



Photograph 19. View east over possible Gas Connection Corridor from Saltholme Substation.



Photograph 20. View southwest towards Pond 1 and the PCC



Photograph 21. Example of rough grassland amongst industrial buildings and infrastructure



Photograph 22. An existing Gas Connection Corridor with adjacent semi-improved grassland, Billingham



Photograph 23. Rough grassland with scrub and birch woods in the distance within the Seal Sands industrial complex



Photograph 24. Example of rough grasslands typical of the Seal Sands industrial complex



Photograph 25. Rough grassland and ephemeral/ short perennial habitats (OMH) amongst industrial buildings and infrastructure



Photograph 26. Dabholme Gut



Photograph 27. View northeast, towards PCC along a proposed Electricity Connection Corridor, existing above ground pipelines can be seen on the right of picture



Photograph 28. Scrub habitat and grassland in vicinity of PCC



Photograph 29. Scrub habitats and giant hogweed in vicinity of PCC



Photograph 30. Improved grassland with characteristics of grazing marsh



Photograph 31. Bramble scrub adjacent to disused railway



Photograph 32. Beach and intertidal habitat at Bran Sands



Photograph 33 Mosaic of grassland, scrub, bare ground and ruderal habitats on land south of Bran Sands



Photograph 34. Species-rich grassland south of Bran Sands



Photograph 35. Large stand of Schedule 9 Japanese rose on shoreline near Bran Sands.



Photograph 36. View of the pond on land south of Bran Sands.

Annex C Results of Botanical Survey

The following botanical survey data are presented for habitats within and adjacent to the PCC Site, as this is the location where most permanent habitat losses for the Proposed Development will occur. Early indicative designs for the Proposed Development included options to install pipeline crossings of the River Fleet through the lower banks or across the upper banks. On this basis the species lists for the River Fleet banks are presented separately for upper and lower bank zones that broadly reflect the differences in physical profile and species richness of the banks across their vertical profiles.

Relative species abundances are given using the DAFOR (Dominant, Abundant, Frequent, Occasional, Rare) scale. Although there is no formally agreed quantitative equivalent for these broad categories, they are widely regarded as being equivalent to the following cover scores: Dominant $\geq 75\%$; Abundant = 51-75%; Frequent = 26-50%; Occasional = 11-25%; and Rare = 1-10%. Scores preceded by an L indicate an additional cover assessment of “Localised” or “Local”, which indicates that coverage of a species is clustered rather than even within the survey area.

Plant Species	Common Name	Target Note 1	Target Note 4	Target Note 5	Target Note 7	Target Note 8	Target Note 3
<i>Achillea millefolium</i>	Yarrow		F	LA	O	F	
<i>Agrostis stolonifera</i>	Creeping bent	LA					
<i>Alliaria petiolata</i>	Garlic-mustard				R	R	
<i>Anisantha sterilis</i>	Barren brome		R				
<i>Anthriscus sylvestris</i>	Cow parsley			R			
<i>Anthyllis vulneraria</i> ssp. <i>vulneraria</i>	Kidney-vetch		F	A			A-F
<i>Arenaria serpyllifolia</i> agg.	Thyme-leaved sandwort agg.		R	LO		LO	
<i>Arrhenatherum elatius</i>	False oat-grass			F			
<i>Artemisia vulgaris</i>	Mugwort		LO	LO			
<i>Bellis perennis</i>	Daisy			O		LO	
<i>Buddleja davidii</i>	Butterfly-bush	R					
<i>Carduus nutans</i>	Musk thistle			R			
<i>Carex flacca</i>	Glaucous sedge			O			
<i>Carex pendula</i>	Pendulous sedge			LO			
<i>Carlina vulgaris</i>	Carline thistle				O	LO	LO
<i>Catapodium rigidum</i>	Fern-grass		LO	R			
<i>Centaurea nigra</i> agg.	Common knapweed			LF	R	F	
<i>Centaurea scabiosa</i>	Greater knapweed			O		R	
<i>Centranthus ruber</i>	Red valerian	R			R		
<i>Cerastium fontanum</i>	Common mouse-ear		R	O	O		O
<i>Cerastium semidecandrum</i>	Little mouse-ear		LF	O		R	
<i>Chamerion angustifolium</i>	Rosebay willowherb			O	LF		O
<i>Cirsium arvense</i>	Creeping thistle			O			
<i>Cirsium vulgare</i>	Spear thistle	R		R			
<i>Crataegus monogyna</i>	Hawthorn			LA	O	O	
<i>Crepis biennis</i>	Rough hawk's-beard	R	O	O	R		O

Plant Species	Common Name	Target Note 1	Target Note 4	Target Note 5	Target Note 7	Target Note 8	Target Note 3
<i>Dactylis glomerata</i>	Cock's-foot	F	F	A	A	A	F
<i>Daucus carota</i> subsp. <i>carota</i>	Wild carrot			A	O	A	O
<i>Diplotaxis tenuifolia</i>	Wild rocket	O				R	
<i>Dipsacus fullonum</i>	Teasel			LO			
<i>Echium vulgare</i>	Viper's bugloss	F		O		LO	
<i>Elytrigia repens</i>	Couch					F	
<i>Erigeron acris</i>	Blue fleabane				R		R
<i>Erodium cicutarium</i>	Common stork's-bill		LO	O	R		R
<i>Erophila verna</i>	Common whitlow-grass		LO	LO	LO		
<i>Festuca ovina</i>	Sheep's fescue			LF	R	R	
<i>Festuca rubra</i>	Red fescue	LA	D	A-D	A-D	A-D	A-D
<i>Fragaria vesca</i>	Wild strawberry						O
<i>Galium album</i>	Hedge bedstraw			LA			
<i>Geranium molle</i>	Dove's-foot crane's-bill			R			
<i>Geranium pyrenaicum</i>	Hedge crane's-bill			R			
<i>Geranium robertianum</i>	Herb-Robert	R					
<i>Heracleum mantegazzianum</i>	Giant hogweed			LF			
<i>Heracleum sphondylium</i>	Hogweed					O	
<i>Hieracium</i> agg.	Hawkweed agg.			R	LO		
<i>Hippophae rhamnoides</i>	Sea buckthorn	R		LA	LO		
<i>Hypochaeris radicata</i> ssp. <i>radicata</i>	Cat's-ear	O			O	O	
<i>Iris germanica</i>	Bearded iris					LO	
<i>Lactuca virosa</i>	Great lettuce	O					
<i>Lamium album</i>	White dead-nettle				R		
<i>Lathyrus pratensis</i>	Meadow vetchling			F			
<i>Leucanthemum vulgare</i>	Oxeye daisy		O	LF			
<i>Leymus arenarius</i>	Lyme grass					R	

Plant Species	Common Name	Target Note 1	Target Note 4	Target Note 5	Target Note 7	Target Note 8	Target Note 3
<i>Linaria vulgaris</i>	Common toadflax		LO	R	O		
<i>Linum catharticum</i>	Fairy flax						LO
<i>Lotus corniculatus</i>	Common bird's-foot trefoil	A	LO	LF	O	LO	F
<i>Luzula campestris</i>	Field woodrush						O
<i>Malus pumila</i>	Apple					R	
<i>Medicago lupulina</i>	Black medick			O			
<i>Melilotus</i> sp.	Melilot sp.			O			
<i>Ononis repens</i>	Common restharrow	O		O	F	O	O
<i>Pastinaca sativa</i>	Wild parsnip			A			
<i>Peltigera</i> sp.	Dog lichen			R		LO	
<i>Pilosella officinarum</i>	Common mouse-ear-hawkweed	O	O	R	LA	LO	O
<i>Plantago coronopus</i>	Buck's-horn plantain		O	F	LF	LO	F
<i>Plantago lanceolata</i>	Ribwort plantain	F	A	A	O	F	
<i>Plantago maritima</i>	Sea plantain						R
<i>Poa pratensis</i>	Smooth meadow-grass				LF	O	
<i>Potentilla anserina</i>	Silverweed			R			
<i>Potentilla reptans</i>	Creeping cinquefoil		LO				
<i>Prunus spinosa</i>	Blackthorn			LA			
<i>Reseda lutea</i>	Weld					R	
<i>Reseda luteola</i>	Wild mignonette		R				
<i>Rosa canina</i> agg.	Dog rose agg.					O	
<i>Rosa rugosa</i>	Japanese rose			R			
<i>Rosa spinosissima</i>	Burnet rose				LO		
<i>Rubus armeniacus</i>	Himalayan giant bramble			LF			
<i>Rubus fruticosus</i> agg.	Brambles	LF		LO		LA	R
<i>Salix caprea</i>	Goat willow					LO	

Plant Species	Common Name	Target Note 1	Target Note 4	Target Note 5	Target Note 7	Target Note 8	Target Note 3
<i>Sambucus nigra</i>	Elder					R	
<i>Saxifraga tridactylites</i>	Rue-leaved saxifrage			LF			
<i>Sedum acre</i>	Biting stonecrop		LF	F	R	LO	O
<i>Senecio erucifolius</i>	Hoary ragwort		R	O			
<i>Senecio inaequidens</i>	Narrow-leaved ragwort	O					
<i>Senecio jacobaea</i>	Common ragwort			R	O		O
<i>Senecio squalidus</i>	Oxford ragwort		R	O			
<i>Senecio vulgaris</i> ssp. <i>vulgaris</i>	Groundsel					R	
<i>Silene dioica</i>	Red campion			R			
<i>Silene vulgaris</i>	Bladder campion					LO	
<i>Sonchus asper</i> ssp. <i>asper</i>	Prickly sow-thistle		R				
<i>Stellaria pallida</i>	Lesser chickweed			R			
<i>Taraxacum</i> agg.	Dandelions			R			O
<i>Trifolium arvense</i>	Hare's-foot clover		R				
<i>Trifolium dubium</i>	Lesser trefoil		O				
<i>Trifolium medium</i>	Zigzag clover			LF			
<i>Trifolium pratense</i>	Red clover			O			
<i>Trifolium repens</i>	White clover			F			
<i>Tussilago farfara</i>	Colt's-foot	O		O			
<i>Ulex europaeus</i>	European gorse			R			
<i>Veronica chamaedrys</i>	Germander speedwell			O			
<i>Vicia sativa</i> ssp. <i>segetalis</i>	Common vetch			O		O	O
<i>Vicia sepium</i>	Bush vetch				R		

Plant Species	Common Name	Pond 1	Pond 2	Pond 3	Pond 4	Fleet River Corridor – Upper Bank and Margins	Fleet River Corridor – Lower Bank	Fleet River
<i>Acer campestre</i> var. <i>leiocarpum</i>	Field maple (non-native)				O			
<i>Achillea millefolium</i>	Yarrow					O		
<i>Agrostis stolonifera</i>	Creeping bent		LA				F	F
<i>Alnus cordata</i>	Italian alder				R			
<i>Alnus glutinosa</i>	Alder			O				
<i>Alopecurus pratensis</i>	Meadow foxtail			O				
<i>Angelica sylvestris</i>	Wild angelica				R			
<i>Anthoxanthum odoratum</i>	Sweet vernal-grass			O				
<i>Anthyllis vulneraria</i> ssp. <i>vulneraria</i>	Kidney-vetch					R		
<i>Bolboschoenus maritimus</i>	Sea club-rush	A	LA	F				A
<i>Bromus hordeaceus</i> ssp. <i>Hordeaceus</i>	Soft brome					O		
<i>Caltha palustris</i>	Marsh marigold				O			R
<i>Calystegia sepium</i>	Hedge bindweed						LA	
<i>Cardamine pratensis</i>	Cuckoo-flower	LF		LF				
<i>Carex otrubae</i>	False fox-sedge	O		O				
<i>Cerastium tomentosum</i>	Snow-in-summer					LF		
<i>Chamerion angustifolium</i>	Rosebay willowherb					O		
<i>Cirsium arvense</i>	Creeping thistle						LA	
<i>Crataegus monogyna</i>	Hawthorn				O	LO		
<i>Crataegus rhipidophylla</i>	Large-sepal hawthorn				R			
<i>Crepis biennis</i>	Rough hawk's-beard					R		
<i>Dactylis glomerata</i>	Cock's-foot					A		
<i>Digitalis purpurea</i>	Foxglove					R		
<i>Diplotaxis tenuifolia</i>	Wild rocket					R		
<i>Eleocharis palustris</i>	Spike-rush		LA					

Plant Species	Common Name	Pond 1	Pond 2	Pond 3	Pond 4	Fleet River Corridor – Upper Bank and Margins	Fleet River Corridor – Lower Bank	Fleet River
<i>Elodea nuttallii</i>	Nuttall's waterweed				F			
<i>Elytrigia repens</i>	Couch						A	
<i>Epilobium hirsutum</i>	Greater willowherb						A	O
<i>Eupatorium cannabinum</i>	Hemp-agrimony					R		
<i>Festuca rubra</i>	Red fescue					D		
<i>Filipendula ulmaria</i>	Meadowsweet	LA					F	
<i>Galium aparine</i>	Cleavers						LO	
<i>Glyceria maxima</i>	Reed sweet-grass			F			F	F
<i>Heracleum sphondylium</i>	Hogweed						O	
<i>Hippophae rhamnoides</i>	Sea buckthorn				O			
<i>Hypericum tetrapterum</i>	Square-stalked St John's-wort			O				
<i>Iris pseudacorus</i>	Yellow iris	O		F	A			
<i>Lathyrus pratensis</i>	Meadow vetchling					O		
<i>Lemna</i> sp.	Duckweed							A
<i>Leucanthemum vulgare</i>	Oxeye daisy	LA						
<i>Ligustrum ovalifolium</i> 'Aureum'	Garden privet			LO				
<i>Lythrum salicaria</i>	Purple loosestrife	A						
<i>Myriophyllum spicatum</i>	Spiked milfoil			R				
<i>Ononis repens</i>	Common restharrow					O		
<i>Origanum vulgare</i>	Wild marjoram	LA						
<i>Phalaris arundinacea</i>	Reed canary-grass						LA	O
<i>Phragmites australis</i>	Common reed	LD		F				
<i>Pilosella officinarum</i>	Common mouse-ear-hawkweed					LO		
<i>Poa pratensis</i>	Smooth meadow-grass					A		
<i>Poa trivialis</i>	Rough meadow-grass						F	

Plant Species	Common Name	Pond 1	Pond 2	Pond 3	Pond 4	Fleet River Corridor – Upper Bank and Margins	Fleet River Corridor – Lower Bank	Fleet River
<i>Potentilla anserina</i>	Silverweed			O				
<i>Potentilla reptans</i>	Creeping cinquefoil						O	
<i>Primula veris</i>	Cowslip	LF						
<i>Primula vulgaris</i>	Primrose	O						
<i>Pulicaria dysenterica</i>	Common fleabane			LF				
<i>Ranunculus aquatilis</i> agg.	Water-crowfoot agg.		LO					
<i>Rosa canina</i> agg.	Dog-rose agg.					LO		
<i>Rosa rugosa</i>	Japanese rose				O			
<i>Rumex crispus</i>	Curled dock						LO	
<i>Salix cinerea</i> ssp. <i>oleifolia</i>	Grey willow			O				
<i>Salix viminalis</i>	Osier				O			
<i>Salix x fragilis</i>	Crack willow				F			
<i>Sambucus nigra</i>	Elder					R		
<i>Scrophularia auriculata</i>	Water figwort						R	
<i>Sedum album</i>	White stonecrop					LF		
<i>Senecio vulgaris</i> ssp. <i>vulgaris</i>	Groundsel						R	
<i>Silene dioica</i>	Red campion	O						
<i>Silene flos-cuculi</i>	Ragged-Robin			R				
<i>Solanum dulcamara</i>	Bittersweet		LF					
<i>Sonchus arvensis</i>	Perennial sow-thistle						LO	
<i>Sorbus intermedia</i>	Swedish whitebeam				O	R		
<i>Trifolium repens</i>	White clover					F		
<i>Tussilago farfara</i>	Colt's-foot						LO	
<i>Typha angustifolia</i>	Lesser bulrush			LA				
<i>Typha latifolia</i>	Bulrush	A	LA				LD	F
<i>Urtica dioica</i> ssp. <i>dioica</i>	Common nettle	LA					LF	

Plant Species	Common Name	Pond 1	Pond 2	Pond 3	Pond 4	Fleet River Corridor – Upper Bank and Margins	Fleet River Corridor – Lower Bank	Fleet River
<i>Vicia sepium</i>	Bush vetch					O		