

Item	Factor	Rating			Section 1 (85.960 - 86.250)		
		1	2	3	Value	Rating	Comment
Ground Conditions							
Peat							
1	Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	3.4 m	3	Peat depths from long sections
2	Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	9 kPa	2	Shear vane results
3	Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Qmec data - GC3
Mineral Soil or Rock Below Peat							
4	Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Geomorphological Plan
5	Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	>10 kPa	1	Qmec data - GC3
6	Rock at base of peat	No	Possibly	Yes			
7	Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock							
8	Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
9	Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography							
Slope Angle							
10	Slope Angle - Ground Surface	<3°	3°-5°	>5°	4.4°	2	Site investigation data/Infinite slope
11	Slope Angle - Base of Peat	<3°	3°-5°	>5°	2.4°	1	Site investigation data/Infinite slope
Morphology							
12	In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
13	Downslope distance to watercourse	>250 m	100-250 m	<100 m	>250	1	Geomorphological Plan
14	General slope characteristics downslope	Concave	Planar	Convex	Concave	1	Geomorphological Plan
15	Distance from convex break in slope	>100 m	50-100 m	<50 m	120 m	1	Geomorphological Plan
16	Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Oblique	2	Geomorphological Plan
Water Conditions							
Surface Hydrology							
17	Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Drains Present - Geomorphological Plan
18	Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained	2	Geomorphological Plan
19	Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Varied	2	Geomorphological Plan
20	Upslope catchment area	Minor	Intermediate	Significant	Minor	1	Corrib Base Plan 16
21	Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Oblique	2	Geomorphological Plan
Hydrogeology							
22	Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
23	Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
24	Potential for natural piping	No	Possibly	Yes	No	1	Geomorphological Plan
Stability Analysis							
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil							
25	FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2.6	1	Infinite slope
26	FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	1.8	2	Infinite slope
Other Factors							
Vegetation							
27	Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
28	Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland	2	Cutover areas of peat
Peat Slide History							
29	Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
30	Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
31	Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use							
32	Peat Workings	Cutaway/Turbary		Mechanically cut	Cutaway/Turbary	1	Geomorphological Plan

Failure Potential	
Total	44
Max	87
Failure Potential Score (%)	50.6

29 Factors Used

Factor	Rating			Section 2 (86.250 - 86.600)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	4.2 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	3 kPa	3	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Qmec data - GC2
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	>10 kPa	1	Qmec data - GC2
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	3.7°	2	Site investigation data/Infinite slope
Slope Angle - Base of Peat	<3°	3°-5°	>5°	2.9°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	>250	1	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Planar	2	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	170 m	1	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Across Slope	3	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Drains Present - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained	2	Geomorphological Plan
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Varied	2	Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Minor	1	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Oblique	2	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	No	1	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2.3	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	1.2	3	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland	2	Cutover area of peat
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	Mechanically cut	3	Geomorphological Plan

Failure Potential	
Total	50
Max	87
Failure Potential Score (%)	57.5

29 Factors Used

Factor	Rating			Section 3 (86.600 - 87.050)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	3.2 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	6 kPa	2	From shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Assumed
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	No	1	Mineral soil exposures in base of cutting (Geo Plan)
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	>10 kPa	1	Geomorphological Plan
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	3°	2	Geomorphological Plan
Slope Angle - Base of Peat	<3°	3°-5°	>5°	1.8°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	>250	1	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Convex	3	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	70 m	2	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Across Slope	3	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Drains Present - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained	2	Geomorphological Plan
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Up/Downslope	1	Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Minor	1	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Perpendicular	3	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	No	1	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	1.7	2	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	2.4	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Dry/Grassland	1.5	Cutover area of peat
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	Cutaway/Mechanically cut	2	Geomorphological Plan

Failure Potential	
Total	47.5
Max	87
Failure Potential Score (%)	54.6

29 Factors Used

Factor	Rating			Section 4 (87.050 - 87.230)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	4.0 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	1 kPa	3	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Qmec data - GC1
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	>10 kPa	1	Qmec data - GC1
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	2°	1	Geomorphological Plan
Slope Angle - Base of Peat	<3°	3°-5°	>5°	2.9°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	>250	1	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Convex	3	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	90 m	2	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Across Slope	3	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Diffuse	1	No Drains/Streams - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained/Ponded	2.5	Geomorphological Plan
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	No Ditches		Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Minor	1	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	None		Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	No	1	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2.1	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	1.3	2	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland/wetlands	2.5	Geomorphological Plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	43
Max	78
Failure Potential Score (%)	55.1

26 Factors Used

Factor	Rating			Section 5 (87.230 - 87.330)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	3.2 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	2 kPa	3	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Assumed
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Assumed
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	5-10 kPa	2	Assumed
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	2°	1	Geomorphological Plan
Slope Angle - Base of Peat	<3°	3°-5°	>5°	0.9°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	>250	1	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Convex	3	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	0 m	3	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Oblique	2	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Diffuse	1	No Drains/Streams - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained/Ponded	2.5	Geomorphological Plan, some shallow bog pools
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	No Ditches		Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Minor	1	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	None		Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	No	1	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2.1	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	4	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland/Wetlands	2.5	Geomorphological Plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	43
Max	78
Failure Potential Score (%)	55.1

26 Factors Used

Factor	Rating			Section 6 (87.330 - 87.836)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	3.5 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	9 kPa	2	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Assumed
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Assumed
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	5-10 kPa	2	Assumed
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	2.3°	1	Site investigation data/Infinite slope
Slope Angle - Base of Peat	<3°	3°-5°	>5°	1.2°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	100 - 250 m	2	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Concave	1	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	160 m	1	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Oblique	2	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Drains Present - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained/Drained	1.5	Geomorphological Plan
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Varied	2	Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Intermediate	2	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Perpendicular	3	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	1.4	2	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	3.4	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland	2	Cutover area of peat
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Assumed
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Assumed
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	Cutaway/Mechanically cut	2	Geomorphological Plan

Failure Potential	
Total	48.5
Max	87
Failure Potential Score (%)	55.7

29 Factors used

Factor	Rating			Section 7 (87.836 - 88.100)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	4.9 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	>10 kPa	5 - 10 kPa	<= 5 kPa	7 kPa	2	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Assumed
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Assumed
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	5-10 kPa	2	Assumed
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	1.6°	1	Site investigation data/Infinite slope
Slope Angle - Base of Peat	<3°	3°-5°	>5°	1.0°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	100 - 250 m	2	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Planar	2	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	160 m	1	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Across Slope	3	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete/Diffuse	1.5	Old Drains/No Drains - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Ponded	3	Geomorphological Plan
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Up/Downslope	1	Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Minor	1	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Perpendicular	3	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2.2	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	2.8	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland/Wetlands	2.5	Geomorphological Plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/Irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	47
Max	84
Failure Potential Score (%)	56.0

28 Factors Used

Factor	Rating			Section 8 (88.100 - 88.270)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	5.0 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	>10 kPa	5 - 10 kPa	<= 5 kPa	6 kPa	2	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Assumed
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Assumed
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	5-10 kPa	2	Assumed
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	2.5°	1	Geomorphological Plan
Slope Angle - Base of Peat	<3°	3°-5°	>5°	4.2°	2	Site investigation data/Infinite slope, two slopes recorded, worst case used
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	>250 m	1	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Planar	2	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	230 m	1	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Oblique	2	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Diffuse	1	Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Drained	1	Geomorphological Plan
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	No Ditches		Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Minor	1	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	None		Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	No	1	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2.2	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	0.7	3	Infinite slope (two slopes measured, worst case used - anomaly in vane depths)
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland/Wetlands	2.5	Geomorphological Plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	40.5
Max	78
Failure Potential Score (%)	51.9

26 Factors Used

Factor	Rating			Section 9 (88.270 - 88.600)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	2.2 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	No shear vane results	2	Assumed
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Assumed
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	No	1	Mineral soil exposures in minor cliff (Geo Plan)
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	>10 kPa	1	Geomorphological Plan
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	4.0°	2	Geomorphological Plan
Slope Angle - Base of Peat	<3°	3°-5°	>5°	3.4°	2	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	<100	3	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Planar	2	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	No		Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Oblique	2	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Drained	1	Geomorphological Plan
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Up/Downslope	1	Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Intermediate	2	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Oblique	2	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2.1	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	2.1	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland	2	Cutover area of peat
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	Cutaway/Turbary	1	Geomorphological Plan

Failure Potential	
Total	45
Max	84
Failure Potential Score (%)	53.6

28 Factors Used

Factor	Rating			Section 10 (89.520 - 89.750)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	3.1 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	No shear vane results	2	Assumed
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Assumed
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	No	1	Mineral soil exposures in cliff (Geo Plan)
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	>10 kPa	1	Geomorphological Plan
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	2°	1	Geomorphological Plan
Slope Angle - Base of Peat	<3°	3°-5°	>5°	1.3°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	<100	3	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Planar	2	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	No		Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Oblique	2	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained	2	Geomorphological Plan
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Up/Downslope	1	Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Intermediate	2	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Parallel	1	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	3.5	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	4.1	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland/Wetlands	2.5	Geomorphological Plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	42.5
Max	81
Failure Potential Score (%)	52.5

27 Factors Used

Factor	Rating			Section 11 (89.750 - 89.950)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	1.8 m	2	Peat depths from long sections
Min Peak Undrained Shear Strength	>10 kPa	5 - 10 kPa	<= 5 kPa	1 kPa	3	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Assumed
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	No	1	Mineral soil exposures in cutting (Geo Plan)
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	>10 kPa	1	Geomorphological Plan
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	2.5°	1	Geomorphological Plan
Slope Angle - Base of Peat	<3°	3°-5°	>5°	3.3°	2	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	100-250	2	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Planar	2	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	50	2	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Across Slope	3	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained/Ponded	2	Geomorphological Plan
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Up/Downslope	1	Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Minor	1	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Oblique	2	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	3.1	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	2.8	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland/Wetlands	2.5	Geomorphological Plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None/Cutaway	0.5	Geomorphological Plan

Failure Potential	
Total	46
Max	87
Failure Potential Score (%)	52.9

29 Factors Used

Factor	Rating			Section 12 (89.950 - 90.220)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	2.6 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	8 kPa	2	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Assumed
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	No	1	Mineral soil exposures in cutting (Geo Plan)
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	>10 kPa	1	Geomorphological Plan
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	8.5°	3	Geomorphological Plan - Two slopes recorded, worst case used
Slope Angle - Base of Peat	<3°	3°-5°	>5°	3.3°	2	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	Yes, slope > 3°	3	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	<100 m	3	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Convex	3	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	0 m	3	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Up/Downslope	1	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Drained	1	Geomorphological Plan
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Varied	2	Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Minor	1	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Perpendicular	3	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	No	1	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2.2	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	2.2	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland	2	Geomorphological Plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None/Cutaway	0.5	Geomorphological Plan

Failure Potential	
Total	50.5
Max	87
Failure Potential Score (%)	58.0

29 Factors Used

Factor	Rating			Section 13 (90.220 - 90.380)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	3.1 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	11 kPa	1	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	Assumed
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Assumed
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	5-10 kPa	2	Assumed
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	3.5°	2	Geomorphological Plan
Slope Angle - Base of Peat	<3°	3°-5°	>5°	1.4°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	Yes, slopes <3°	2	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	<100 m	3	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Planar	2	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	100	2	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Across Slope	3	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete/Point	2.5	Natural Stream - Geotechnical Plan
Drainage conditions	Drained	Partially Drained	Ponded	Drained	1	Geomorphological Plan
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	No Ditches		Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Minor	1	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	None		Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2.1	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	3.1	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	No Trees		Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	Grassland/Wetlands	2.5	Geomorphological Plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	45
Max	78
Failure Potential Score (%)	57.7

26 Factors Used

Factor	Rating			Section 14 (90.380 - 90.780)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	3.8 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	5 kPa	2	From Site Investigation Data
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	From Site Investigation Data
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	No	1	From Site Investigation Data
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	>10 kPa	1	From Site Investigation Data
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	2.0°	1	Site investigation data/Infinite slope
Slope Angle - Base of Peat	<3°	3°-5°	>5°	1.3°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	Yes, slopes <3°	2	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	<100 m	3	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Convex	3	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	0 m	3	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Oblique	2	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Forestry drains - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained	2	Forestry drains mostly functioning but some ponded
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Varied	2	Forested Area - Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Minor	1	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Oblique	2	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	5.4	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	4	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	Good/Fair	1.5	Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	None		Forested area - Geomorphological plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/Irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	47.5
Max	84
Failure Potential Score (%)	56.5

28 Factors Used

Factor	Rating			Section 15 (90.780 - 91.210)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	4.0 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	4 kPa	3	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	From Site Investigation Data
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Assumed
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	5-10 kPa	2	Assumed
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	2.1°	1	Site investigation data/Infinite slope
Slope Angle - Base of Peat	<3°	3°-5°	>5°	0.5°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	Yes, slopes <3°	2	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	<100 m	3	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Convex	3	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	0 m	3	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Up/Downslope	1	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Forestry drains - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained	2	Forestry drains mostly functioning but some ponded
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Varied	2	Forested Area - Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Intermediate	2	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Oblique	2	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2.3	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	6.7	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	Fair	2	Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	None		Forested area - Geomorphological plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	51
Max	84
Failure Potential Score (%)	60.7

28 Factors Used

Factor	Rating			Section 16 (91.210 - 91.470)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	4.0 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	4.5 kPa	3	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	From Site Investigation Data
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Assumed
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	5-10 kPa	2	Assumed
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	1.7°	1	Site investigation data/Infinite slope
Slope Angle - Base of Peat	<3°	3°-5°	>5°	0.7°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	<100	3	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Convex	3	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	0 m	3	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Up/Downslope	1	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Forestry drains - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained	2	Forestry drains mostly functioning but some ponded
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Varied	2	Forested Area - Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Significant	3	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Perpendicular	3	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	No	1	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	No	1	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2.1	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	4.9	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	Fair	2	Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	None		Forested area - Geomorphological plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	52
Max	84
Failure Potential Score (%)	61.9

28 Factors Used

Factor	Rating			Section 17 (91.470 - 91.560)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	3.7 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	>10 kPa	5 - 10 kPa	<= 5 kPa	7.5 kPa	2	Shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	From Site Investigation Data
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	No	1	From Site Investigation Data
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	>10 kPa	1	From Site Investigation Data
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	4.0°	2	Geomorphological Plan
Slope Angle - Base of Peat	<3°	3°-5°	>5°	1.6°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	Yes, slopes <3°	2	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	<100 m	3	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Convex	3	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	0 m	3	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Up/Downslope	1	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Forestry drains - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained	2	Forestry drains mostly functioning but some ponded
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Varied	2	Forested Area - Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Significant	3	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Perpendicular	3	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	Possibly Yes	2	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	Possibly Yes	2	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	3.6	1	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	2.7	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	Fair	2	Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	None		Forested area - Geomorphological plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/Irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	53
Max	84
Failure Potential Score (%)	63.1

28 Factors Used

Factor	Rating			Section 18 (91.560 - 91.920)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	4.0 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	2 kPa	3	From shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	From Site Investigation Data
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Assumed
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	5-10 kPa	2	Assumed
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	3.3°	2	Site investigation data/Infinite slope
Slope Angle - Base of Peat	<3°	3°-5°	>5°	3.1°	2	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	<100	3	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Planar	2	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	No		Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Oblique	2	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Forestry drains - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained	2	Forestry drains mostly functioning but some ponded
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Varied	2	Forested Area - Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Intermediate	2	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Oblique	2	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	Possibly Yes	2	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	Possibly Yes	2	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	1.5	2	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	1.2	3	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	Fair	2	Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	None		Forested area - Geomorphological plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	54
Max	81
Failure Potential Score (%)	66.7

27 Factors Used

Factor	Rating			Section 19 (91.920 - 92.400)		
	1	2	3	Value	Rating	Comment
Ground Conditions						
Peat						
Peat Depth	0.0-1.0 m	1.0-2.0 m	>2.0	4.4 m	3	Peat depths from long sections
Min Peak Undrained Shear Strength	> 10 kPa	5 - 10 kPa	<= 5 kPa	2 kPa	3	From shear vane results
Peat Classification at base of peat	Fibrous	Some Fibres	Amorphous	Some Fibres	2	From Site Investigation Data
Mineral Soil or Rock Below Peat						
Mineral soil - very soft sensitive clay layer at base of peat	No	Possibly	Yes	Possibly	2	Assumed
Peak undrained shear strength of mineral soil below peat	>10 kPa	5-10 kPa	<=5 kPa	5-10 kPa	2	Assumed
Rock at base of peat	No	Possibly	Yes			
Rock interface characteristics at base of peat	Rough/ Weathered	Smooth Undulating	Smooth Planar			
Interface Conditions - Peat to Mineral Soil/Rock						
Contact conditions between peat - mineral soil/rock	No separation	Partially separated	Separated	Partially Separated	2	Geomorphological Plan
Signs of movement on interface (eg slickensides)	No	Possibly	Yes	No	1	Geomorphological Plan
Topography						
Slope Angle						
Slope Angle - Ground Surface	<3°	3°-5°	>5°	1.73°	1	Site investigation data/Infinite slope
Slope Angle - Base of Peat	<3°	3°-5°	>5°	1.1°	1	Site investigation data/Infinite slope
Morphology						
In valley with defined watercourse	No	Yes, slopes <3°	Yes, slopes > 3°	No	1	Geomorphological Plan
Downslope distance to watercourse	>250 m	100-250 m	<100 m	>250 m	1	Geomorphological Plan
General slope characteristics downslope	Concave	Planar	Convex	Convex	3	Geomorphological Plan
Distance from convex break in slope	>100 m	50-100 m	<50 m	0 m	3	Geomorphological Plan
Orientation of alignment with respect to slope	Up/Downslope	Oblique	Across slope	Oblique	2	Geomorphological Plan
Water Conditions						
Surface Hydrology						
Surface water pathways	Diffuse (no drains, watercourse present)	Discrete (drains, watercourse present)	Point (water source such as spring)	Discrete	2	Forestry drains - Geomorphological Plan
Drainage conditions	Drained	Partially Drained	Ponded	Partially Drained	2	Forestry drains mostly functioning but some ponded
Man-made drainage ditch orientation	Up/Downslope	Varied	Across slope	Varied	2	Forested Area - Geomorphological Plan
Upslope catchment area	Minor	Intermediate	Significant	Intermediate	2	Corrib Base Plan 16
Orientation of alignment with respect to drainage ditches	Parallel	Oblique	Perpendicular	Perpendicular	3	Geomorphological Plan
Hydrogeology						
Evidence of upwelling groundwater (eg springs)	No		Yes	Possibly Yes	2	Geomorphological Plan
Water saturated granular soil at base of peat	No		Yes	Possibly Yes	2	Geomorphological Plan
Potential for natural piping	No	Possibly	Yes	Possibly	2	Geomorphological Plan
Stability Analysis						
Factor of Safety - Infinite Slope (Undrained) @ Peak Strength in very soft Mineral Soil						
FoS (Infinite Slope) - using slope angle at ground surface	>2	1.3 - 2.0	<1.3	2	2	Infinite slope
FoS (Infinite Slope) - using slope angle at base of peat	>2	1.3 - 2.0	<1.3	3.1	1	Infinite slope
Other Factors						
Vegetation						
Tree Growth	Good	Fair	Poor	Poor	3	Geomorphological Plan
Vegetation (no trees)	Dry	Grassland	Wetlands	None		Forested area - Geomorphological plan
Peat Slide History						
Evidence of previous slides (site inspection and/or aerial photos)	No	General Area	On site	General Area	2	Dooncarton Mountain (2003), L1202 (2008)
Tension Cracks in Peat	No		Yes	No	1	Geomorphological Plan
Distressed/irregular ground indicative of movement.	No		Yes	No	1	Geomorphological Plan
Land Use						
Peat Workings	Cutaway/Turbary		Mechanically cut	None		Geomorphological Plan

Failure Potential	
Total	54
Max	84
Failure Potential Score (%)	64.3

28 Factors Used