

## 4. Group 3: Youghal Co. Cork and Dungarvan Co. Waterford.

### 4.1. Youghal, Co. Cork

#### 4.1.1. Summary Details:

Youghal is located on Cork's eastern border with County Waterford. It is an important ring town and serves a large hinterland in both counties. With the completion of the Youghal by-pass the overall strategy aims to promote development of the town, its hinterland as an employment and service location and its coastal setting with its special recreational, heritage and marine tourism functions. The population of Youghal is currently 6,393 as per the results of the 2006 Census. This is projected to increase to 13,065 by 2018 (see Appendix B). It is forecast that up to 2000 houses will be connected in Youghal over the next 10 years.

The I.D.A. has 17.5 acres in the Cork Hill area of which 4.5 acres is available for development. The Town Council have developed 11 sites at Foxhole for light industrial / commercial. A new hotel is planned for the town off the by-pass road, and a new Dunnes Stores. Two potential large I/C loads and ten medium I/C loads have also been identified.

Youghal is situated 21km from the existing Transmission network at Midleton.

#### 4.1.2. Summary Load Analysis:

*Youghal, Co. Cork*

Source: Networks cost estimates report July 2007.

##### Industrial / Commercial Load Summary Forecast:

<b>Total EAC 2016</b>	7,468 MWh	254,841 Therms
<b>Peak Day 2016</b>	46,006 kWh	1,017 Therms

##### New Housing Summary Forecast:

<b>New Housing Load (Therm)</b>	1,040,000 (year 10)
<b>New Housing Load (MWh)</b>	30,480 (year 10)

#### 4.1.3. Solutions:

The most economic option for supplying the town of Youghal, Co. Cork is by laying a 250mm PE 100 SDR17 Feeder main from the proposed new Rincrew AGI (2.3 km approx.). Rincrew AGI would serve Youghal and Dungarvan. The route involves laying mains along the R634 & N25 from Rincrew AGI to Youghal.

#### 4.1.4. Cost Estimates:

*Youghal, Co. Cork*

Source: Networks cost estimates report July 2007.

##### Estimated Capital expenditure Costs for feeder and Distribution Mains:

Item	Costs €
Transmission Pipeline and AGI	€6,175,000
Feeder / Distribution Main Construction	€ 1,634,900
<b>Total Estimated Costs</b>	<b>€ 7,809,900</b>

##### 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.

#### 4.1.5. Business Modelling:

€m	NPV @ 5.2%
<b>DISTRIBUTION</b>	
Distribution Revenue	4.56
Capex	-3.00
Contributions	0.34
Opex	-0.92
<b>Distribution Total</b>	<b>0.98</b>
<b>TRANSMISSION</b>	
Onshore Revenue	1.14
Entry Revenue	0.79
Capex - AGI	-5.87
Opex	-0.49
<b>Transmission Total</b>	<b>-4.42</b>
<b>NPV TOTAL</b>	<b>-3.44</b>

#### 4.1.6. Results:

Connection of Youghal to the network results in a negative net present value (NPV) of €3.44m and therefore connection of this town is uneconomic on a stand-alone basis.



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**NEW TRANSMISSION MAIN FROM BALLYTRASNA TO SUPPLY RINCREW AGI**

**RINCREW AGI**

**START OF DISTRIBUTION MAIN END OF FEEDERMAIN**

**PROPOSED DRS**

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'

0	PRELIMINARY ISSUE	J.O.K.	-	-
ISSUE	REVISION	08/08/07	CHECKED BY	APPR'D BY
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MATRLS. DELIVERY:	-	SURVEYED BY:	J.O.K./D.B	
METER SIZE:	-	SUPPLY PRESS:	-	OUTLET PRESS:
		<b>BORD GÁIS NETWORKS</b>		
PROJECT:		DATE:	26/01/2007	SCALE:
<b>YOUGHAL, CO.CORK</b>		DRAWN:	J.O.K.	APPR.:
TITLE:		DRG. NO.	PROJ. NO.	SH.
<b>FEEDERMAIN/DIST. MAINS LAYOUT</b>		YL/101/1	YL/101	1 of 1



## 4.2. Dungarvan, Co. Waterford

### 4.2.1. Summary Details:

Dungarvan is located on the N25 national primary route 28 miles from Waterford City to the East and 46 miles from Cork City to the West. The population of Dungarvan is currently 7,813 as per the results of the 2006 Census. This is projected to increase to 14,485 by 2018 (see Appendix B). It is forecast that up to 2000 houses will be connected in Dungarvan over the next 10 years.

The town development plan has sufficient land zoned and available for development. There are currently 4 large I/C companies operating in Dungarvan, including Glaxo Smithkline. There are also number of Medium I&C customers and Small I&C customers based in the area.

Dungarvan is situated 33km from the nearest existing Transmission pipeline, and 25km from the town of Youghal.

### 4.2.2. Summary Load Analysis:

*Dungarvan, Co. Waterford*

Source: Networks cost estimates report July 2007.

#### Industrial / Commercial Load Summary Forecast:

<b>Total EAC 2016</b>	10,979 MWh	374,662 Therms
<b>Peak Day 2016</b>	65,440 kWh	1,778 Therms

#### New Housing Summary Forecast:

<b>New Housing Load (Therm)</b>	1,040,000 (year 10)
<b>New Housing Load (MWh)</b>	30,480 (year 10)

### 4.2.3. Solutions:

The most economic option for supplying the town of Dungarvan is by laying a 315/250mm PE 100 SDR17 feeder main from the proposed Youghal Feeder Main at Rincrew Bridge (25.3 km approx.). The proposed Rincrew AGI would serve both Dungarvan and Youghal.

#### 4.2.4. Cost Estimates:

*Dungarvan, Co. Waterford*

Source: Networks cost estimates report July 2007.

##### Estimated Capital expenditure Costs for feeder and Distribution Mains:

Item	Costs €
Transmission Pipeline and AGI costs	€6,175,000
Feeder / Distribution Main Construction	€7,820,517
<b>Total Estimated Costs</b>	<b>€13,995,517</b>

##### 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.

#### 4.2.5. Business Modelling:

€m	NPV @ 5.2%
<b>DISTRIBUTION</b>	
Distribution Revenue	4.88
Capex	-8.99
Contributions	0.35
Opex	-1.48
<b>Distribution Total</b>	<b>-5.24</b>
<b>TRANSMISSION</b>	
Onshore Revenue	1.24
Entry Revenue	0.86
Capex - AGI	-5.87
Opex	-0.49
<b>Transmission Total</b>	<b>-4.26</b>
<b>NPV TOTAL</b>	<b>-9.49</b>

#### 4.2.6. Results:

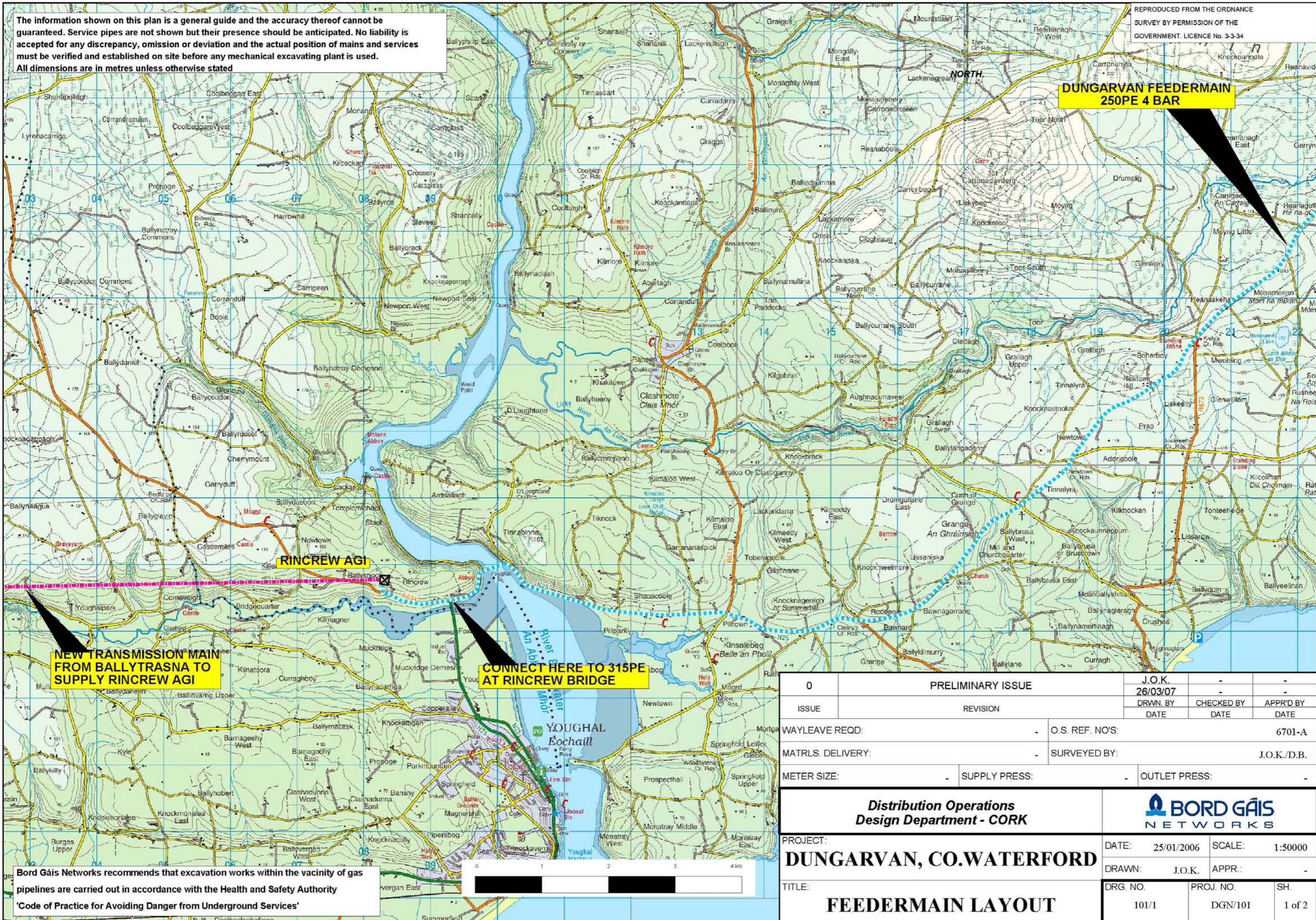
Connection of Dungarvan to the network results in a negative net present value (NPV) of €9.49m and therefore connection of this town is uneconomic on a stand-alone basis.



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**DUNGARVAN FEEDERMAIN  
250PE 4 BAR**



**NEW TRANSMISSION MAIN  
FROM BALLYTRASNA TO  
SUPPLY RINCREW AGI**

**CONNECT HERE TO 315PE  
AT RINCREW BRIDGE**

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'

0	PRELIMINARY ISSUE	J.O.K.	-	-
ISSUE	REVISION	DRWN. BY	CHECKED BY	APPR'D BY
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**Distribution Operations  
Design Department - CORK**

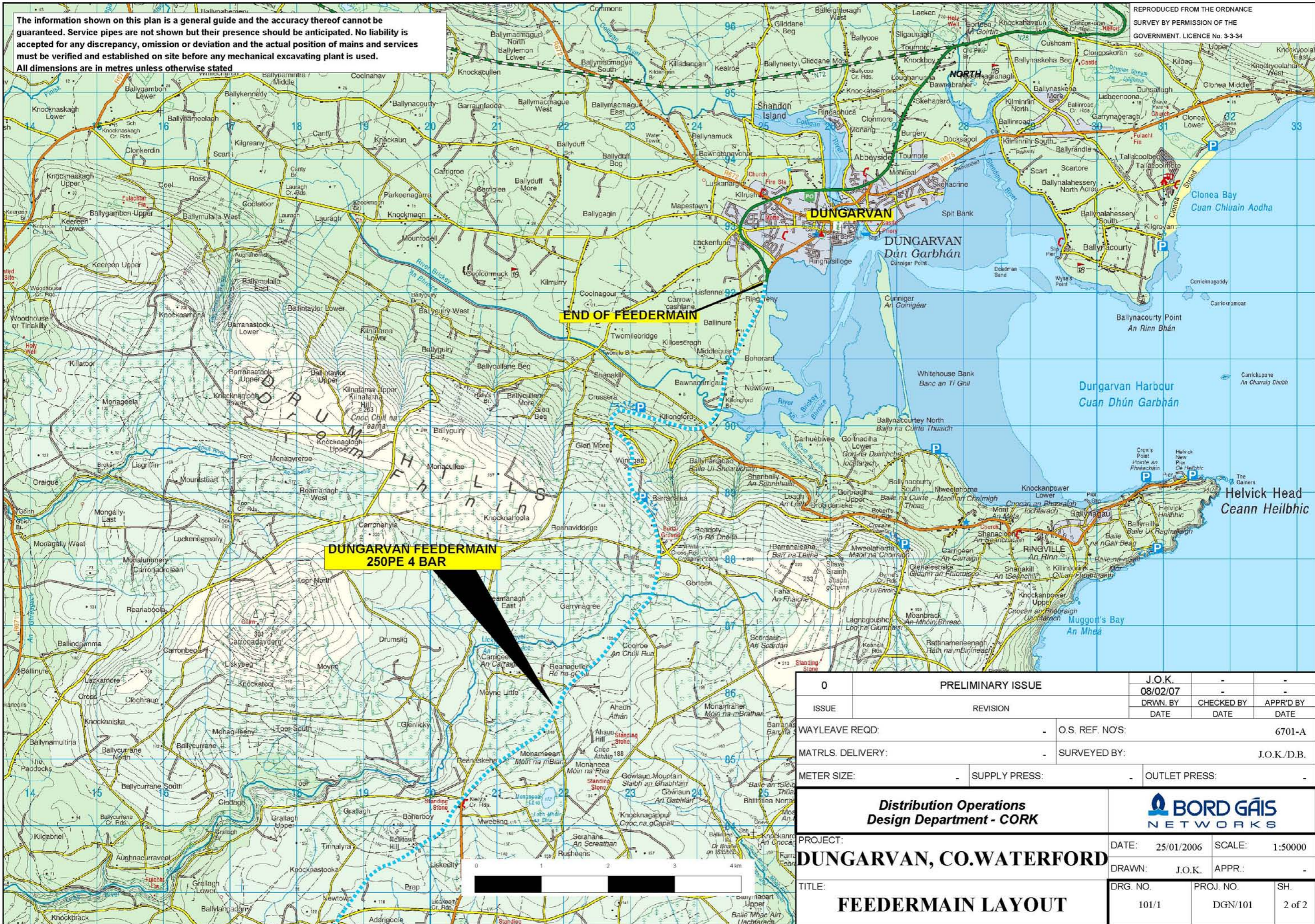


PROJECT:	<b>DUNGARVAN, CO. WATERFORD</b>		
TITLE:	<b>FEEDERMAIN LAYOUT</b>		
DATE:	25/01/2006	SCALE:	1:50000
DRAWN:	J.O.K.	APPR.:	-
DRG. NO.	101/1	PROJ. NO.	DGN/101
		SH.	1 of 2



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<b>Distribution Operations Design Department - CORK</b>		<b>BORD GÁIS NETWORKS</b>		
PROJECT:	<b>DUNGARVAN, CO. WATERFORD</b>		DATE:	25/01/2006
TITLE:	<b>FEEDERMAIN LAYOUT</b>		SCALE:	1:50000
	DRG. NO.	PROJ. NO.	SH.	
	101/1	DGN/101	2 of 2	



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METER SIZE:	-	SUPPLY PRESS:	-	OUTLET PRESS:

<b>Distribution Operations Design Department - CORK</b>					
PROJECT:	<b>DUNGARVAN, CO. WATERFORD</b>	DATE:	25/01/2006	SCALE:	1:10000
TITLE:	<b>DISTRIBUTION MAINS LAYOUT</b>	DRAWN:	J.O.K.	APPR.:	-
		DRG. NO.	101/2	PROJ. NO.	DGN/101
		SH.	1 of 1		

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