

6. Group 5: Loughrea and Gort Co. Galway.

6.1. Loughrea, Co. Galway

6.1.1. Summary Details:

Loughrea is situated 35km south east of Galway city. The population of Loughrea is currently 4,532 as per the results of the 2006 Census. This is projected to increase to 7,868 by 2018 (see Appendix B). It is forecast that there will be 1000 new houses connected in Loughrea in the next 10 years as it is an attractive location for commuters to Galway City.

Loughrea has three large industrial and commercial customers. It also has a number of medium and small customers. With the opening of the town bypass last year this number is expected to grow in the coming years.

Loughrea is situated 13km from the proposed Distribution network in Craughwell.

6.1.2. Summary Load Analysis:

Loughrea, Co. Galway

Source: Networks cost estimates report June 2007.

Industrial / Commercial Load Summary Forecast:

Total EAC 2015	7,287 MWh	248,700 Therms
Peak Day 2015	44,684 kWh	1,525 Therms

New Housing Summary Forecast:

New Housing Load (Therm)	520,000 (year 10)
New Housing Load (MWh)	15,240 (year 10)

6.1.3. Solutions:

The most economic option for supplying the town of Loughrea, Co. Galway is by laying a 250mm & 180mm PE 100 SDR17 Feeder main from Craughwell.

6.1.4. Cost Estimates:

Loughrea, Co. Galway

Source: Networks cost estimates report June 2007.

Estimated Capital expenditure Costs for feeder and Distribution Mains:

Item	Costs €
Transmission AGI Upgrade	
Feeder / Distribution Main Construction	€ 3,543,058
Total Estimated Costs	€ 3,543,058

These estimated costs include for the following:

District regulator installations, special engineering difficulties (crossings), archaeological survey, local authority charges, adverse ground conditions, pre-tender investigations, insurance, design, administration, material procurement and construction contracts.

The estimates do not include for:

New housing estate mains, service or meter costs.

Industrial / Commercial mains, service or meter costs.

6.1.5. Business Modelling:

€m	NPV @ 5.2%
DISTRIBUTION	
Distribution Revenue	2.86
Capex	-4.40
Contributions	0.20
Opex	-0.24
Distribution Total	-1.58
TRANSMISSION	
Onshore Revenue	0.73
Entry Revenue	0.50
Capex - AGI	0.00
Opex	0.00
Transmission Total	1.23
NPV TOTAL	-0.35

6.1.6. Results:

Connection of Loughrea to the network results in a negative net present value (NPV) of €0.35m and therefore connection of this town is uneconomic on a stand-alone basis.



Bord Gáis Networks recommends that excavation works within the vicinity of gas pipelines are carried out in accordance with the Health and Safety Authority 'Code of Practice for Avoiding Danger from Underground Services'

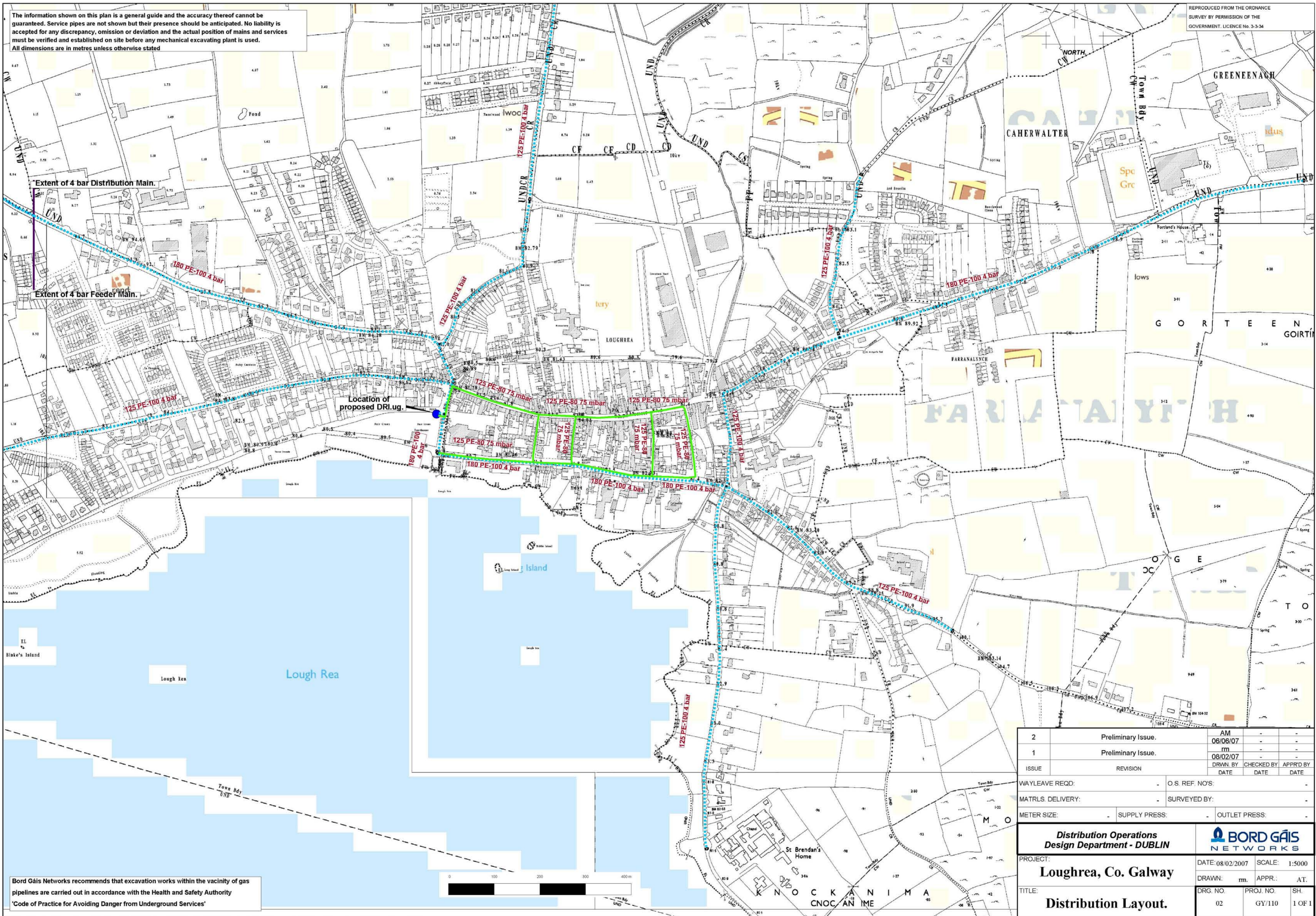


2	Revision to notes	DMcD	-	-
		09/07/07	-	-
1	Preliminary Issue.	rm	-	-
		08/02/07	-	-
ISSUE	REVISION	DRWN. BY	CHECKED BY	APPR'D BY
		DATE	DATE	DATE
WAYLEAVE REQD:	-	O.S. REF. NO'S:	-	-
MATRLS. DELIVERY:	-	SURVEYED BY:	-	-
METER SIZE:	-	SUPPLY PRESS:	-	OUTLET PRESS:

Distribution Operations Design Department - DUBLIN			
PROJECT: Loughrea, Co. Galway		DATE: 08/02/2007	SCALE: 1:50000
TITLE: Feeder Main.		DRAWN: rm	APPR.: AT.
DRG. NO. 01	PROJ. NO. GY/110	SH.	-

The information shown on this plan is a general guide and the accuracy thereof cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability is accepted for any discrepancy, omission or deviation and the actual position of mains and services must be verified and established on site before any mechanical excavating plant is used. All dimensions are in metres unless otherwise stated.

REPRODUCED FROM THE ORDINANCE SURVEY BY PERMISSION OF THE GOVERNMENT. LICENCE No. 3-3-34



Bord Gáis Networks recommends that excavation works within the vicinity of gas pipelines are carried out in accordance with the Health and Safety Authority 'Code of Practice for Avoiding Danger from Underground Services'

2	Preliminary Issue.	AM	-	-
1	Preliminary Issue.	06/06/07	-	-
		rm	-	-
ISSUE	REVISION	DATE	CHECKED BY	APPRD BY
		DATE	DATE	DATE
WAYLEAVE REQD:	-	O.S. REF. NOS:	-	-
MATRLS. DELIVERY:	-	SURVEYED BY:	-	-
METER SIZE:	-	SUPPLY PRESS:	-	OUTLET PRESS:
Distribution Operations		BORD GÁIS NETWORKS		
Design Department - DUBLIN				
PROJECT:	Loughrea, Co. Galway		DATE: 08/02/2007	SCALE: 1:5000
TITLE:	Distribution Layout.		DRAWN: mm.	APPR.: AT.
	DRG. NO.	PROJ. NO.	SH.	
	02	GY/110	1 OF 1	

6.2. Gort, Co. Galway

6.2.1. Summary Details:

Gort is located 36km south of Galway City on the N18, National Primary Road linking Galway with Ennis Co. Clare. The population of Gort is currently 2,734 as per the results of the 2006 Census. This is projected to increase to 5,069 by 2018 (see Appendix B). Gort acts as a commuter town for the city of Galway and its population is expected to increase with the city and surrounding towns. It is forecast that up to 700 houses will be connected in Gort over the next 10 years.

Gort has one large industrial / commercial customer, The Lady Gregory Hotel. It also has some medium and numerous small customers.

Gort is located 1.4km from the existing Ballyhugh B.V. station.

6.2.2. Summary Load Analysis:

Gort, Co. Galway

Source: Networks cost estimates report June 2007.

Industrial / Commercial Load Summary Forecast:

Total EAC 2015	4,858 MWh	165,813 Therms
Peak Day 2015	29,639kWh	440 Therms

New Housing Summary Forecast:

New Housing Load (Therm)	364,000 (year 10)
New Housing Load (MWh)	10,668 (year 10)

6.2.3. Solutions:

The most economic option for supplying the town of Gort, Co. Galway is by laying a 180mm PE100 SDR17 feeder main from a new Ballyhugh AGI (approx. 1.4km).

6.2.4. Cost Estimates:

Gort, Co. Galway

Source: Networks cost estimates report June 2007.

Estimated Capital expenditure Costs for feeder and Distribution Mains:

Item	Costs €
Transmission AGI Upgrade	€950,000
Feeder / Distribution Main Construction	€ 1,101,606
Total Estimated Costs	€ 2,051,606

These estimated costs include for the following:

District regulator installations, special engineering difficulties (crossings), archaeological survey, local authority charges, adverse ground conditions, pre-tender investigations, insurance, design, administration, material procurement and construction contracts.

The estimates do not include for:

New housing estate mains, service or meter costs.

Industrial / Commercial mains, service or meter costs.

6.2.5. Business Modelling:

€m	NPV @ 5.2%
DISTRIBUTION	
Distribution Revenue	1.96
Capex	-1.77
Contributions	0.14
Opex	-0.10
Distribution Total	0.22
TRANSMISSION	
Onshore Revenue	0.50
Entry Revenue	0.34
Capex - AGI	-0.95
Opex	-0.21
Transmission Total	-0.32
NPV TOTAL	-0.10

6.2.6. Results:

Connection of Gort to the network results in a negative net present value (NPV) of €0.10m and therefore connection of this town is uneconomic on a stand-alone basis.

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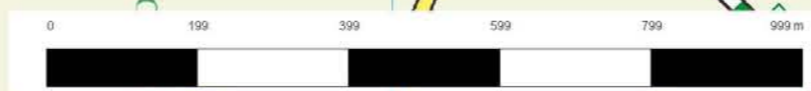
PROPOSED TRANSMISSION AGI AT BALLYHUGH

Extent of Gort 4bar Feeder Main

Note: to see detail of low pressure network refer to drawing No. GY/111/2 - (2 of 2)

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WAYLEAVE REQD:	-	O.S. REF. NO'S:	-
MATRLS. DELIVERY:	-	SURVEYED BY:	-
METER SIZE:	-	SUPPLY PRESS:	-
		OUTLET PRESS:	-

Distribution Operations Design Department - DUBLIN			
PROJECT:	Gort	DATE: 17/04/2007	SCALE: 1:10000
TITLE:	Feeder + Distribution Layout	DRAWN: MS	APPR.: AT
		DRG. NO. 01	PROJ. NO. GY/111/2
			SH. 1 OF 2