes and Silt Traps	Inspected and Cleaned every three years.
All Roads	Offlets	Drainage offlets from carriageway	Cleaned annually
2	Ditches	Road drainage ditches and cut off ditches	Inspected and Cleaned every 4 years
3a/3b	Ditches	Road drainage ditches and cut off ditches	Inspected and Cleaned every 6 years
4a/4b	Ditches	Road drainage ditches and cut off ditches	Inspected and Cleaned every 10 years
All	Gullies	Cleaning of Gullies	Cleaned 2 times every year
2	French Drains	Inspecting and Cleaning	Inspected and Cleaned every 4 years
3a/3b	French Drains	Inspecting and Cleaning	Inspected and Cleaned every 6 years
4a/4b	French Drains	Inspecting and Cleaning	Inspected and Cleaned every 10 years
Drainage			
2	French Drains	Replace Filter Material	Replace Filter Material as required but at min of 1 in 15 years
3a/3b	French Drains	Replace Filter Material	Replace Filter Material as required but at min of 1 in 20 years
4a/4b	French Drains	Replace Filter Material	Replace Filter Material as required but at min of 1 in 30 years
2/	Drainage Pipework	Inspecting and Cleaning	Inspected and Cleaned every 4 years
3/3a	Drainage Pipework	Inspecting and Cleaning	Inspected and Cleaned every 6 years

Hierarchy Ranking	Location	Description	Condition Standard (per 100m length)
4a/4b	Drainage Pipework	Inspecting and Cleaning	Inspected and Cleaned every 10 years
Grass Cutting and Verges			
All Roads	Grass Cut	Cut Verges	1.2m swathe three times per year
2	Weed killing	Spray French drains for weed prevention with approved weed killer	
3a/3b	Weed killing		
4a/4b	Weed killing		
Traffic Signs			
2/3a/3b	Traffic Signs	Physical condition / integrity of Signs	Inspected annually. As Required for Safety
4a/4b		Physical condition / integrity of Signs	Inspected every two years. As Required for Safety
All		Replacement and repair of damaged signs and bollards	Normally Treated as Cat 1 or 2 safety defect
Road Markings			
All	Road Markings	Replacement after Surface Treatment or Surface replacement	All mandatory markings that existed prior to treatment should be replaced as soon as reasonably practicable after completion of works. If not possible signage or temporary marking must be provided in areas where their absence could lead to danger.
2/3a/3b		Worn Markings	Should be replaced when >40% of their area becomes ineffective or worn away. Or after five years
4a/4b		Worn Markings	Should be replaced when >50% of their area becomes ineffective or worn away. Or after ten years.
Fences and Barriers			
All	Safety Fence	Damage	Treated as Cat 1 defect unless damage is obviously superficial then program repair.
Footway 1 & 2	Pedestrian Guard-rail	Damage	Treated as Cat 1 defect unless damage is obviously superficial then program repair.
Traffic Signals			
All	School Crossing Patrol Signs	Faults	Repair by end of next working day during term time.
Street Lighting			
All Roads	Distribution pillar	Preventative maintenance 1. Check all terminals 2. Clean	Minimum of once in every four years.

Hierarchy Ranking	Location	Description	Condition Standard (per 100m length)
		3. Check earthing 4. Grease all moving parts	
All Roads	St Lighting Column	Preventative maintenance 1. Check all terminals 2. Clean 3. Check earthing 4. Grease all moving parts 5. Assess column condition	Minimum of once in every four years.
All Roads	Circuit testing	Preventative maintenance 1. Continuity test 2. Insulation resistance test. 3. Polarity Test 4. Earth loop impedance test 5. Earth electrode test 6. Marking circuit diagram	Minimum of once in every four years.
All Roads	St Lighting Lamp Change	Change lamps	Minimum of once in every 3.5 years