

LIMERICK COUNTY COUNCIL

COMHAIRLE CHONTAE LUIMNIGH



Water Services Investment Program

ASSESSMENT OF NEEDS - 2009

DRAFT REPORT

October 2009

Paul Crowe, BE, CEng, MIEI
Director Transportation and Water Services

Contents Page

Introduction

Strategic Context

Category 1 Proposals

Category 2 Proposals

Category 3 Proposals

Additional Notes to Category 3

Category 4 Proposals

Glossary

Introduction

This Needs Assessment is in response to Circular letter L6/09 from the Department of the Environment Heritage and Local Government.

This document builds upon a previous Assessment of Needs produced in 2006.

The purpose of the Needs Assessment is to assist the DEHLG in preparing a national Water Services Investment Programme for 2010-2012.

There are changes in the Needs Assessment process from previous times. The DEHLG have requested that schemes be presented under four separate categories:

Category 1: Water conservation proposals which meet environmental and economic goals.

Category 2: Works required to respond to ECJ judgments.

Category 3: Environment/Public Health Objectives (eg arising from compliance with Water Framework Directive requirements, Regulations and EPA Reports dealing with drinking water standards, wastewater treatment standards, authorisation of wastewater discharges, bathing water standards etc).

Category 4: Works to support sustainable development of hubs and gateways under the NSS, strategic developing areas and works to support employment creation.

The Department have also requested a single list within each category covering both water and sewerage (ie Councils have been asked to prioritise between water and sewerage schemes). In addition there is an emphasis on contracts that can be delivered over the 2011-2010 period. The previous Assessment of Needs submitted to the Department included for schemes assessed –in some cases- against a more long term implementation horizon, taking into account available finances. Therefore it is submitted that this present Assessment of Needs is a document which updates and recasts, for the current situation, certain capital requirements of the county. As such it is not a like-for-like replacement of the previous document and the earlier document continues to have a validity in terms of longer term aspirations.

Funding of the projects in the County under the Water Services Investment Programme will assist the economic development of the County and will assist the Council in meeting its environmental and statutory obligations. The order in which schemes appear in their respective Categories is indicative of the immediate requirements of the County. The extent of the work which needs to be undertaken is

substantial; the assistance of central government is necessary for the Council to meet its obligations and targets in this crucial area.

The Assessment of Needs obviously is not held out to be a complete statement of the capital requirements within Water Services. There are many other projects where perhaps it may be more appropriate to seek support under the RAL funding or the Small Capital Schemes programme.

Strategic Context

The timescale of the preparation of this Assessment of Needs ran in parallel to the timescale for the finalisation (under Section 11.5 of the Planning and Development Act 2000) of the Draft Development Plan for County Limerick. It was also during this period that the Shannon River Basin Management Plan was progressing towards its final stages.

Therefore there was a body of information available in the preparation of the Assessment, together with parallel frameworks against which to assess coordination with Local, Regional, National and European objectives.

Limerick County Council is particularly conscious of the needs to use the Water Services Capital programme to support economic development in the county and region, while also addressing historical deficits in infrastructure and achieving the widest compliance with environmental requirements.

Outside of the city environs, Limerick County is sometimes described as a county of towns and villages. The settlement pattern is one of many smaller towns and villages dispersed throughout the county, with a greater number of settlements than one might expect for a county of its size. To cater for this Limerick County Council has provided a dispersed network of water and sewerage schemes throughout the county. There are 66 individual water sources contributing to the public supply, together with 45 separate sewerage schemes. Some rationalisation of plants has already taken place, some additional rationalisation/regionalisation is included in the Assessment of Needs.

Many of the sewage treatment plants were built in the 1940s and 1950s, and as such do not meet either modern treatment standards or the population demands of the settlements. For the smaller towns and villages it is important to have settlements with functioning treatment systems to act as an alternative to one-off rural housing.

Even for the sewage treatment plants built in the 1970s and 1980s, which employ relatively modern treatment techniques, the demands of the Water Framework Directive and the Surface Water Regulations 2009 can mean that the effluent from such plants might no longer be compliant (eg Newcastle West)

In terms of the sustainable development within the county it is particularly important that the major population centres (Kilmallock, Newcastle West) together with the recognised centres on transport corridors can act as growth centres and are not hindered by deficiencies in water or sewerage infrastructure.

The County contains part of the Shannon-Limerick Gateway, together with the Estuary of the River Shannon. Limerick County Council recognises the need to maximise the potential of the Gateway and Estuary for the benefit of the county and the region.

The National Technology Park in Plassey and the University of Limerick are both key drivers of Gateway's potential . These locations are served by the Castletroy Sewerage Scheme. The Plassey Technological Park has been identified by Shannon Development and the IDA as a “*National Strategic Site for Utility Intensive Industry*”, such as BioPharma etc. It is essential that the Water Services planning for such a nationally important site is always prepared for the development potential

It is generally recommended that water schemes have a minimum of 24 hours supply storage. Many of the water schemes in County Limerick have substantially less than that figure. The increase of storage towards the recommended level is required to increase the stability of the water supply system.

Limerick County Council has made considerable strides in the area of water conservation, and has a permanent water conservation team. There is much work still to do in this area. In addition Limerick County Council has identified sections of main which need major rehabilitation. The replacement of such mains will not only reduce the level of unaccounted-for-water, but will reduce costs on energy and on emergency call-outs.

Enclosure: Settlement Structure for County Limerick.

Settlement Structure for County Limerick	
Tier 1: The Gateway The City and City Environs	These locations are defined as the City Environs Area comprising the areas covered by the Castletroy Local Area Plan and the Southern Environs Local Area Plan.
Tier 2: Key Towns	Kilmallock, Newcastle West
Tier 3: Centres on Transport Corridors	Abbeyfeale, Adare, Askeaton, Castleconnell, Croom, Foynes, Patrickswell and Rathkeale
Tier 4: Towns and Villages	Murroe, Caherconlish, Oola, Dromcolligher, Doon, Ballingarry, Bruree, Athea, Shanagolden, Bruff, Cappamore, Glin, Hospital, Kilfinane and Pallaskenry
Tier 5: Small villages with a range of infrastructural, social and community facilities.	Ardagh, Ballyagran, Ballylanders, Ballyhahill, Ballyneety, Broadford, Carrigkerry, Clarina, Fedamore, Galbally, Herbertstown, Knocklong, Kildimo, Kiltely, Montpellier, Mountcollins, Pallasgreen,
Tier 6: Small settlements	Anglesboro, Ashford, Ardpatrick, Athlacca, Ballyorgan, Banogue, Ballysteen, Castlemahon, Castletown, Creora, Coolcappagh, Croagh, Caherline, Dromkeen, Elton, Feenagh, Feohanagh, Glenbrohane, Glenroe, Granagh, Glenosheen, Knockainy, Kilfinny, Kilbeheny, Kilcolman, Knockainey, Knockaderry, Kilcornan, Kilmeedy, Monagea, Loghill, Meanus, Nicker, Old Pallas, Raheenagh, Strand, Templeglantine, Tournafulla, Glenbrohane, Granagh, Kilcornan, Kilmeedy

Assessment of Needs Tables

Category 1 Water Conservation

WATER CONSERVATION - ASSESSMENT OF NEEDS : Category 1 Water Conservation

Local Authority

LIMERICK COUNTY COUNCIL

Water Conservation Allocation

€4,319,232.00

Balance of Allocation Available

~~€264,154.17~~

PART 1 - Completed Contracts for which Grant Aid is required

€349,349.17

PART 2 - Contracts in Progress

€55,580.00

PART 3 - Contracts to Start 2010 - 2012

€300,000.00

PART 4 - Stage 3 Schemes in Planning

€3,085,852.50

Estimated Additional Allocation Required to Fund

Projects included in Assessment

€3,790,781.67

PART 1 - Completed Contracts for which Grant Aid is required								
1	2	3	4	5	6	7	8	9
Contract	Type - Stage 1, 2 or 3	Scheme	Date Contract Completed	Contract Cost	Approved Grant	Balance of Grant Available	Additional Funding Required	Total Grant Requirements
								(7+8)
				€	€	€	€	€
Water Conservation - Telemetry	1	Limerick County Wide Telemetry	October 2009	681,359.17	400,174.00	-	281,185.17	281,185.17
Project Management	1	Limerick County Wide Water Con.	June 2008	1,787,668.00	1,749,119.00	-	38,549.00	38,549.00
No. 1 Find and Fix	2	Limerick County Wide Water Con.	October 2009	172,528.00	142,913.00	29,615.00	-	29,615.00

WATER CONSERVATION - ASSESSMENT OF NEEDS : Category 1 Water Conservation Part 3

Local Authority

LIMERICK COUNTY COUNCIL

PART 3 - Contracts to Start 2010 - 2012									
1	2	3	4		5	6	7	8	9
Contract	Type - Stage 1, 2 or 3	Scheme	Contract Dates		Contract Cost	Approved Grant	Balance of Grant Available	Additional Funding Required	Total Grant Requirements
			Start	Finish	€	€	€	€	€
Water Conservation Pressure Management	2	LCC Pressure Management	August 2010	November 2011	300,000.00	Nil	Nil	300,000.00	300,000.00

WATER CONSERVATION - ASSESSMENT OF NEEDS : Category 1 Water Conservation Part 4

Local Authority

LIMERICK COUNTY COUNCIL

PART 4 - Stage 3 Schemes in Planning						Note
1	2		3	4	5	
Scheme	Scheme Dates		Estimated Scheme Cost	Approved Grant	Balance of Grant Available	
	Start	Finish	€	€	€	
Bruff (Camass)	2010	2011	€101,775.00	Nil	Nil	
Glin	2010	2012	€99,360.00	Nil	Nil	Cast Iron mains with anticipated lead connections
SEWSS	2010	2012	€204,300.00	Nil	Nil	
Murroe	2010	2012	€276,600.00	Nil	Nil	Cast Iron mains with anticipated lead connections
Rathkeale	2010	2012	€69,810.00	Nil	Nil	Cast Iron mains with anticipated lead connections
Killaghteen	2010	2012	€281,850.00	Nil	Nil	Cast Iron mains with anticipated lead connections
Jamestown	2010	2012	€195,300.00	Nil	Nil	
Oola	2010	2012	€277,800.00	Nil	Nil	
Ardagh WSS	2011	2012	€92,025.00	Nil	Nil	Cast Iron mains with anticipated lead connections
Bruff	2011	2012	€60,000.00	Nil	Nil	
Banogue	2011	2012	€30,000.00	Nil	Nil	
Doon	2011	2012	€4,350.00	Nil	Nil	Cast Iron mains with anticipated lead connections
Anglesborough	2011	2012	€14,175.00	Nil	Nil	
Court	2011	2012	€207,750.00	Nil	Nil	
Hospital	2011	2012	€30,375.00	Nil	Nil	Replacement of lead connection (cast iron mains)
Cappamore	2011	2012	€47,107.50	Nil	Nil	Replacement of lead mains
Rineroe/ knockanes	2011	2012	€59,775.00	Nil	Nil	
Croom/ Caherass	2011	2012	€29,250.00	Nil	Nil	
Raheen Dooradoyle (patrickwell)	2011	2012	€157,725.00	Nil	Nil	
Kilfinnane	2011	2012	€21,600.00	Nil	Nil	
Bruff	2011	2012	€133,725.00	Nil	Nil	
Caherconlish	2011	2012	€146,475.00	Nil	Nil	
Croom/ Carrigeen	2011	2012	€40,500.00	Nil	Nil	
Croom/ Monaster	2011	2012	€273,900.00	Nil	Nil	
Rosbrien	2011	2012	€192,825.00	Nil	Nil	
Raheen Dooradoyle (Gouldavoher)	2011	2012	€37,500.00	Nil	Nil	
Total			€3,085,852.50			

WATER CONSERVATION - ASSESSMENT OF NEEDS : Category 1 Water Conservation Part 5

Local Authority

LIMERICK COUNTY COUNCIL

Part 5 - Water Conservation Staff Resources				
<i>List the number, grade and duties of All staff employed on water conservation in the Council, and whether full time or part time.</i>				
Grade	No.	%	Full Time Equivalent	Duties
Tier 1 : Water Conservation Crew				
Foreman	1	100%	1	Site Supervision/H&S/Works Planning/Emergency Response/Leak Detection
General Operatives	4	100%	4	Leak Detection
Tier 2 : Water Services Department				
Executive Engineer	1	85%	0.85	Management of Water Conservation Section
Senior Executive Engineer	1	5%	0.05	Technical Assistance
Senior Engineer	1	4%	0.04	Technical Assistance
Clerical Officers	3	4%	0.12	Clerical duties
Tier 3 : Water Services Area Staff				
Rathkeale Area				
Plumber	2	15%	0.3	Leak repair
Plumbers Mates	2	15%	0.3	Leak repair
Area Foreman	1	15%	0.15	Site Supervision/H&S/Works Planning/Emergency Response
Area Engineer	1	3%	0.03	Site Supervision/H&S/Works Planning/Emergency Response
Area Clerical Officer	1	3%	0.03	Clerical duties
Caretakers	8	5%	0.4	Leak Detection
Newcastle West Area				
Plumber	3	15%	0.45	Leak repair
Plumbers Mates	1	15%	0.15	Leak repair
Area Foreman	1	15%	0.15	Site Supervision/H&S/Works Planning/Emergency Response
Area Engineer	1	3%	0.03	Site Supervision/H&S/Works Planning/Emergency Response
Area Clerical Officer	1	3%	0.03	Clerical duties
Caretakers	12	5%	0.6	Leak Detection
Kilmallock Area				
Plumber	3	15%	0.45	Leak repair
Plumbers Mates	4	15%	0.6	Leak repair
Area Foreman	1	15%	0.15	Site Supervision/H&S/Works Planning/Emergency Response
Area Engineer	1	3%	0.03	Site Supervision/H&S/Works Planning/Emergency Response
Area Clerical Officer	1	3%	0.03	Clerical duties
Caretakers	8	5%	0.4	Leak Detection
Annacotty Area				
Plumber	4	15%	0.6	Leak repair
Plumbers Mates	4	15%	0.6	Leak repair
Area Foreman	1	15%	0.15	Site Supervision/H&S/Works Planning/Emergency Response
Assistant Area Foreman	1	15%	0.03	Site Supervision/H&S/Works Planning/Emergency Response
Area Engineer	1	3%	0.03	Site Supervision/H&S/Works Planning/Emergency Response
Area Clerical Officer	1	3%	0.05	Clerical duties
Caretakers	4	5%	0.2	Leak Detection
Total Full Time Equivalent			12	

Category 2 ECJ Judgement Works

Category 2 ECJ Judgement Works

There are no public schemes in County Limerick which currently are the subject of this category

Category 3 Environmental / Public Health Objectives

Category 3 List

		Name of Contract	Estimated Costs		Time frame	Short Explanations ¹	
			Scheme	Contract		<i>Why priority assigned</i>	Statutory/Environmental factors
1.	Kilmallock Sewerage Scheme Note: Also included in Category 4	Kilmallock Sewerage scheme Treatment Contract	€2m	€3.4m	2010-2012	* Key Settlement. *Killmallock is only one of two towns in the top tier of towns in Draft County Development Plan. *Contract Documents well advanced	*Current Plant Design of 25 mg/l BOD with effluent ranging up to 44 mg/l of BOD. *Target effluent standards to meet the WWDA are BOD = 15 Mg/l, Orthophosphate =0.3mg/l *The EPA Q Value is 3-4 (2008) *EPA have instructed new treatment plant to be commissioned by 1/1/2011 *WFD: Status Moderate, At risk from WWTP
2	Dromcolligher Sewerage Scheme (formerly Dromcolligher / Hospital/ Pallasgreen / Bruff grouped sewerage scheme)	Dromcolligher Sewerage scheme Treatment and outfall Contract	€5m	€2.7	2011-2012	*This discharge is the only EPA “red dot” location in Co. Limerick *Preliminary Report already produced. *Very Significant impact by the discharge on the Ahavarragha	*Current effluent BOD average 67 mg/l. *River has no capacity to receive effluent (BOD theoretically would have to be less than 1 mg/l) *The EPA Q Value is 1-2 * SSRS 2.4 *Plant is subject to EPA Direction *WFD: Status BAD, at risk from WWTP

¹ Please also see the “Notes” at the end of the document for further general issues or common factors.

		Name of Contract	Estimated Costs		Time frame	Short Explanations ¹	
			Scheme	Contract		<i>Why priority assigned</i>	Statutory/Environmental factors
3	Patrickswell Sewerage Scheme Note: Also included in Category 4	Patrickswell Sewerage Construction Contract	€0.5m	€4.5m	2010-2011	* Contracts prepared *Very Significant impact by the discharge on the Barnakyle * Scheduled to discharge to Limerick main drainage	Current effluent BOD typically exceed 200 mg/l. *River has no capacity to receive effluent *The EPA Q Value is 3 * SSRS Of 2.4 to 3.2 WFD: Status Poor, At risk from WWTP
4	Newcastle West sewerage scheme Note: Also included in Category 4	Newcastlewest Sewerage Schemes Design contract	€12m	€0.6m	Design 2010-2011 Construction post 2012 (though earlier required)	Newcastle is one of two priority towns in Co. Limerick. The new surface water standards pose severe challenges for existing plant, especially in relation to ammonia It is necessary to maintain the ability to thrive as a County Town	*River Q value of 3 *River SSRS of 4 *The new surface water standards pose severe challenges for existing plant, especially in relation to ammonia * Current ammonia effluent concentration typically in the range 1.5-12 mg/l with an average of 7mg/l * Target ammonia concentration of less than 1 mg/l to meet Surface Water Regulations. *WFD: Status Poor, At risk from WWTP *WFD Objective to restore by 2015
5	East Limerick Trunk Mains scheme	Foileen Water Supply Improvements Contract	€35m	€1m	2011-2012	Water Supply has volumetric constraints in summer periods in Doon Cappamore Area.	*RAL list scheme due to Turbidity exceedances *High crypto score *Supply shortages

		Name of Contract	Estimated Costs		Time frame	Short Explanations ¹	
			Scheme	Contract		Why priority assigned	Statutory/Environmental factors
6	Askeaton Sewerage Scheme (Formerly Athea Askeaton Foynes Shanagolden Gin grouped sewerage scheme)	Askeaton sewerage scheme Contract 1 Note: Also included in Category 4	€7.1m	€2.6m	2011-2012	Town scheme significantly overloaded Significant Industrial land on the Estuary nearby.	*Effluent discharge standards not being met. * BOD of effluent average 236 mg/l
7	Water supplies storage Stage 1	Waster Supply Storage Augmentation scheme Stage 1 Increase capacity by 10,000 cubic metres over a number of sites Contract 1 Contract 2	€7m	€3m €4m	Preliminary reports and Design 2010-2011. Construct 2011-2012 2012 and post 2012	Insufficient storage in many village schemes in County Limerick. Upgrade to 24 hour storage as a minimum	*Reduced storage has implications for security of water supply and firefighting. *Increased storage will allow for greater use of night rate electricity resulting in both cost and environmental savings
8	Wetlands for effluent polishing scheme	Effluent polishing; Existing effluents Contract 1 pilot schemes	€2.5m	€0.8m	Design 2010 Construct 2011-2012 and afterwards	Limerick County Council has 45 separate sewerage schemes. It is recognised that not all schemes will be fully upgraded under the current WSIP. It is proposed to use integrated constructed wetlands for polishing, starting with initial pilot sites.	Inability to meet discharge standards on effluent discharges.

		Name of Contract	Estimated Costs		Time frame	Short Explanations ¹	
			Scheme	Contract		<i>Why priority assigned</i>	Statutory/Environmental factors
9	Castletroy Sewerage Scheme Note: Also included in Category 4	Castletroy Sewerage Scheme Design Contract	€8m	€0.5m	Design 2010-2012	Key Settlement , Part of Gateway	
10	Adare Water Supply interim improvements	Adare Water Supply interim improvements	€0.5m	€0.5m	2010	Historically issues with maintaining water volumes and quality There is as yet no timeline for resolving the THM issues associated with the Clareville supply (see below)	*Aluminium exceedances have occurred over past number of years and as notified in recent times to EPA. *Plant design needs to be modified to include for pH balancing and contact times.
11	Clareville Water Supply Quality improvements			Cost to be included within the Limerick City costs.		*Currently there are intermittent difficulties in meeting the new THM limits in the networks. There is a requirement to have this issue addressed.	*Currently there are intermittent difficulties in meeting the new THM limits in the networks, as notified to EPA. There is a requirement to have this issue addressed. *Further extensions of the networks from Clareville should not be progressed until the THM issue is resolved.

		Name of Contract	Estimated Costs		Time frame	Short Explanations ¹	
			Scheme	Contract		<i>Why priority assigned</i>	Statutory/Environmental factors
12	Adare Patrickswell Trunk Main	Adare Patrickswell Trunk Main		€2.6m	2012-2015 (see entry 11 above)	Adare is a town in the second tier of major towns in County Limerick , Part of long term strategy of watermains in County Limerick.	See entry at (10) above
13	Croom Water Trunk Main.	Croom Water Trunk Main.	€m	€m	2012-2015 (see entry 11 above)	Croom is a town in the second tier of major towns in County Limerick Part of long term strategy of watermains in County Limerick	*Currently constraints on water capacity in the town.
14	Dromcolligher Sewerage Scheme (formerly Dromcolligher / Hospital/ Pallasgreen / Bruff grouped sewerage scheme)	Dromcolligher Sewerage scheme Contract 2 Main sewers and storm-water separation	€m	€2.3m	2011-2012	*This discharge is the only EPA “red dot” location in Co. Limerick *Preliminary Report already produced. *Very Significant impact by the discharge on the Ahavarragh *Reduction of stormwater to the treatment plant	*Current effluent BOD average 67 mg/l. *River has no capacity to receive effluent (BOD would have to be less than 1 mg/l) *The EPA Q Value is 1-2 * Storm water overflows need to be eliminated * SSRS of 2.4 *Plant is subject to EPA Direction *WFD: Status BAD, at risk from WWTP

		Name of Contract	Estimated Costs		Time frame	Short Explanations ¹	
			Scheme	Contract		<i>Why priority assigned</i>	Statutory/Environmental factors
15	Hospital Sewerage scheme Formerly part of Bruff Dromcolligher Hospital Pallasgreen grouped sewerage scheme	Hospital Sewerage scheme Rising main and treatment plant Contract	€4.2m	€3.0m	2012	*Preliminary report prepared *Environmental factors	Poor existing effluent quality Average BOD of 72mg/l Lack of assimilative capacity without a pumped system. Q Value of 3 SSRS of 4 to 5.6 PR States that outfall must move approx five km downstream *WFD: Status Moderate, at risk from WWTP
16	Dedicated Rising mains to Reservoirs	Dedicated rising mains contract 1 Dedicated rising mains Contract 2	€1m	€1m TBA	Design & contract 1 2011-2011 2012	*Traditional layout of schemes has uncertain turnover times of water in service reservoirs *Need for greater assurance on water age within systems *Maintenance of chlorine residuals	Indicated by LCC as a RAL issue for water quality *Need for greater assurance on water age within systems *Maintenance of chlorine residuals
17	Abbeyfeale Sewerage Scheme	Contract 1 Interim works	€10m	€1.5m	PR 2010-2011 Contract 2011 2012	Significant town in County Limerick.	EPA licence application identified a number of urgent improvements required to the plant

		Name of Contract	Estimated Costs		Time frame	Short Explanations ¹	
			Scheme	Contract		<i>Why priority assigned</i>	Statutory/Environmental factors
18	Bruff and Pallasgreen Sewerage scheme	Bruff and Pallasgreen Sewerage scheme contract 1 Treatment plants	€10.76	€2.6m	2012-2014	Existing schemes at Capacity. These settlements have the capacity to strengthen.	Effluent Quality Average BOD of 52 mg/l in Bruff
19	Limerick County Trunk Watermains East Limerick	Knockbrack Pallas Link Contract	€35m	€3.0m	2012-2014 (see 11 above)	Significant area of East County Limerick with fragmented water supply arrangements	Water Quality Production capacity Storage Capacity Security of Supply
20	Athea Foynes Glin Shanagolden Sewerage Schemes (Formerly Athea Askeaton Foynes Shanagolden Gin grouped sewerage scheme)	Contract 1 Treatment Systems Contract 2 Collection Systems	€6.7m	€3.1m €3.6m	2012-2014	Poor effluent standards inhibiting development potential. Elimination of surface water from foul sewers and rehabilitation of sewer networks required	Poor effluent standards Elimination of surface water from foul sewers and rehabilitation of sewer networks required
21	Askeaton Sewerage Scheme (Formerly Athea Askeaton Foynes Shanagolden Gin grouped sewerage scheme)	Contract 2 Collection Systems	€7.1m	€4.5m	2012-2014	Elimination of surface water from foul sewers and rehabilitation of sewer networks required	Elimination of surface water from foul sewers and rehabilitation of sewer networks required

		Name of Contract	Estimated Costs		Time frame	Short Explanations ¹	
			Scheme	Contract		<i>Why priority assigned</i>	Statutory/Environmental factors
22	Croom Sewerage scheme	Croom Waste Water Design Contract and preliminary works Contract		€1m	2012-2014	Plant is approaching its design PE. Receiving waters are sufficient to allow the town to grow substantially into the future.	Plant is approaching its design PE.
23	Abbeyfeale water: Supply Enhanced Treatment and Supply Security	Abbeyfeale water: Supply Enhanced Treatment and Supply Security Design phase		€03.m	2010-2014	Abbeyfeale water supply is not cross connected to any other major supply. There are intermittent issues with raw water quality.	Maintenance of water supply and reduction of supply risk.
24	Bruree and Carrigkerry Water Supply Augmentation	Bruree and Carrigkerry Water Supply Augmentation	€2.5m	€2.5m	2011-2014	Carrigkerry Water Supply has a very poor yield record and intermittently fails. The proposal is to interconnect to NCW supply via Ardagh. It is proposed to connect Bruree water supply to Rockhill for improved water security	Maintenance of water supply and reduction of supply risk.
25	Ballyagran, Broadford Caherconlish, Doon, Fedamore and Oola grouped Sewerage Scheme	Ballyagran, Broadford Caherconlish, Doon, Fedamore and Oola grouped Sewerage Scheme Outfall contracts	€2.5m	€2.5m	2010-2014	In order to meet new surface water standards it is proposed to pipe effluent downstream to achieve require standards	In order to meet new surface water standards it is proposed to pipe effluent downstream to achieve required standards

		Name of Contract	Estimated Costs		Time frame	Short Explanations ¹	
			Scheme	Contract		<i>Why priority assigned</i>	Statutory/Environmental factors
26	Ardagh, and Castlemahon grouped Sewerage scheme	Ardagh, and Castlemahon grouped Sewerage scheme Pumping station contracts	€m	€m	2012	To address poor effluent standards and connect to adjacent larger plant, thereby reducing the number of point discharges and improving effluent quality.	Poor effluent standards.
27	Water Services Strategic Planning Preparation	Water Services Strategic Planning Preparation	€0.3m	€0.3m	2010-2012	To assist towards further long term strategic planning	

Category 3 Environmental / Public Health Objectives

Notes.

Note 1: Please see Glossary at the end of the Document for abbreviations/ acronyms.

Note 2: The following general references should be taken as being included in the “priority” and “environmental” factors in Category 3

The Provision and Quality of Drinking Water in Ireland - A Report for the Years 2007-2008 as published by the EPA

Urban Waste Water Discharges in Ireland for Population Equivalents Greater than 500 Persons - A Report for the Years 2006 and 2007 as published by the EPA.

Category 4

Gateways & Hubs (including Employment Creation)

Assessment of Needs Category 4 List

		Name of Contract	Estimated Costs		Time frame	Short Explanations
			Scheme	Contract		
1	Castletroy Sewerage Scheme	Castletroy Sewerage Scheme Design Contract	€8m	€0.5m	Design 2010-2012	<p><i>Why priority assigned</i></p> <p>The Castletroy Sewerage scheme serves the National Technology Park Plassey and the University of Limerick, both of which are key drivers of the Shannon-Limerick Gateway. The Plassey Technological Park has been identified by Shannon Development /IDA as a “<i>National Strategic Site for Utility Intensive Industry</i>”, such as BioPharma etc. In addition Castletroy Sewerage scheme serves the area of Castletroy a fast growing suburb in the environs of Limerick</p>
2	Newcastle West sewerage scheme Note: Also included in Category 3	Newcastlewest Sewerage Schemes Design contract	€12m	€0.6m	Design 2010-2011 Construction post 2012 (though earlier required)	<p>*The National Spatial Strategy states (page 82) that “<i>Towns such as Newcastlewest need appropriate policies and actions to support their roles as drivers of development at the county level. Examples include policies or actions to achieve good urban design and environmental quality, <u>water services</u> and effective linkages to the gateway in the region</i>”</p> <p>*Outside of the City Environs Newcastle is the largest population centre in the County and is a Key settlement under the Draft County Development Plan for development and employment.</p> <p>*There are environmental issues in relation to waste water including:</p> <ul style="list-style-type: none"> *River Q value of 3 *River SSRS of 4 *The new surface water standards pose severe challenges for existing plant, especially in relation to ammonia <p>* Current ammonia effluent concentration typically in the range 1.5-12 mg/l with an average of 7mg/l</p> <p>* Target ammonia concentration of less than 1 mg/l to meet Surface Water Regulations.</p> <p>*WFD: Status Poor, At risk from WWTP</p> <p>*WFD Objective to restore by 2015</p> <p>*</p>

		Name of Contract	Estimated Costs		Time frame	Short Explanations
			Scheme	Contract		
						<i>Why priority assigned</i>
3	Kilmallock Sewerage Scheme Note: Also included in Category 3	Kilmallock Sewerage scheme Treatment Contract	€12m	€3.4m	2010-2012	<ul style="list-style-type: none"> * Key Settlement. *Killmallock is only one of two towns in the top tier of towns in Draft County Development Plan *Contract Documents well advanced *Current Plant Design of 25 mg/l BOD with effluent ranging up to 44 mg/l of BOD. *Target effluent standards to meet the WWDA are BOD = 15 Mg/l, Orthophosphate =0.3mg/l *The EPA Q Value is 3-4 (2008) *EPA have instructed new treatment plant to be commissioned by 1/1/2011 *WFD: Status Moderate, At risk from WWTP
4	Shannon Estuary Water Supply Treatment Plant Upgrade Scheme	Shannon Estuary Water Supply Treatment Plant Upgrade	€5m		2011-2013	Potential to supply to Toomdeely industrial Lands on the Estuary.
5	Askeaton Sewerage Scheme (Formerly Athea Askeaton Foynes Shanagolden Gin grouped sewerage scheme)	Askeaton sewerage scheme Contract 1 Note: Also included in Category 3	€5m	€2.5m	2011-2012	<ul style="list-style-type: none"> *The Shannon Estuary contributes significantly to the development potential of the gateway. *There is a sizeable holding of Industrial Land beside Askeaton under the control of Shannon Development and which has potential for estuary based industry. *The upgrade of the sewage treatment plant will assist in the development and marketing of the site to international manufacturing. *The current town sewerage scheme is significantly overloaded

		Name of Contract	Estimated Costs		Time frame	Short Explanations
			Scheme	Contract		
6	Mungret Sewerage Scheme	Mungret Sewerage Scheme Final Contract	€m	€m	2011-2011	<i>Why priority assigned</i> Mungret is a village approximately 2km from the Limerick Bunlicky Sewage Treatment Plant The scheme was originally included in Limerick Main Drainage but was later delineated as a separate scheme. Mungret Village may be considered as forming part of the Shannon-Limerick Gateway.

Glossary

Acronym / Abbreviation	Short explanation
BOD	Biochemical Oxygen Demand, a measure of the strength of a sewage or a sewage effluent.
DMA	District Metering Area: a subdivision of a water scheme for the purpose of leakage and demand control.
GWS	Group Water Scheme
LCC	Limerick County Council
PR	Preliminary Report
Q Value	A measure of environmental quality of water body. Q5 being the best (High Quality) Under the Water Framework Directive there is a requirement to achieve at least “Good” status (Q4) by 2015.
RAL	Remedial Action List: This is a list of water schemes acknowledged as requiring improvements;
SSRS	Small Stream Risk Score. A measure water body quality and the risk of not achieving “good” status. A score of less than 6.5 indicates that a stream is at risk; a score between 6.5 an 8 indicates probably at risk.
THM	Trihalomethane
WFD	Water Framework Directive
WWDA	Waste Water Discharge Authorisation: a licence from the EPA for a sewage treatment plant
WWTP	Waste Water Treatment Plant