



Lough Gill, Sligo

## 2.15 Engineering, Infrastructure and Utilities

### 2.15.1 Analysis – Water Supply

There are two main sources of water supplying Sligo and Environs, namely Kilsellagh Reservoir and Lough Gill. There is a water treatment plant at Kilsellagh and two water treatment plants treating water from Lough Gill - Cairn's Hill and Foxes Den. Kilsellagh serves northern parts of Sligo City and Rosses Point, while Cairn's Hill and Foxes Den serve the south side of the city and environs. The three water treatment plants have been, or are in the process of being, upgraded to facilitate the improved treatment and overall quality of the water supply.

Foxes Den was constructed in 2001, with a design capacity of 11,000 cubic metres per day. The refurbishment of Cairns Hill was completed in 2002 and has a design capacity of 5,450 cubic metres per day. A new water treatment plant is due to be constructed at Kilsellagh to replace the existing plant. Construction should be completed in 2004 with an output of 5000 cubic metres per day. A further expansion of the Foxes Den plant (Phase 2) is possible. This would add a further 5000 cubic metres to the supply.

A water conservation programme is being implemented within the Borough and its environs to reduce water loss and promote a more sustainable approach to usage. The total existing supply, combined with a reduction in leakage and the construction of Foxes Den Phase 2, is sufficient to cater for new development in the city and environs. This phase will cater for an extra 5,000 cubic metres per day. These water infrastructure provisions ensure that all lands zoned have the capacity to be served by public water supply.

#### 2.15.1.1 *It is the policy of the local authorities to:*

- Ensure an adequate, sustainable and economic supply of good quality water for domestic, commercial and industrial use.
- Conserve water supplies through the elimination of leakage in the interests of efficiency and sustainability.
- Promote public awareness and involvement in water conservation measures.
- Ensure that all drinking water complies with the European Union Drinking Water Directive 98/83/EC.

#### 2.15.1.2 *It is the objective of the local authorities to:*

- E1** Complete the planning and construction of the New Water Treatment Plant at Kilsellagh (no map reference).
- E2** Replace the existing pipelines between Kilsellagh Water Treatment Plant and Farranacardy Reservoir (no map reference).
- E3** Complete the modifications/refurbishments to the dam at Kilsellagh Reservoir (no map reference).
- E4** Extend the existing Water Treatment Plant at Foxes Den (no map reference).
- E5** Implement the National Water Services Pricing Policy (no map reference).
- E6** Continue the Water Conservation Programme in the Borough of Sligo (no map reference).

### 2.15.2 Analysis - Wastewater Services

The majority of Sligo Borough is serviceable by wastewater drainage infrastructure. The Sligo Main Drainage Scheme will develop a new wastewater treatment plant, sludge hub centre, pumping station and treated effluent outfall, located at Far Finisklin. This scheme will eliminate the discharge of untreated wastewater into Sligo Bay, comply with the Urban Wastewater Treatment Directive (91/27/EEC), and facilitate the future growth and development of Sligo.

Preliminary site works were completed by September 2002, with the main phase of the 'Design, Build, Operate' contract expected to start in 2003, finishing in 2005. The plant will cater for an initial population equivalent of 35,000 PE., with a capacity to serve up to 50,000 PE.

In addition to the new Wastewater Treatment Plant, further upgrading of the wastewater drainage infrastructure is required to ensure adequate service to all areas. Drainage schemes include; Ballincar, Rosses Point, Shannon-Eighter, Teesan, Lisnalurg, Hazelwood, Ballinode and Cummeen.

The proposed Carrowroe Main Drainage System forms a catchment area of 395 acres, only a small portion of which is targeted for development in this development plan period<sup>38</sup>. The foul sewage from this scheme will be pumped into the Sligo Main Drainage system. It is also intended that wastewater from the other schemes will be pumped into the Sligo main drainage system.

The improvements to the main drainage and treatment network as outlined above will be capable of accommodating the future development and growth of the city proposed over the period of the development plan.

**2.15.2.1** *It is the policy of the local authorities to:*

- Implement the Sligo Main Drainage Scheme, construction of the new Wastewater Treatment Plant and improvements to other identified sewerage and drainage schemes so as to ensure a sustainable treatment of effluent waste within the city and environs
- Ensure that developers provide efficient drainage systems with separate foul and surface water networks
- Ensure that effluent sludge is treated to the required European Union standards.

**2.15.2.2** *It is the objective of the local authorities to:*

- E7** Complete the construction of the Sligo Main Drainage Wastewater Treatment plant, sludge hub-centre, pumping station and treated effluent outfall at Far Finisklin. (no map reference)
- E8** Implement the Carrowroe Main Drainage Scheme and reserve lands at Tonafortes, immediately west of the Carrowroe Roundabout for a pumping station as part of the scheme.
- E9** Implement Ballincar-Rosses Point-Shannon Eighter Main Drainage Scheme (no map reference)
- E10** Implement the Teesan-Lisnalurg Main Drainage Scheme (no map reference).
- E11** Implement the Hazelwood-Ballinode Main Drainage Scheme (no map reference).
- E12** Implement the Cummeen Drainage Scheme (no map reference).
- E13** Continue the upgrading of the existing wastewater sewer network to alleviate flooding and provide for future development (no map reference).

<sup>38</sup> Approximately 140 acres of this land may not be developed due to the blighting of land by ESB power lines, the presence of the Curragh Wetlands, the proximity of Lough Gill and the need to protect its water quality (under the Management Plan for Lough Gill), and the presence of archaeological sites in need of protection.

### 2.15.3 Analysis - Surface Water Quality, Drainage Systems and Flood Control

Some areas of the city are prone to floods due to flash flooding of streams and the inability of old and inadequate drainage systems, to deal with such occurrences. The physical nature of the built environment, with its impervious surfaces, including roads, car parks and roofs, increases the flow of stormwater run-off into artificial drainage systems and adjacent streams. This can cause flooding where culverts are in need of upgrading or where stream channels have not adapted to such rapid environmental change. The presence of natural environments incorporating woodlands and wetlands help to retain surface water, thereby helping in the regulation of stream flows. In contrast culverts and underground stormwater systems involve additional development costs and may need to be upgraded at a later date to facilitate increases in run-off from development, especially where this occurs upstream.

The Sligo Main Drainage Flood Alleviation Study has identified a number of areas, which are liable to flooding within Sligo City. These areas have been included within the Sligo Main Drainage Scheme, which will facilitate flood alleviation and enable the accommodation of spare capacity.

Stormwater retention facilities serve a function in storing water, which is in excess of the capacity available in downstream channels until storm flows have abated. They also provide for sediment settlement and thereby assist in pollution control. The provision of such facilities enables an economically and environmentally sustainable approach to stormwater control to be taken.

Under the Carrowroe Drainage Scheme, surface water will drain by gravity flow to a storm water retention pond adjacent to the Curragh Wetlands, so as to contain any surplus flows and clean the water of pollutants prior to its discharge into Ballysadare Bay.

The Management Plan for the Lough Gill Catchment (1998) represents a partnership approach to the catchment management of the lake, involving Sligo County Council (and Leitrim County Council) in addition to statutory bodies, the Institute of Technology, voluntary organisations and community groups. The plan seeks to manage the water quality of the lake from potential conflicting interests and their associated possible adverse impacts.

#### 2.15.3.1 *It is the policy of the local authorities to:*

- Ensure that the water quality of the Garvogue River, Lough Gill and other water courses are maintained to a satisfactory level under the local authority's power and duty as Water Services Authority and Pollution Control Authority.
- Promote public awareness on how to maintain water quality and to reduce waste.
- Generally prevent the alteration of natural drainage schemes and in the case of development works, require the provision of acceptable mitigation measures in order to minimise the risk of flooding and negative impacts to water quality (including run-off, erosion and sedimentation).
- Promote stormwater retention facilities for new developments and existing catchment areas, particularly where developments are proposed in proximity to an existing open water course or stream in the plan area.
- Preserve and protect the water quality of natural surface water storage sites, such as wetlands, where these help to regulate stream flows, recharge groundwater and screen pollutants (such features also provide important habitat functions).
- Generally prohibit the landfilling of wetlands, except in cases of over-riding public interest.

- Identify and protect from contamination all aquifers and aquifer recharge areas used for domestic water supply.
- Protect river channels and streams, which can facilitate surface water drainage, by ensuring that development is kept at an appropriate distance from stream banks and adequate protection measures are put in place.
- Encourage, and where appropriate, require that the permitted flow from a development to a public stormwater or watercourse is restricted to the natural run-off rates from a site before development took place.
- Support the need for a hydrological survey in relation to lands at Carroroe and also an overall assessment of the existing stormwater disposal system in the locality prior to any development.

**2.15.3.2** *It is an objective of the local authorities to:*

- E14** Maintain the natural wetland characteristics of lands at the following locations, free from development, so as to ensure that at a minimum, part of their lands continue to function as natural stormwater retention areas: Cummeen; Ballinode; Cleveragh; Rosses Point Road, Drumaskibbole, Oakfield-Derrydarragh; Cloverhill Lough.
- E15** Incorporate stormwater retention facilities, including possible reconstructed wetlands and ponds, in the following designated areas of open space:
- The proposed open space that adjoins the alluvial woodlands at Hazelwood and Ballinode, so as not to alter the natural hydrological characteristics of the existing alluvial woodlands and maintain the water quality of Lough Gill.
  - The linear park and associated stream course that runs from Doonally, Shannon Oughter, Ballytivnan to Sligo Harbour.
  - The proposed linear park that runs through Finisklin to Gibraltar Point.

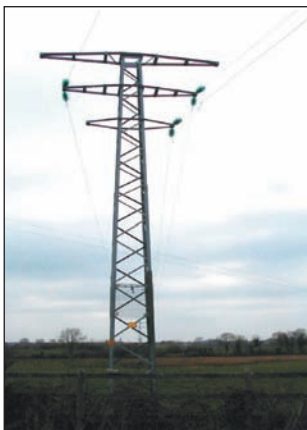
**2.15.4. Analysis - Public Utilities**

The term 'public utilities' relates to the facilities and infrastructure requirements of public, semi-public, private enterprises and companies, which serve the public with the supply of utilities such as electricity, natural gas, telecommunications and water. Public utilities provide, in an integrated manner, for the collection, transmission, distribution, and/or processing of the relevant service to the public. The local authorities acknowledge the necessity for these services, particularly to accommodate a comfortable lifestyle and a successful economic environment. However, with increased privatisation of a range of utility providers, particularly within the telecommunications sector, there is an increasing public concern about the visual and other impacts of various infrastructural elements.

**2.15.4.1** *It is the policy of the local authorities to:*

- Ensure that all new developments are served with adequate public lighting and other available public utilities.
- Facilitate the provision of utilities, such as electricity and telecommunications, to serve the projected population growth and consumer demand within the area.
- Co-ordinate with utility providers, particularly in the early stages of major projects, to limit the proliferation of unsightly lines, aerials and/or antennae, and to limit continuous disruption to public roads from the alternate provision of infrastructure by different companies.
- Encourage, where feasible, the joint usage (co-location) of utility facilities and services.
- Ensure that all utility substations and other utility services are adequately sited, screened and/or landscaped so as to reasonably minimise any adverse aesthetic impacts on surrounding buildings and land uses, where appropriate.

- Encourage the siting of certain facilities, such as public telephones, internet access points and other services into areas that lack such facilities or where demand and need is greatest (this policy is to counteract, for example, the insertion of public telephones in streets of significant public activity, where it provides advertising, while ignoring more socially deprived areas, including neighbourhood centres).
- Explore the provision of a local authority ducting system on all major roads or streets, so as to facilitate co-location and joint usage of utility facilities and services, particularly telecommunications.



### 2.15.5 Analysis - Electricity

The existing electricity supply is provided through a 110 kV substation to the southeast of Sligo and serves a number of 38 kV substations located in Sligo. Due to capacity restraints associated with the current system, improvements are required to cater for new industrial and commercial developments.

Current improvement work has resulted in the uprating of the Moy-Sligo 110 kV line, with further work to be carried out on the proposed 220 kV transmission line from Flagford-Srananagh, and the 125 MVA 220/110 kV station at Srananagh. It is proposed that these latter improvements take place within the period of this development plan to facilitate development potential.

A further increase in the current capacity of the existing system is to be facilitated by a number of measures:

- Various existing 38 kV substations will be uprated to cope with higher loads, specifically Sligo-Cranmore and Sligo-Hazelwood.
- A new 38 kV station is to be constructed at Aghagad to improve the voltage and continuity in the surrounding hinterland north of Ballytivnan. This will facilitate growth of customer load on the north side of Sligo City.
- Reinforcement of existing networks will require new circuits to Strandhill, Finisklin and Oakfield to improve security of supply.
- Two new loaders may be required from Finisklin/Oakfield 38 kV station to the city centre.
- As part of its national programme, the ESB are beginning to convert the existing 10 kV network to 20 kV, by refurbishment and the installation of new transformers.
- Any major load on the north side of the city will require the existing 110 kV station south of Sligo to be uprated with new feeders running from the station through the city, and across the Garvogue River, and reinforcements of networks north of the river will be required.

#### 2.15.5.1 *It is the policy of the local authorities to:*

- Facilitate the provision of energy to serve the projected growth and consumer demand within the plan area.
- Preserve significant landscape views from the visual intrusion of large scale telecommunications and energy infrastructure.
- Support the infrastructural development of ESB networks, including the overhead kV lines required to provide the network needed.
- Require the provision of electricity cables underground, especially in the urban environment and in areas of public open space.



Negative visual impact of overhead cables



### 2.15.6 Analysis – Telecommunications

The local authorities acknowledge the importance of the telecommunications sector to the local and regional economy of Sligo. It sees intensive digitisation as offering a competitive advantage in attracting economic development and inward investment. It also supports the interests of existing residents, industry, commercial and tourism needs. Two telecommunications companies serve Sligo at present - Eircom and Esat. Under the National Development Plan, Sligo has been identified for a number of improvements in the area of telecommunications, including the BMW Broadband Communications Corridor by Chorus; an Accelerated xDSL Rollout for Broadband Services by Esat Telecom; an extension of the National Fibre Optic Network by ESBI and the development of a Regional e-Commerce Hub by Nevada tele.com. In addition to these initiatives, there are plans for a data centre with a range of advance services. Meteor Mobile and O2 also have plans to develop the telecommunications sector in Sligo.

#### 2.15.6.1 *It is the policy of the local authorities to:*

- Have regard to the Government guidelines on 'Telecommunications Antennae and Support Structures – Guidelines for Planning Authorities', July 1996, Department of the Environment.
- Encourage co-location of telecommunications facilities where feasible.
- Preserve significant landscape views from the visual intrusion of large-scale telecommunications infrastructure.
- Ensure that telecommunications infrastructure are adequately screened, integrated and/or landscaped so as to minimise any adverse visual impacts on the environment.
- Generally promote the development of the telecommunications sector and fibre optic networks in Sligo and examine mechanisms through which this could be achieved.

### 2.15.7 Analysis - Gas

While Sligo is not served by gas infrastructure at present, Bord Gais is expected to extend its service to the city sometime in the future following the development of the Corrib Gas Field off the coast of Achill Island in County Mayo. To facilitate this possible development and assuming that Sligo City would be the end station of a transmission pipeline from Ballina, a pressure reduction station may be required south of the city, such as in the vicinity of the new Carrowroe roundabout.

#### 2.15.7.1 *It is the policy of the local authorities to:*

- Facilitate the provision of gas infrastructure to Sligo and Environs.
- Ensure that lands at Tonaforbes, immediately west of the Carrowroe roundabout are reserved free from development so as to ensure that a pressure reduction station for a gas supply to Sligo can be accommodated.

### 2.15.8 Analysis - Infrastructure Corridor

An Infrastructure Corridor involves the reservation of lands for multiple infrastructure uses, which are typically provided underground within a designated corridor. These infrastructure elements include the provision of infrastructure for water supply, sewerage, telecom, electricity and possibly gas. Such corridors are provided separately from the public road system, but have their own service access road, thereby reducing the necessity to disrupt traffic when maintaining or providing the infrastructure services.

Sligo has been the subject of a feasibility study to assess the potential development of an infrastructure corridor. It is just one of two nationwide studies, commissioned by Forfas. Such an initiative would greatly assist in providing the necessary services

for business, enterprises and industries seeking to locate in Sligo - enhancing its competitive edge and advantage over other urban centres.

Other potential benefits from the provision of such a corridor relate to the creation of a cycle-way along the service road, its potential development as a linear park, its use as a 'wildlife corridor' and its recreational use, i.e., walkway.

Given the specific minimum requirements for the provision of such services together in an infrastructural corridor, a minimum width of between 17-19 metres would be required to be reserved for a wayleave<sup>39</sup>.

**2.15.8.1** *It is the policy of the local authorities to:*

- Work with Forfas and the various service providers to examine the potential development of an infrastructure corridor to serve the proposed industrial and business related lands in Sligo and Environs.

**2.15.8.2** *It is an objective of the local authorities to:*

**E16** Reserve lands for a way-leave along the western side of the railway line of a minimum of 20 metres wide so as to ensure a sufficient reserve of land to cater for an infrastructure corridor which could be extended along the proposed Western Distributor Road and/or the proposed Western By-Pass. Note this objective also relates to Objective OS7, which reserves the same lands for a linear park, thus ensuring multiple uses within the same lands.



Recycling - 'Bring Facilities'

## 2.15.9 Analysis - Waste Management, Recycling and Re-Use

There has been a 60% growth in waste generation over the past 5 years, according to the EPA's latest report 'Environment in Focus 2002'. Nearly 88% of the 2.3 million tonnes of household and commercial waste produced is going to landfill sites, while only 12% is recycled. The Waste Management Act, 1996 enables several authorities to come together to adopt a common waste management plan. The six Connaught local authorities - Co. Sligo, Co. Galway, Co. Mayo, Co. Roscommon, Co. Leitrim and Galway City Council - adopted a Waste Management Strategy in September 2001. As there have been problems in the past with a County based approach to the implementation of new waste management infrastructure, each regional authority must now produce a Regional Waste Management Strategy, with the Connaught Strategy including the counties of Sligo, Galway, Mayo, Leitrim and Roscommon. According to the Regional Waste Management Plan for Connaught, there will be a striving toward the target of 48% of waste being recycled, 33% recovered, and 19% going to landfill.

In accordance with the Waste Management Act 1996, an approach to waste management should adhere to a "waste hierarchy". This hierarchy places the greatest emphasis on prevention and minimisation of waste production, followed by re-use, recycling, and recovery (including energy recovery), with disposal to landfill as the lowest preference. The waste hierarchy deals with all types of waste, from household, commercial, and agriculture to construction and demolition waste. It is through this hierarchy that the regional strategy takes cognisance of the need for an improved waste infrastructure to serve Sligo and the surrounding areas.

Sligo currently disposes of its waste to a landfill site in Rathroeen, County Mayo - an interim agreement under the Connaught Regional Waste Management Plan, until the completion of two regional landfill sites (one in South Connaught and one in North Connaught). It is hoped that at this stage other methods of waste disposal will result in only residual waste for the landfill sites.

It is proposed to provide a recycling centre at a site in Belladrihid. The private sector will provide a material's recovery facility and waste transfer station (currently at Finisklin). A further site at Union Quarry was assessed and considered suitable for the development of a Green Waste Composting Facility and for Construction and Demolition waste

<sup>39</sup> The infrastructural elements, which could be bundled within an infrastructure corridor are as follows: water supply, sewerage, telecom, gas and electricity. Telecoms and the 10 Kv line requires between 1-2 metres. The gas transmission line requires a 14m reservation; a 110 kV electricity line requires 9 metres (1 metre relating to ducting, 2 metres for a hardstand servicing area and another 6 metres for a servicing area on the other side of the gas pipeline wayleave). It is possible to overlap this 6 metre area with the 14 gas reservation, thereby minimising the land take. This amounts to a total of 19 metres, however as the proposed Inner Relief Road already takes account of the telecoms and 10 Kv line, the total land width could be reduced to approximately 17 metres, depending on topography.

(outside the development plan study area). These facilities will link in with other waste infrastructure proposals in the Connaught Regional Waste Management Strategy.

Construction and Demolition Waste is one of the major sources of waste. The establishment of the National Construction and Demolition Waste Council in June 2002 will assist in the achievement of the Government target for recycling 85% of C & D waste by 2013.

There is in place a Bring-Bank network to serve the city and environs. Within Sligo city itself there are currently nine Bring-Bank Stations, with a further one to be installed by the end of 2002, with an objective of 18 by the end of the current programme in 2004. Full Government intervention by way of grant aid will be required to provide the level of infrastructure envisaged.

In the absence of funding for both the infrastructural arrangements and the on-going maintenance of the system, the targets set out in the Connaught Waste Management Plan, will not be achieved.

**2.15.9.1** *It is the policy of the local authorities to:*

- Implement the Connaught Regional Waste Management Plan.
- Promote the development of facilities in accordance with the waste hierarchy principle which involves a shift toward preventative and waste minimisation measures, while developing recycling and reuse, disposal with energy recovery and, as the last option, disposal of residual waste to landfill.
- Encourage and enforce initiatives under the Waste Management (Packaging) Regulations.
- Liaise with and encourage private sector, semi-state and voluntary groups to actively pursue initiatives, which involve recycling and/or reuse.
- Implement segregated domestic waste collection arrangements.
- Ensure that facilities are made available for recycling a broad range of items in the waste stream and provide a civic amenity recycling site within the Sligo and Environs area, which will accept a variety of materials, such as glass, metals, paper, green/garden waste, bulky waste such as refrigerators, cookers, washing machines, household hazardous wastes such as spent batteries, waste oils, chemicals, paints, weed-killers etc.
- Encourage the recycling of construction and demolition waste and the reuse of aggregates and other materials in future construction projects.
- Implement related principles of the 'polluter pays principle', proximity principle, precautionary principle and the principle of shared responsibility in all waste management initiatives.
- Support the continued provision of a private refuse collection service and introduce a segregated domestic waste collection arrangement.
- Fulfill the EU Landfill Directive 1999, which requires separate landfills for hazardous, non-hazardous and inert wastes and bans landfill of tyres by 2003 (for whole tyres) and 2006 (for shredded tyres).
- Encourage energy recovery, where possible, by inclusion of biogas, which is a renewable and environmentally friendly fuel source, in large sewage treatment facilities.
- Prevent and minimise waste by:
  - Promotional and educational campaigns.
  - The introduction and promotion of home composting units for biowaste.
  - The diversion of some urban biowaste from landfill for bulk treatment and re-use.
  - Incorporating measures during licensing procedures of industry to encourage minimisation and prevention, wherever possible.



- Developing Construction Waste Management Plans, whereby materials chosen for building will focus on reducing environmental impacts and the generation of construction and demolition waste will be minimised.
- Ensure that all residential, commercial and industrial development has adequate provision to enable high levels of recycling and waste management.
- Support an expanded waste recovery and recycling sector in Sligo in order to service the region's existing and future regional needs.
- Ensure that all new development provides waste management facilities commensurate with its nature and scale so as to enable the achievement of high levels of recycling as specified in the Connaught Waste Management Strategy.

**2.15.9.2** *It is an objective of the local authorities to:*

- E17** Provide a recycling facility convenient to Sligo City, such as at Belladrehid and/or Finisklin.
- E18** Provide and maintain a total of 18 Bring-Banks by the end of 2004 (no map reference).
- E19** Facilitate a Civic Amenity Recycling Facility in the vicinity of Cranmore Road and Mac's Lane.
- E20** Provide/Facilitate the provision of a Biological Treatment Plant for organic kitchen waste.



**2.15.10 Analysis - Litter Control**

The Borough Council and County Council are tackling the effects of litter on the environment via the Litter Management Plan, 2001-2004. It is the aim of this plan to reduce litter in accordance with the Litter Pollution Act 1997 and encourage the public to become more vigilant in relation to the disposal of litter. The Council will continue its campaign of litter education and awareness and encourage an ECO-Business Alliance, involving the development of a Voluntary Code of Practice specifically aimed at businesses. An association with the Tidy Towns Activities will also assist in encouraging the improvement of litter control and general environmental quality throughout the city.

**2.15.10.1** *It is the policy of the local authorities to:*

- Enforce the aims of the Litter Management Plan 2001-2004.
- Support and encourage anti-litter campaigns, tidy towns initiatives, environmental awareness campaigns, an ECO-business alliance, and other measures/initiatives that will positively contribute to the environmental quality of the city.

**2.15.11 Analysis - Air Quality**

The emissions from fossil fuels can have a detrimental impact on air quality and contribute to the greenhouse effect. Fossil fuels are used in transport and general energy consumption in heating/lighting/businesses/agriculture etc. In order to facilitate improvements in air quality, it is necessary to reduce the number of individual trips made by car, and encourage alternative means of travel, such as public transport, cycling and walking. It would also be beneficial to encourage a shift in the mode of transport for freight from road to rail. The strategy for the future development of Sligo (section 1.4 and 1.5) has sought to integrate land use and transport to support such objectives.

From October 1st, 2002, there will be a phased increase in the sale of smokeless fuels in Sligo, leading to the outright ban on the marketing, sale and distribution of bituminous coal in Sligo from October 1, 2003. This will have a significant impact on the improvement of air quality and the reduction of harmful emissions from solid fuel. As a result of this programme in Sligo and in other urban centres, it is expected that on a countrywide basis, there will be a reduction of 8,000-10,000 tonnes of sulphur dioxide.

**2.15.11.1** *It is the policy of the local authorities to:*

- Support public transport and non-motorised means of travel to improve air quality.
- Support the programme for the ban on the sale and use of bituminous coal.
- Protect significant tree groups and other vegetation types and encourage landscaping and tree planting as a means of air purification and the filtering of suspended particles.

### **2.15.12 Analysis - Fire Service**

There is one fire station serving the Borough area, which is adequate to the needs of the city. An extension to the office department of the station is required, with proposals for this to be carried out in 2003.

**2.15.12.1** *It is the policy of the local authority to:*

- Ensure that the Fire Service facilities are adequate to serve the needs of the population it serves, subject to funds being made available by the Department of the Environment and Local Government.

**2.15.12.2** *It is an objective of the local authorities to:*

**E21** Relocate the fire station to a central location in the City and/or environs.