

Appendix T

Route Selection Matrix

Clarification of Route Development Process

16th June, 2009

Introduction

As recorded in the minutes of the pre-application consultation meeting between the Applicant and An Bord Pleanála dated 21st January, 2009, in respect of the pending application for the proposed Corrib Onshore Pipeline, the Board's advice to the Applicant included the following:

- Robust route selection criteria should be detailed including considerations of a technical or commercial nature.
- Any negative outcomes of a chosen route should be measured and compared with the original route.

The route selection process, including the various route selection criteria employed in selecting the proposed onshore pipeline route is detailed in Chapter 3, Volume 1 of the Corrib Onshore Pipeline EIS. This note provides additional detail regarding the route development process for the Corrib Onshore Pipeline. As such it should be read in conjunction with Chapter 3 of the EIS.

The selection criteria used in the route development process derived from the public consultation process undertaken by RPS in the period February to June, 2007 as well as from input from the technical, environmental and other experts of the project team.

Corridor Evaluation and Short-listing Process (September, 2007)

Input from all specialists for each corridor was recorded on a matrix (see Sheet 1 attached) where the identified selection criteria were listed against identified corridor options and the previously approved route.

Each specialist provided input into the matrix, in his/her area of expertise and based on the extent of knowledge that had been obtained for each corridor by this time. In this way no criterion was deemed to be of any greater or lesser importance than another. The criteria were broken down into sub-criteria to allow for additional detail in the evaluation process.

At this stage, such information was generally of a high level, primarily based upon desk-top and vantage point / visual surveys. However, an additional detailed matrix on environmental factors was compiled (see Sheet 2 attached), deriving from the more extensive environmental studies that had been carried out in the area over the preceding years. This environmental information is summarised on the main evaluation matrix.

Following input of all specialist information, the characteristics of each corridor in respect of the agreed route selection criteria were evaluated qualitatively by the various members of the multi-disciplinary project team in a series of workshops.

A colour coding system was used in the evaluation process to assist in the determination of preferred corridors as follows:

- Green – indicates that the criterion is 'preferred';
- Amber – indicates that the criterion represents a 'potential constraint'; and
- No colour – indicates that one corridor cannot be distinguished from another in respect of a particular criterion i.e. it is not preferred or does not have potential constraints.

The matrix allowed a comparative evaluation of identified corridors and the previously approved route, in terms of community, environmental and technical route selection criteria. Resulting from this comparative evaluation, all route corridors emerged as having criteria that

constituted both potential preferences and constraints (envisaged positive and negative outcomes).

The result of the evaluation process was that Corridors A, B and C emerged as being preferred / having least constraint. The primary reasons for short-listing these corridors is detailed in Chapter 3 of the EIS. It is clear from the evaluation matrix (Sheet 1) that the preferred corridors were least constrained. The iterative qualitative evaluation process meant that the other identified corridors were not eliminated from further consideration should this have been required i.e. should new information cause the short-listed corridors to be eliminated.

Detailed Corridor / Route Evaluation (November, 2007 - February, 2008)

Further assessment of the short-listed corridors, and ongoing public and stakeholder consultation, revealed potential significant constraints with corridors A and C; this resulted in the identification of variations to these corridors as explained in Chapter 3 of the EIS.

The same multi-disciplinary qualitative process was used to evaluate the short-listed corridors and their variations against the agreed selection criteria, and with the input of new information which had been obtained in the interim period (see Sheet 3 attached). The evaluation continued to include the previously approved route. This ensured that in overall terms, the evaluation of alternative corridors / routes was consistent and robust.

Subsequently, criteria which had a neutral evaluation for all identified short-listed corridors were removed from the matrix (see Sheet 4 attached). This was because it was considered that these criteria no longer assisted in identifying a preferred corridor / route. However, this was no reflection on the importance or otherwise of these criteria. This allowed for a greater focus on the criteria which were considered to be more preferred / constrained for each route.

Having, done this, a further evaluation sought to remove criteria which were no longer considered to be of critical relevance to the selection process or which were effectively covered by other criteria. This iterative evaluation also allowed for input of new information as before.

The result of this process was a Reduced Route Evaluation Matrix (see Sheet 5 attached). This was further refined (with the elimination of 1 other criterion) in the Final Route Evaluation Matrix (see Sheet 6 attached), dated February, 2008.

The Final Route Evaluation Matrix identified Route C1 as having the least number of potential constraints when evaluated against the other identified potential routes and the previously approved route.

Conclusion

It is considered that the iterative qualitative route selection process carried out over the period September, 2007 to February, 2008 is very robust. It allowed for the inclusion of all route selection criteria that emerged during the public consultation process; it allowed for the evaluation of new information as more focussed environmental and technical studies were undertaken; it allowed for an evaluation of the previously approved route against this agreed set of route selection criteria; and finally it did not rely on a weighting of criteria. This process therefore allowed a clear understanding and evaluation of the balance of community, technical and environmental criteria for each identified route option.

Corrib Onshore Pipeline
Evaluation of Alternative Pipeline Corridors - Sheet 1
 11th September, 2007

	Preferred	Potential Constraints								
Technical Criteria	Rossport CORRIDOR A	Aghoos CORRIDOR B	Sruwaddacon Bay CORRIDOR C	Inver Upland CORRIDOR D	Inver / Barnatra CORRIDOR E	Portacloy CORRIDOR F	Glinsk CORRIDOR G	Curraunboy CORRIDOR H	Rossport APPROVED ROUTE****	
1 Safety										
Risk to people and community during operation	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Risk of disturbance e.g. by third parties	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Construction Safety Risk including offshore approaches and landfall	Low	Low	Low to medium. Longer section in marine areas.	Low	Low	Medium/High. Longer offshore pipeline. Difficult landfall - northfacing narrow bay	Medium/High. Additional risks at landfall location (>50m cliffs). Longer offshore pipeline. Northfacing bay	Low to medium. Longer section in marine areas.	Low	Low
2 Design										
Length of Pipeline - downstream of landfall valve	10.6km	8.3km	8.2km	9.6km	12.5km	14km	14.2km	11.8km	8.9km	8.9km
Approx. additional length to currently approved Off-shore pipeline	0km	0km	0km	1.5km	1.5km	5km	20km	1.5km	0km	0km
Pipeline flow assurance issues	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Reduced gas recovery from Corrib Field	Reduced gas recovery from Corrib Field	Acceptable	Acceptable	Acceptable
Offshore pipeline routing risk	Low	Low	Low	Medium/High	Medium/High	High	High	Medium High	Low	Low
Offshore pipeline permitting risk	Low	Low	Low	Medium/High	Medium/High	High	High	Medium/High	None	None
Risk of incompatibility with approved off-shore pipeline design/alignment	None	None	None	Medium	Medium	High	High	Low	None	None
Suitability of landfall valve location	High	High	High	Medium. Requires further detailed study. Rocky coastline at northern landing.	Medium. Requires further detailed study. Rocky coastline at northern landing.	Low. Rocky coastline. Difficult perpendicular approach.	Medium	Low. Construction of landfall valve facility in Machair/sand system poses significant challenge.	High	High
3 Construction										
Risk of Construction Difficulties	Medium. Mainly land based. One short and one medium water course crossings	Medium. Mainly land based. Short water course crossings	Medium/High. Section traversing bay technically challenging	Medium. Mainly land based. Slopes	Low. Mainly land based.	Medium/High. Pipeline pull-in difficult. Mainly land based. Sloping upland areas may pose additional challenges.	High.	Medium/High. Section traversing landfall area and bay technically challenging	Medium. Mainly land based. One short and one medium water course crossings	Medium. Mainly land based. One short and one medium water course crossings
Complexity of construction methodology	Low. Generally conventional construction with short crossings of Sruwaddacon Bay and rivers.	Medium. Generally similar to Corridor A but includes second crossing of Sruwaddacon Bay which will be longer and more complex.	High. Includes approximately 4.5km within Sruwaddacon Bay which will be technically challenging.	Low. Generally conventional construction.	Low. Generally conventional construction.	Medium. Generally conventional construction. Slope stability needs further detailed study close to landfall.	High. Landfall will be technically very challenging. Long section through extensive bog will be technically challenging.	High. Includes approximately 2.5km within Curraunboy Bay which will be technically challenging.	Low. Generally conventional construction with short crossings of Sruwaddacon Bay and rivers.	Low. Generally conventional construction with short crossings of Sruwaddacon Bay and rivers.
Suitability of road access for construction	Medium	Medium	Medium	Medium	High	Medium	Low	Low	Medium	Medium
4 GROUND CONDITIONS										
Risk of landslides and sandbank movements	Low	Low. Route perpendicular to slope in steep sections.	Low. Sections through bay can be stabilised by deeper burial of pipeline.	Low. Avoids slopes.	Low	Medium. Relatively steep slopes.	Low	Low	Low	Low
Community Criteria	CORRIDOR A	CORRIDOR B	CORRIDOR C	CORRIDOR D	CORRIDOR E	CORRIDOR F	CORRIDOR G	CORRIDOR H	CURRENT ROUTE	
5 Proximity										
Minimum Distance from dwellings	>100m	>100m	>100m	>100m	>100m	>100m	>100m. Proximity significantly exceeds that for all other corridors.	>100m	70m	70m
6 Planning / Land Use										
Impact on development potential	Low	Low	Low	Medium. Greater development potential around Inver.	Medium to high. Greater development potential around Inver.	Low to Medium. Some development potential around Portacloy.	Low	Low	Low	Low
Temporary impacts on land use	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Permanent Impacts on land use	Low/Medium. Turbary rights affected close to roadside.	Low	Low	Low/Medium. Turbary rights affected close to roadside.	Low/Medium. Turbary rights affected close to roadside.	Low/Medium. Turbary rights affected close to roadside.	Low/Medium. Turbary rights affected close to roadside.	Low/Medium. Turbary rights affected close to roadside.	Low/Medium. Turbary rights affected close to roadside.	Low/Medium. Turbary rights affected close to roadside.
7 Landowner Consent										
Level of landowner agreement with corridor / Route	Full landowner agreement still outstanding	Full landowner agreement still outstanding	All landowners agreed previously consented route. This corridor may not require any new landowner consent.	Full landowner agreement still outstanding	Full landowner agreement still outstanding	Full landowner agreement still outstanding	Full landowner agreement still outstanding	Full landowner agreement still outstanding	Full landowner agreement still outstanding	Documented & Unresolved Landowner Opposition.
8 Number of Affected Landowners										
Number of landowners involved directly	Medium	Medium	Medium	High	High	Low	Low	Low	Medium	Medium
Number of commonage shares involved directly	High	None	None	High	High	High	Medium	Medium	High	High
9 Number of Affected Residents										
Number of dwellings in the immediate vicinity of the development	Low	Low	Low	High in areas around Inver. Otherwise low.	High in areas around Inver and along R314.	High in areas around Portacloy. Otherwise relatively low.	Low	Low	Low	Low
10 Potential Impacts on Human Beings during Construction										
Air Quality	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Drinking Water	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Noise	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Vibration	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Traffic	Low & temporary	Low & temporary	Low & temporary	Medium & Temporary (denser habitation. Relatively busy area)	Medium & Temporary (denser habitation. Relatively busy area)	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Access to private property	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Access to public areas and amenities	Low & temporary	Low & temporary	Low & temporary	Medium & Temporary	Medium & Temporary	Medium & Temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Negative economic impacts e.g. tourism, fishing	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Environmental Criteria	CORRIDOR A	CORRIDOR B	CORRIDOR C	CORRIDOR D	CORRIDOR E	CORRIDOR F	CORRIDOR G	CORRIDOR H	CURRENT ROUTE	
11 Impacts on Habitats and Wildlife										
Potential for impact on Habitats and Species of conservation value / Environmentally Designated Areas	Medium/High. Short crossings of watercourses; Sruwaddacon Bay (SPA) & Glenamoy Bog Complex (SAC). Crossing blanket bog - intact in areas	Low / medium. Short and one medium length crossings of Sruwaddacon Bay (SPA) & Glenamoy Bog Complex (SAC).	Medium / high. Long section within Sruwaddacon Bay / Glenamoy Bog Complex (SAC).	Medium/high. Fixed dune system / Machair (Annex I priority habitat at southern Inver landfall only. Potential to use landfall on Corridor E. Short sections through Pollatomish Bog (NHA).	Medium. Short section through Pollatomish Bog (NHA) and Carrowmore Lake Complex (SAC).	Low / medium. This Corridor includes some of a small dune system (Annex I habitat) at the landfall. Traverses marginal blanket bog sections of the SAC, some of which are intact.	High. Traverses through centre of intact blanket bog (Annex I priority habitat) Glenamoy Bog Complex (SAC). Part of Bog is being restored by Coillte.	High. Machair at Garter Hill, Annex I priority habitat. Periphery of Glenamoy Bog Complex (SAC). Feeding area for over wintering Geese. Flora Protection Order Petaphyllum ralfsii.	Low. Mainly land based. One short bay crossing and one medium water course crossing.	Low. Mainly land based. One short bay crossing and one medium water course crossing.
Annex I Priority Habitat (SAC) exists within Corridor	Fixed dune grassland* Intact Blanket Bog	Fixed dune grassland*	Fixed dune grassland*	Machair	none	Intact Blanket Bog	Intact Blanket Bog	Machair	none	none
Potential to impact on fauna**	Salmonids; feeding birds (Brent geese), sand martin colony, otters; protected plant species; heronry	Salmonids; feeding birds (Brent geese), sand martin colony, otters; protected plant species	Salmonids; feeding birds (Brent geese, waders); sand martin colony & otters.	Salmonids, otters; protected plant species.	Salmonids; overwintering Greenland white-fronted Geese, breeding seabirds; otters; protected plant species.	Salmonids; otter; protected plant species; heronry.	Grey Seals & Twite (red listed birds); Salmonids; breeding birds, otters; heronry; protected plant species	Salmonids; Brent geese; breeding birds; otters; protected plant species; heronry.	Salmonids; feeding birds (Brent geese), sand martin colony, otters; protected plant species	Salmonids; feeding birds (Brent geese), sand martin colony, otters; protected plant species
12 Archaeology, Culture & Local Heritage										
Recorded Monument and Place Sites / Potential archaeological constraints **	One area of archaeological potential identified from aerial photography (on land).	None recorded.	None recorded.	There are recorded archaeological features (cist, stone circle, field systems) and areas of archaeological potential within this corridor.	There are recorded archaeological features (field system, barrow, house site, enclosure) and areas of archaeological potential	One area of archaeological potential identified from aerial photography.	None recorded.	In Curraunboy townland, there is a large foreshore settlement site. One area of archaeological potential identified from aerial photography.	None recorded.	None recorded.
Architectural Heritage Constraints**	No protected structures field & townland boundaries, past mining remains	No protected structures field & townland boundaries, past mining remains	No protected structures field & townland boundaries, past mining remains	No protected structures Field & townland boundaries, past mining remains.	No protected structures Field & townland boundaries, past mining remains.	No protected structures field & townland boundaries, past mining remains.	No protected structures field & townland boundaries, past mining remains.	No protected structures field & townland boundaries, past mining remains.	No protected structures field & townland boundaries, past mining remains.	No protected structures field & townland boundaries, past mining remains.
Potential for Cultural Heritage Constraints**	No protected structures field & townland boundaries, past mining remains	No protected structures field & townland boundaries, past mining remains	No protected structures field & townland boundaries, past mining remains	No protected structures Field & townland boundaries, past mining remains.	No protected structures Field & townland boundaries, past mining remains.	No protected structures field & townland boundaries, past mining remains.	No protected structures field & townland boundaries, past mining remains.	No protected structures field & townland boundaries, past mining remains.	No protected structures field & townland boundaries, past mining remains.	No protected structures field & townland boundaries, past mining remains.
13 Other / General Criteria										
Potential Visual Impacts***	Low / Medium. Location of landfall valve is close to protected views and a scenic route. Potentially visible from a large number of vantage points. Short Term for Pipeline.	Low / Medium. Location of landfall valve is close to protected views and a scenic route. Potentially visible from a large number of vantage points. Short Term for Pipeline.	Low / Medium. Location of landfall valve is close to protected views and a scenic route. Potentially visible from a large number of vantage points. Short Term for Pipeline.	Low / Medium. Location of landfall valve is close to protected views and a scenic route. Potentially visible from a large number of vantage points. Short Term for Pipeline.	Low / Medium. Location of landfall valve is close to protected views and a scenic route. Potentially visible from a large number of vantage points. Short Term for Pipeline.	Low / Medium. Location of landfall valve is close to protected views and a scenic route. Potentially visible from a large number of vantage points. Short term for Pipeline.	Low / Medium. Location of landfall valve is close to protected views.	Low / Medium. High Scenic View extends across the Bay to this area. Scenic Route at County Road North of Dooncarton offers long distance view across the Bay. Potentially visible from a large number of vantage points. Short Term for Pipeline.	Low / Medium. Location of landfall valve is close to protected views and a scenic route. Potentially visible from a large number of vantage points. Short Term for Pipeline.	Low / Medium. Location of landfall valve is close to protected views and a scenic route. Potentially visible from a large number of vantage points. Short Term for Pipeline.
Impact on Project Programme	Low	Low	Medium. Potential delays due to slow construction and seasonal constraints.	High. Due to market constraints for offshore barges this can delay production start-up by up to two years. Significant negative impact on project.	High. Due to market constraints for offshore barges this can delay production start-up by up to two years. Significant negative impact on project.	High. Due to market constraints for offshore barges this can delay production start-up by up to two years. Significant negative impact on project.	High. Due to market constraints for offshore barges this can delay production start-up by up to two years. Significant negative impact on project.	High. Due to market constraints for offshore barges this can delay production start-up by up to two years. Significant negative impact on project.	Low	Low
Capital costs	No significant additional capital costs	No significant additional capital costs	Medium. Construction within Sruwaddacon Bay will add to project costs.	Medium - need additional laybarges for shallow water area	Medium - need additional laybarges for shallow water area	Significant additional offshore and landfall costs	Significant additional offshore and landfall costs	Medium - need additional laybarges for shallow water area	No significant additional capital costs	No significant additional capital costs
Schedule induced additional costs	None	None	Medium. Construction time delay can cause late start-up and reduce net present value of project.	New landfall will result in deferral of current offshore contract and will result in major delay and additional costs.	New landfall will result in deferral of current offshore contract and will result in major delay and additional costs.	New landfall will result in deferral of current offshore contract and will result in major delay and additional costs.	New landfall will result in deferral of current offshore contract and will result in major delay and additional costs.	New landfall will result in deferral of current offshore contract and will result in major delay and additional costs.	None	None

* Priority habitat exists at edge of corridor.
 ** If this corridor were to be pursued, then further detailed studies would be required.
 *** Careful site selection and design of facilities will avoid/reduce impacts.
 **** Approved Route is not a corridor (300m wide). Assessment here is therefore of an area approximately 40m wide (wayleave width)

Note: this is an ongoing process and colours may change as the route is defined.

**Corrib Onshore Pipeline
Detailed Environmental Criteria - Sheet 2**

Environmental Criteria*	Route A	Route A1	Route B	Route C	CORRIDOR D	CORRIDOR E	CORRIDOR F	CORRIDOR G	CORRIDOR H	Route C1	APPROVED ROUTE
11 Impacts on Habitats and Wildlife											
Annex I Habitats (within SAC)	Atlantic salt meadows (Saltmarsh), Blanket Bog and Depressions on peat (Rhynchosporion), Estuaries & sandflats not covered by seawater at low-tide.	Atlantic salt meadows (Saltmarsh), Blanket Bog and Depressions on peat (Rhynchosporion), Estuaries & sandflats not covered by seawater at low-tide.	Atlantic salt meadows (Saltmarsh), Estuaries & sandflats not covered by seawater at low-tide.	Atlantic salt meadows (Saltmarsh), Estuaries & sandflats not covered by seawater at low-tide.	Machair, Fixed (grey) dunes, Blanket Bog and Depressions on peat (Rhynchosporion)	Blanket Bog and Depressions on peat (Rhynchosporion)	Embryonic shifting dunes, Fixed dunes(?)	Atlantic salt meadows (Saltmarsh), Blanket Bog and Depressions on peat (Rhynchosporion), Estuaries & sandflats not covered by seawater at low-tide.	Machair, Fixed (grey) dunes, Atlantic salt meadows (Saltmarsh), Blanket Bog and Depressions on peat (Rhynchosporion), Estuaries & sandflats not covered by seawater at low-tide.	Atlantic salt meadows (Saltmarsh), Blanket Bog and Depressions on peat (Rhynchosporion), Estuaries & sandflats not covered by seawater at low-tide.	Atlantic salt meadows (Saltmarsh), Blanket Bog and Depressions on peat (Rhynchosporion), Estuaries & sandflats not covered by seawater at low-tide.
Annex I *Priority Habitat (within designated areas)	*Intact Blanket Bog (c.1km)	*Intact Blanket Bog (c. 950m)	None	None	*Machair and *Fixed dunes, *Intact Blanket Bog (NHA)	*Intact Blanket Bog (NHA)	*Intact Blanket Bog	*Intact Blanket Bog (more than 4km)	*Machair and *Fixed (grey) dunes	*Intact Blanket Bog (c. 150m)	*Intact blanket bog (c. 500m)
Annex I Habitats present in non-designated area	Intact blanket bog	Intact blanket bog	None	Intact blanket bog	None	Intact blanket bog	Intact blanket bog	Intact blanket bog	Intact blanket bog	Intact blanket bog	Intact blanket bog
Predicted impacts on annex habitats in designated sites - before mitigation	Blanket bog: Moderate to Significant. Salt marsh: Moderate to Significant. Estuarine habitats and tidal watercourses: Moderate (localised)	Blanket bog: Moderate to Significant. Salt marsh: Moderate to Significant. Estuarine habitats and tidal watercourses: Moderate (localised)	Salt marsh: Moderate to Significant. Estuarine habitats and tidal watercourses: Moderate (localised)	Salt marsh: Moderate to Significant. Estuarine habitats and tidal watercourses: Moderate (localised)	Fixed dune system / Machair: Moderate to Significant. Blanket bog: Moderate to Significant. (NHA).	Blanket bog: Moderate to Significant. (NHA).	Embryonic shifting dunes and Fixed dunes(?): Moderate to Significant. Blanket bog: Moderate to Significant.	Blanket bog: Moderate to Significant.	Fixed dune / Machair system at Garter Hill: Moderate to Significant. Blanket bog: Moderate to Significant. Estuarine habitats and tidal watercourses: Moderate (localised)	Blanket bog: Moderate. Salt marsh: Moderate to Significant. Estuarine habitats and tidal watercourses: Moderate (localised)	Blanket bog: Moderate - short to medium term impact. Salt marsh: Moderate to Significant - short term. Estuarine habitats and tidal watercourses: Moderate (localised)
Predicted residual impacts on annex habitats in designated sites - after mitigation	Blanket bog: Moderate to Significant (pools & flushed areas) - medium term. Salt marsh: Slight - short term. Estuarine habitats and tidal watercourses: Imperceptible temporary.	Blanket bog: Moderate to Significant (pools & flushed areas) - short to medium term. Salt marsh: Slight - short term. Estuarine habitats and tidal watercourses: Imperceptible temporary..	Salt marsh: Slight - short term. Estuarine habitats and tidal watercourses: Imperceptible temporary.	Salt marsh: Slight - short term. Estuarine habitats and tidal watercourses: Imperceptible temporary..	Fixed dune system / Machair: Moderate to Significant - short to medium term. Blanket bog: Moderate to Significant short to medium term impact. (NHA).	Blanket bog: Moderate to Significant short to medium term impact. Carrowmore lake Complex SAC and Pollatomish Bog NHA.	Embryonic shifting dunes and Fixed dunes(?): Moderate - short to medium term. Blanket bog: Moderate - short to medium term.	Blanket bog: Moderate to Significant - short to medium term impact.	Fixed dune / Machair system at Garter Hill: Moderate to Significant - medium to long term. Blanket bog: Moderate to Significant - short to medium term impact. Estuarine habitats and tidal watercourses: Imperceptible temporary.	Blanket bog: Moderate - short to medium term. Salt marsh: Slight - short term. Estuarine habitats and tidal watercourses: Imperceptible temporary.	Blanket bog: Moderate to Significant (pools & flushed areas) - short to medium term. Salt marsh: Slight - short term. Estuarine habitats and tidal watercourses: Imperceptible temporary.
Predicted adverse impact on the integrity of the site. (SAC)	Slight to Moderate (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)	Potential (SAC 476 Carrowmore Lake Complex) - in event of run off into Lake via Aghoos River	Slight to Moderate (SAC 500 Glenamoy Bog Complex)	Slight to Moderate (SAC 500 Glenamoy Bog Complex)	Slight to Moderate (SAC 476 Carrowmore Lake Complex) - loss of GWFG feeding site	Slight (SAC 500 Glenamoy Bog Complex)	Moderate (SAC 500 Glenamoy Bog Complex)	Moderate to Significant (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)
Predicted adverse impact on the integrity of the site as a whole (SPA and Ramsar site)	None	None	None	None	None	Ditto (Carrowmore Lake SPA)	None	Potential	Potential	None	None
Predicted impact on fauna	Otter: Moderate (Annex II & IV) - short term / Neutral - long term. Grey Seal: None. Harbour Seal (Annex II & IV): None. Badger: Slight short term, neutral - long term. Bats: Imperceptible; neutral long term. Salmonids: None	Otter: Moderate (Annex II & IV) - short term / Neutral - long term. Grey Seal: None. Harbour Seal (Annex II & IV): None. Badger: Slight short term, neutral - long term. Bats: Imperceptible; neutral long term. Salmonids: None	Otter: Moderate (Annex II & IV) - short term / Neutral - long term. Grey Seal: None. Harbour Seal (Annex II & IV): None. Badger: Slight short term, neutral - long term. Bats: Imperceptible; neutral long term. Salmonids: None	Otter: Moderate (Annex II & IV) - short term / Neutral - long term. Grey Seal: None. Harbour Seal (Annex II & IV): None. Badger: Slight short term, neutral - long term. Bats: Imperceptible; neutral long term. Salmonids: None	Otter: Moderate (Annex II & IV) - short term / Neutral - long term. Grey Seal: None. Harbour Seal (Annex II & IV): None. Badger: Slight short term, neutral - long term. Bats: Imperceptible; neutral long term. Salmonids: None	Otter: Moderate (Annex II & IV) - short term / Neutral - long term. Grey Seal: None. Harbour Seal (Annex II & IV): None. Badger: Slight short term, neutral - long term. Bats: Imperceptible; neutral long term. Salmonids: None	Otter: Moderate (Annex II & IV) - short term / Neutral - long term. Grey Seal: None. Harbour Seal (Annex II & IV): None. Badger: Slight short term, neutral - long term. Bats: Imperceptible; neutral long term. Salmonids: None	Otter: Moderate (Annex II & IV) - short term / Neutral - long term. Grey Seal: None. Harbour Seal (Annex II & IV): None. Badger: Slight short term, neutral - long term. Bats: Imperceptible; neutral long term. Salmonids: None	Otter: Moderate (Annex II & IV) - short term / Neutral - long term. Grey Seal: None. Harbour Seal (Annex II & IV): None. Badger: Slight short term, neutral - long term. Bats: Imperceptible; neutral long term. Salmonids: None	Otter: Moderate (Annex II & IV) - short term / Neutral - long term. Grey Seal: None. Harbour Seal (Annex II & IV): None. Badger: Slight short term, neutral - long term. Bats: Imperceptible; neutral long term. Salmonids: None	Otter: Moderate (Annex II & IV) - short term / Neutral - long term. Grey Seal: None. Harbour Seal (Annex II & IV): None. Badger: Slight short term, neutral - long term. Bats: Imperceptible; neutral long term. Salmonids: None
Predicted impact on birds	Brent Geese: None expected. Sand martin colony: None expected. Potential for nesting Golden Plover (Annex I) on intact blanket bog in SAC (timing). Heronry: Slight - temporary (timing). SPA resident and overwintering species: Slight - temporary (timing). Cormcrake and other Annex species (Terns etc.): no impact expected	Brent Geese: None expected. Sand martin colony: None expected. Heronry: Slight - temporary (timing). SPA resident and overwintering species: Slight - temporary (timing). Cormcrake and other Annex species (Terns etc.): no impact expected	Brent Geese: None expected. Sand martin colony: None expected. SPA resident and overwintering species: Slight - temporary (timing). Cormcrake and other Annex species (Terns etc.): no impact expected	Brent Geese: None expected. Sand martin colony: None expected. SPA resident and overwintering species: Slight - temporary (timing). Cormcrake and other Annex species (Terns etc.): no impact expected	Brent Geese: None expected. SPA resident and overwintering species: none expected (timing). Cormcrake: no impact expected	Overwintering Greenland White-fronted Goose in Carrowmore Lake Complex SAC: potential loss of feeding grounds: Significant Impact - Medium to Long term	Potential for nesting Golden Plover (Annex I) on intact blanket bog in SAC (timing). Heronry: Slight - temporary (timing).	Nesting Twite (Red-listed) at landfall. Potential for nesting Golden Plover (Annex I) on intact blanket bog in SAC (timing). Heronry: Slight - temporary (timing).	Landfall approach is through one of two main feeding area for over wintering Geese: Significant impact - medium term. Potential for nesting Golden Plover (Annex I) on intact blanket bog in SAC (timing). Heronry: Slight - temporary (timing). SPA resident and overwintering species: Slight - temporary (timing).	Brent Geese: None expected. Sand martin colony: None expected. SPA resident and overwintering species: Slight - temporary (timing). Cormcrake and other Annex species (Terns etc.): no impact expected	Brent Geese: None. Sand martin colony: None. Potential for nesting Golden Plover (Annex I) on intact blanket bog in SAC (timing). SPA resident and overwintering species: Slight - temporary (timing). Cormcrake and other Annex species (Terns etc.): no impact expected
Potential to impact on Protected Flora	Slight to Moderate (Blanket bog species)	Slight (Blanket bog species)	None expected	None expected	Slight	Slight	Slight	Slight to Moderate (Blanket bog species)	Moderate to High (<i>Petaphyllum ralfsii</i>)	Slight	Slight
Potential to impact on Marine Fauna	Salmonids: None Marine Inverts: imperceptible temporary	Salmonids: None Marine Inverts: imperceptible temporary	Salmonids: None Marine Inverts: imperceptible temporary	Salmonids: None Marine Inverts: imperceptible temporary					Salmonids: None Marine Inverts: imperceptible temporary	Salmonids: None Marine Inverts: imperceptible temporary	Salmonids: None Marine Inverts: imperceptible temporary

* Prepared by Environmental Specialists J. Neff (EACS) and I. Wilson (Benthic Solutions Ltd.)

Corrib Onshore Pipeline
DRAFT Evaluation of Alternative Pipeline Routes (Landfall to Gas Processing Terminal) - Sheet 3

26th November, 2007

	Preferred		Constraints			
	Environmental Constraint on this Route (Priority Habitat)	1	3	4	5	Rosspoint
Technical Criteria	Route A	Route A1	Route B	Route C	Route C1	APPROVED ROUTE
1 Safety						
Risk to people and community during operation	Low	Low	Low	Low	Low	Low
Risk of disturbance e.g. by third parties	Low	Low	Low	Minimal	Low	Low
Construction Safety Risk including offshore approaches and landfall	Low	Low	Low to medium. Longer section in estuarine areas (approximately 1.4km).	Low to medium. Longer section in estuarine areas (Approximately 4km).	Low to medium. Longer section in estuarine areas (approximately 1km).	Low
2 Design						
Length of Pipeline - downstream of landfall valve	10.6km	10.31km	8.3km	8.2km	8.64km	8.9km
Approximate additional length to currently approved Off-shore pipeline	0km	0km	0km	0km	0km	0km
Pipeline flow assurance issues	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
Offshore pipeline routing risk	Low	Low	Low	Low	Low	N/A
Offshore pipeline permitting risk	Low	Low	Low	Low	Low	N/A
Risk of incompatibility with approved off-shore pipeline design/alignment	None	None	None	None	None	N/A
Suitability of landfall valve location	High	High	High	High	High	High
3 Construction						
Risk of Construction Difficulties	High. Mainly land based including construction in deep bog with bog pools. Two short water course crossings.	Low. Mainly land based including construction in bog. Two short water course crossings.	Medium. One relatively long crossing of Bay. Section traversing bay technically challenging	Medium/High. Long section traversing bay technically challenging	Medium. Mainly land based including construction in bog. One relatively long crossing of Bay. Section traversing bay technically challenging.	Low. Mainly land based. Two short water course crossings.
Complexity of construction methodology	Low. Generally conventional construction with short crossings of Sruwaddacon Bay and rivers.	Low. Generally conventional construction with short crossings of Sruwaddacon Bay and rivers.	Medium. Specialist (trenchless option) crossing of Sruwaddacon Bay (approximately 1km).	High. Specialist (trenchless option) long crossing of Sruwaddacon Bay (approximately 4km).	Medium. Specialist (trenchless option) crossing of Sruwaddacon Bay (approximately 1km).	Low. Generally conventional construction with short crossings of Sruwaddacon Bay and rivers.
Ease of access for construction	Medium	Medium	Medium	Medium	Medium	Medium
4 GROUND CONDITIONS						
Risk of landslides / peat slides and sandbank movements (with mitigation)	Low	Low	Low	Low	Low	Low
Community Criteria	Route A	Route A1	Route B	Route C	Route C1	APPROVED ROUTE
5 Proximity						
Distance from dwellings (over entire onshore pipeline)	74m. One dwelling must be acquired to achieve >100m separation distance on this route. This dwelling is currently 74m from pipeline route. Dwelling to east is >100m from pipeline route.	74m. One dwelling must be acquired to achieve >100m separation distance on this route. This dwelling is currently 74m from pipeline route. Dwelling to east is >100m from pipeline route.	>100m	>100m	74m. One dwelling must be acquired to achieve >100m separation distance on this route. This dwelling is currently 74m from pipeline route.	70m
6 Planning / Land Use						
Impact on development potential	Low	Low	Low	Minimal	Low	Low
Temporary impacts on land use	Low	Low	Low to medium.	Low	Low	Low
Permanent Impacts on land use	Low/Medium. Turbary rights affected.	Low/Medium. Turbary rights affected.	Low	Minimal	Low/Medium.	Low/Medium. Turbary rights affected close to roadside.
7 Landowner Consent						
Level of landowner agreement with corridor / Route (excluding commonage shareholders)	Substantial agreement expected. Possible CAO requirement.	Substantial agreement expected. Possible CAO requirement.	Documented objection.	All landowners agreed previously on sections of consented route. Possible CAO requirement. This corridor may not require any new landowner consent.	Substantial agreement expected. Possible CAO requirement.	Documented & Unresolved Landowner Opposition.
Agreement from Commonage Shareholders	Unknown. Probability of objection from some share holders.	Unknown. Probability of objection from some share holders.	No commonage	No commonage	Unknown. Probability of objection from some share holders.	Unknown. Probability of objection from some share holders.
8 Number of Affected Landowners						
Number of landowners involved directly	Medium	Medium	Medium	Medium	Medium	Medium
Number of commonage shares involved directly	High	High	None	None	High	High
9 Number of Affected Residents						
Population Density (as per IS 328)	Low	Low	Low	Low	Low	Low
Level of compliance with recommendations of Cassells Report	Meets expectations on increased proximity to housing.	Meets expectations on increased proximity to housing.	Meets expectations on increased proximity to housing but involves another community.	Generally exceeds expectations on increased proximity to housing.	Meets expectations on increased proximity to housing.	N/A
10 Predicted Impacts on Human Beings during Construction						
Air Quality	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Drinking Water	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Noise	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Vibration	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Traffic	High & temporary	High & temporary	High & temporary	High & temporary	High & temporary	High & temporary
Access to private property	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Access to public areas and amenities	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Negative economic impacts e.g. tourism, fishing	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary	Low & temporary
Environmental Criteria	Route A	Route A1	Route B	Route C	Route C1	APPROVED ROUTE
11 Impacts on Habitats and Wildlife						
Annex I Habitats (within SAC)	Atlantic salt meadows (Saltmarsh), Blanket Bog and Depressions on peat (Rhynchosporion), Estuaries & sandflats not covered by seawater at low-tide.	Atlantic salt meadows (Saltmarsh), Blanket Bog and Depressions on peat (Rhynchosporion), Estuaries & sandflats not covered by seawater at low-tide.	Atlantic salt meadows (Saltmarsh), Estuaries & sandflats not covered by seawater at low-tide.	Atlantic salt meadows (Saltmarsh), Estuaries & sandflats not covered by seawater at low-tide.	Atlantic salt meadows (Saltmarsh), Blanket Bog and Depressions on peat (Rhynchosporion), Estuaries & sandflats not covered by seawater at low-tide.	Atlantic salt meadows (Saltmarsh), Blanket Bog and Depressions on peat (Rhynchosporion), Estuaries & sandflats not covered by seawater at low-tide.
Annex I *Priority Habitat (within designated areas)	*Intact Blanket Bog (c.1km)	*Intact Blanket Bog (c. 950m)	None	None	*Intact Blanket Bog (c. 150m)	*Intact blanket bog (c. 500m)
Predicted adverse impact on the integrity of the site. (SAC)	Slight to Moderate (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)	Potential (SAC 476 Carrowmore Lake Complex) - in event of run off into Lake via Aghoos River	Slight to Moderate (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)
Predicted adverse impact on the integrity of the site as a whole (SPA and Ramsar site)	None	None	None	None	None	None
Potential to impact on Protected Flora	Slight to Moderate (Blanket bog species)	Slight (Blanket bog species)	None expected	None expected	Slight	Slight
Potential to impact on Marine Fauna	Salmonids: None Marine Inverts: imperceptible temporary	Salmonids: None Marine Inverts: imperceptible temporary	Salmonids: None Marine Inverts: imperceptible temporary	Salmonids: None Marine Inverts: imperceptible temporary	Salmonids: None Marine Inverts: imperceptible temporary	Salmonids: None Marine Inverts: imperceptible temporary
12 Archaeology, Culture & Local Heritage						
Recorded Monuments and Place Sites within 100m	None	None	None	None	None	None
Features of Archaeological Potential within 100m	Four	Three	Three	One	Two	One
Architectural Heritage Constraints**	No protected structures	No protected structures	No protected structures	No protected structures	No protected structures	No protected structures
Potential for Cultural Heritage Constraints**	Field & townland boundaries, past mining remains	Field & townland boundaries, past mining remains	Field & townland boundaries, past mining remains	Field & townland boundaries, past mining remains	Field & townland boundaries, past mining remains	Field & townland boundaries, past mining remains
13 Other / General Criteria	Route A	Route A1	Route B	Route C	Route C1	APPROVED ROUTE
Potential Visual Impacts - Pipeline Construction	Temporary Impact during construction phase only.	Temporary Impact during construction phase only.	Temporary Impact during construction phase only.	Temporary Impact during construction phase only.	Temporary Impact during construction phase only.	Temporary Impact during construction phase only.
Risk of delay to project due to lengthy statutory process	High	Low/Medium	Medium	High	Medium	N/A
Impact on Project Programme (Construction phase, excluding third party interference)	Medium	Low/Medium	Medium	High. Potential delays due to slow construction and seasonal constraints.	Medium	Low/Medium
Additional Capital costs	Low/Medium	Low	Medium	High	Medium	N/A
Schedule induced additional costs	N/A	N/A	N/A	Likely	N/A	N/A

Notes:

Route evaluation is an ongoing process. Comments and colours on this spreadsheet may change as routes are further defined.
 Routes A, B and C are centrelines of Corridors A, B and C evaluated for short-listing. All routes evaluated here are taken to be of wayleave width (approximately 40 - 60m wide)
 Criteria that are no longer relevant to this stage of the Route Development Process have been omitted for greater clarity

Corrib Onshore Pipeline
DRAFT Evaluation of Alternative Pipeline Routes (Landfall to Gas Processing Terminal) - Sheet 4
Screened Criteria (Excluding non differential Criteria)

21st December, 2007

	Not relevant at this stage or covered elsewhere	Preferred	Constraints			
	Environmental Constraint on this Route (Priority Habitat)	1	3	4	5	Rosspoint
Technical Criteria	Route A	Route A1	Route B	Route C	Route C1	APPROVED ROUTE
Length of Pipeline - downstream of landfall valve	10.6km	10.31km	8.3km	8.2km	8.64km	8.9Km
Risk of Construction Difficulties	High. Mainly land based including construction in deep bog with bog pools. Two short water course crossings.	Low. Mainly land based including construction in bog. Two short water course crossings.	Medium. One relatively long crossing of Bay. Section traversing bay technically challenging	Medium/High. Long section traversing bay technically challenging	Medium. Mainly land based including construction in bog. One relatively long crossing of Bay. Section traversing bay technically challenging.	Low. Mainly land based. Two short water course crossings.
Complexity of construction methodology	Low. Generally conventional construction with short crossings of Sruwaddacon Bay and rivers.	Low. Generally conventional construction with short crossings of Sruwaddacon Bay and rivers.	Medium. Specialist (trenchless option) crossing of Sruwaddacon Bay (approximately 1km).	High. Specialist (trenchless option) long crossing of Sruwaddacon Bay (approximately 4km).	Medium. Specialist (trenchless option) crossing of Sruwaddacon Bay (approximately 1km).	Low. Generally conventional construction with short crossings of Sruwaddacon Bay and rivers.
Distance from dwellings (over entire onshore pipeline)	74m. One dwelling must be acquired to achieve >100m separation distance on this route. This dwelling is currently 74m from pipeline route. Dwelling to east is >100m from pipeline route.	74m. One dwelling must be acquired to achieve >100m separation distance on this route. This dwelling is currently 74m from pipeline route. Dwelling to east is >100m from pipeline route.	>100m	>100m	74m. One dwelling must be acquired to achieve >100m separation distance on this route. This dwelling is currently 74m from pipeline route.	70m
Impact on development potential	Low	Low	Low	Minimal	Low	Low
Temporary impacts on land use	Low	Low	Low to medium.	Low	Low	Low
Permanent Impacts on land use	Low/Medium. Turbery rights affected.	Low/Medium. Turbery rights affected.	Low	Minimal	Low/Medium.	Low/Medium. Turbery rights affected close to roadside.
Level of landowner agreement with corridor / Route (excluding commonage shareholders)	Substantial agreement expected. Possible CAO requirement.	Substantial agreement expected. Possible CAO requirement.	Documented objection.	All landowners agreed previously on sections of consented route. Possible CAO requirement. This corridor may not require any new landowner consent.	Substantial agreement expected. Possible CAO requirement.	Documented & Unresolved Landowner Opposition.
Agreement from Commonage Shareholders	Unknown. Probability of objection from some share holders.	Unknown. Probability of objection from some share holders.	No commonage	No commonage	Unknown. Probability of objection from some share holders.	Unknown. Probability of objection from some share holders.
Number of commonage shares involved directly	High	High	None	None	High	High
Level of compliance with recommendations of Cassells Report	Meets expectations on increased proximity to housing.	Meets expectations on increased proximity to housing.	Meets expectations on increased proximity to housing but involves another community.	Generally exceeds expectations on increased proximity to housing.	Meets expectations on increased proximity to housing.	N/A
Annex I Priority Habitat (within SAC)	Intact Blanket Bog (approximately 1km)	Intact Blanket Bog (400m at edge)	None	None	Intact Blanket Bog (200m at edge)	None
Predicted Adverse Impact on Integrity of the SAC & SPA Reserves	Low/Medium	Low	Low	Low/Medium	Low	Low
Potential to impact on Protected Fauna	Low. Salmonids; Lamprey, SPA overwintering & resident bird species, sand martin colony, otters; protected plant species; heronry, corncrake	Low. Salmonids; Lamprey, SPA overwintering & resident bird species, sand martin colony, otters; protected plant species; heronry, corncrake	Low. Salmonids; Lamprey, SPA overwintering & resident bird species, sand martin colony, otters; protected plant species; heronry, corncrake	Medium. Salmonids; Lamprey, SPA overwintering & resident bird species, sand martin colony, otters; protected plant species; corncrake	Low. Salmonids; Lamprey, SPA overwintering & resident bird species, sand martin colony, otters; protected plant species; corncrake	Low. Salmonids; Lamprey, SPA overwintering & resident bird species, sand martin colony, otters; protected plant species; corncrake
Predicted adverse impact on the integrity of the site. (SAC)	Slight to Moderate (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)	Potential (SAC 476 Carrowmore Lake Complex) - in event of run off into Lake via Aghoos River	Slight to Moderate (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)
Potential to impact on Protected Flora	Slight to Moderate (Blanket bog species)	Slight (Blanket bog species)	None expected	None expected	Slight	Slight
Risk of delay to project due to lengthy statutory process	High	Low/Medium	Medium	High	Medium	N/A
Impact on Project Programme (Construction phase, excluding third party interference)	Medium	Low/Medium	Medium	High. Potential delays due to slow construction and seasonal constraints.	Medium	Low/Medium
Additional Capital costs	Low/Medium	Low	Medium	High	Medium	N/A

Notes:

Route Evaluation is an ongoing process.

Comments and colours on this spreadsheet may change as routes are further defined.

Corrib Onshore Pipeline

DRAFT High Level Evaluation of Alternative Pipeline Routes (Landfall to Gas Processing Terminal) - 'Reduced Route Evaluation Matrix' Sheet 5

4th January, 2008

		Preferred		Constraints			
		Environmental Constraint on this Route (Priority Habitat)	1	3	4	5	Rosspoint
High Level Criteria		Route A	Route A1	Route B	Route C	Route C1	APPROVED ROUTE
Length of Pipeline - downstream of landfall valve		10.6km	10.31km	8.3km	8.2km	9.13km	8.9Km
Distance from dwellings (over entire onshore pipeline)		2No. Unoccupied dwellings must be acquired to achieve >100m separation distance on this route.	2No. Unoccupied dwellings must be acquired to achieve >100m separation distance on this route.	>100m	>100m	2No. Unoccupied dwellings must be acquired to achieve >100m separation distance on this route.	70m
Level of landowner agreement with corridor / Route (excluding commonage shareholders)		Substantial agreement expected. Possible CAO requirement.	Substantial agreement expected. Possible CAO requirement (see comments below).	Documented objection.	All landowners agreed previously on sections of consented route. Possible CAO requirement. This corridor may not require any new landowner consent.	Substantial agreement expected. Possible CAO requirement.	Documented & Unresolved Landowner Opposition.
Agreement from Commonage Shareholders		Unknown. Probability of objection from some share holders.	Unknown. Probability of objection from some share holders.	No commonage	No commonage	Unknown. Probability of objection from some share holders.	Unknown. Probability of objection from some share holders.
Stated objectives for modifying the pipeline route (Cassells Report)		Meets expectations on increased proximity to housing.	Meets expectations on increased proximity to housing.	Meets expectations on increased proximity to housing but involves another community.	Generally exceeds expectations on increased proximity to housing.	Meets expectations on increased proximity to housing.	N/A
Predicted Adverse Impact on Integrity of the SAC & SPA/Ramsar		Low/Medium	Low	Low	Low/Medium	Low	Low
Predicted adverse impact on the integrity of the site. (SAC)		Slight to Moderate (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)	Potential (SAC 476 Carrowmore Lake Complex) - in event of run off into Lake via Aghoos River	Slight to Moderate (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)
Risk of delay to project due to lengthy statutory process		High	Low/Medium	Medium	High	Medium	N/A
Impact on Project Programme (Construction phase, excluding third party interference)		Medium	Low/Medium	Medium	High. Potential delays due to slow construction and seasonal constraints.	Medium	Low/Medium
Additional Capital costs		Low/Medium	Low	Medium	High	Medium	N/A

Comments

- Route A** Not preferred mainly due to environmental constraint (approximately 1km of intact blanket bog with bog pools. (Priority Habitat)). Other viable alternatives exist.
- Route A1** Potential constraint (approximately 140m crosses land belonging to documented objector). More direct alternatives exist.
- Route B** Documented objection on this route. Route involves another local community which could lead to further division in the area. This route may be beyond scope of Cassells Recommendations. Other acceptable routes meeting these recommendations exist.
- Route C** Not preferred for environmental, technical, cost and programme reasons. Other more appropriate alternatives exist.
- Route C1** Preferred route as it is acceptable under all criteria including landowner issues.

Corrib Onshore Pipeline

DRAFT High Level Evaluation of Alternative Pipeline Routes (Landfall to Gas Processing Terminal) - 'Final Route Evaluation Matrix'

Sheet 6

1st February, 2008

Preferred	Constraints
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	Environmental Constraint on this Route (Priority Habitat)	1	3	4	5	Rosspoint
High Level Criteria	Route A	Route A1	Route B	Route C	Route C1	APPROVED ROUTE
Length of Pipeline - downstream of landfall valve	10.6km	10.31km	8.3km	8.2km	9.13km	8.9Km
Distance from dwellings (over entire onshore pipeline)*	2No. Unoccupied dwellings must be acquired to achieve >100m separation distance on this route.	2No. Unoccupied dwellings must be acquired to achieve >100m separation distance on this route.	>100m	>100m	2No. Unoccupied dwellings must be acquired to achieve >100m separation distance on this route.	70m
Level of landowner agreement with corridor / Route (excluding commonage shareholders)	Substantial agreement expected. Possible CAO requirement.	Substantial agreement expected. Possible CAO requirement (see comments below).	Documented objection.	All landowners agreed previously on sections of consented route. Possible CAO requirement. This corridor may not require any new landowner consent.	Substantial agreement expected. Possible CAO requirement.	Documented & Unresolved Landowner Opposition.
Agreement from Commonage Shareholders	Unknown. Probability of objection from some share holders.	Unknown. Probability of objection from some share holders.	No commonage	No commonage	Unknown. Probability of objection from some share holders.	Unknown. Probability of objection from some share holders.
Stated objectives for modifying the pipeline route (Cassells Report)	Meets expectations on increased proximity to housing.	Meets expectations on increased proximity to housing.	Meets expectations on increased proximity to housing but involves another community.	Generally exceeds expectations on increased proximity to housing.	Meets expectations on increased proximity to housing.	N/A
Predicted Adverse Impact on Integrity of the SAC &	Low/Medium	Low	Low	Low/Medium	Low	Low
Predicted adverse impact on the integrity of the site. (SAC)	Slight to Moderate (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)	Potential (SAC 476 Carrowmore Lake Complex) - in event of run off into Lake via Aghoos River	Slight to Moderate (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)	Slight (SAC 500 Glenamoy Bog Complex)
Impact on Project Programme (Construction phase, excluding third party interference)	Medium	Low/Medium	Medium	High. Potential delays due to slow construction and seasonal constraints.	Medium	Low/Medium
Additional Capital costs	Low/Medium	Low	Medium	High	Medium	N/A

Comments

- Route A** Not preferred mainly due to environmental constraint (approximately 1km of intact blanket bog with bog pools. (Priority Habitat)). Other viable alternatives exist.
- Route A1** Potential constraint (approximately 140m crosses land belonging to documented objector). More direct alternatives exist.
- Route B** Documented objection on this route. Route involves another local community which could lead to further division in the area. This route may be beyond scope of Cassells Recommendations. Other acceptable routes meeting these recommendations exist.
- Route C** Not preferred for environmental, technical, cost and programme reasons. Other more appropriate alternatives exist.
- Route C1** Preferred route as it is acceptable under all criteria including landowner issues.

* 2No. dwellings are both owned by the same person and are unoccupied. The Developer has agreed with the owner to purchase these dwellings. This criterion is therefore not identified as a constraint for route evaluation purposes.