

Appendix B

Trees and Hedges

Adwick washlands habitat creation – planning application supporting information

Appendix 2: TREE SURVEY RESULTS

Surveys were conducted in March 2009. Only trees with a circumference greater than 30cm at 1.5m height were surveyed. Heights and crown radii are approximate to nearest 0.5m.

Reference number: 1	
	
Photo number: 1	
Species: Ash	
Height: 5.5 (m)	
Stem circumference: 70 (largest stem) (cm @ 1.5m)	
Shape: multi-stem (12)	
Max. crown radii: 8 (m)	
Age class: mature	
Physiological/structural condition: A: healthy and vigorous	
Safe useful life expectancy (SULE): L: long more than 40years	

Reference number: 2



Photo number: 3

Species: Ash

Height: 4 (m)

Stem circumference: 45 (largest stem) (cm @ 1.5m)

Shape: multi-stem (17)

Max. crown radii: (m)

Age class: mature

Physiological/structural condition: A: healthy and vigorous

Safe useful life expectancy (SULE): L: long more than 40years

Reference number: 3



Photo number: 4

Species: Willow sp.

Height: 7 (m)

Stem circumference: 112 (cm @ 1.5m)

Shape: multi-stem (15)

Max. crown radii: 4 (m)

Age class: mature

Physiological/structural condition: B: satisfactory

Safe useful life expectancy (SULE): M: medium 20-40 years

Reference number: 4 and 5



Photo number: 6

Species: Blackthorn

Height: 2.5 (m)

Stem circumference: 70 (cm @ 1.5m)

Shape: Standard

Max. crown radii: 2.5 (m)

Age class: mature

Physiological/structural condition: B: satisfactory

Safe useful life expectancy (SULE): M: medium 20-40 years

Reference number: 6



Photo number: 9

Species: Willow sp.

Height: 5 (m)

Stem circumference: 113 (cm @ 1.5m)

Shape: multi-stem (3)

Max. crown radii: 6 (m)

Age class: semi-mature

Physiological/structural condition: A: healthy and vigorous

Safe useful life expectancy (SULE): L: long more than 40years

Reference number: 7	
	
Photo number: 10	
Species: Willow sp.	
Height: 4 (m)	
Stem circumference: 100 (cm @ 1.5m)	
Shape: multi-stem (5)	
Max. crown radii: 4.5 (m)	
Age class: semi-mature	
Physiological/structural condition: A: healthy and vigorous	
Safe useful life expectancy (SULE): L: long more than 40years	

Reference number: 21	
	
Photo number: 21	
Species: Willow sp.	
Height: 3 (m)	
Stem circumference: 120 (cm @ 1.5m)	
Shape: multi-stem (5)	
Max. crown radii: 4.5 (m)	
Age class: mature	
Physiological/structural condition: B: satisfactory	
Safe useful life expectancy (SULE): L: long more than 40years	

Reference number: 22



Photo number: 25

Species: Silver birch

Height: 5.5 (m)

Stem circumference: 65 (cm @ 1.5m)

Shape: multi-stem (3)

Max. crown radii: 4 (m)

Age class: semi-mature

Physiological/structural condition: A: healthy and vigorous

Safe useful life expectancy (SULE): L: long more than 40years

Reference number: 23 and 24



Photo number: 26

Species: Willow sp.

Height: 4.5 (m)

Stem circumference: 45 and 49 (cm @ 1.5m)

Shape: multi-stem (5 and 6)

Max. crown radii: 3.5 (m)

Age class: semi-mature

Physiological/structural condition:

A: healthy and vigorous

Safe useful life expectancy (SULE):

L: long more than 40years

Reference number: 25



Photo number: 27

Species: Silver birch

Height: 6 (m)

Stem circumference: 51 (cm @ 1.5m)

Shape: Standard(singled/maiden)

Max. crown radii: 3 (m)

Age class: mature

Physiological/structural condition: A: healthy and vigorous

Safe useful life expectancy (SULE): M: medium 20-40 years

Reference number: 26 and 27



Photo number: 28

Species: Willow sp.

Height: 5 (m)

Stem circumference: 72 and 55 (cm @ 1.5m)

Shape: multi-stem (6 and 8)

Max. crown radii: 7 and 5 (m)

Age class: semi-mature

Physiological/structural condition: B: satisfactory

Safe useful life expectancy (SULE): L: long more than 40years

Reference number: 28



Photo number: 29

Species: Ash

Height: 6.5 (m)

Stem circumference: 50 (cm @ 1.5m)

Shape: multi-stem (6)

Max. crown radii: 3 (m)

Age class: semi-mature

Physiological/structural condition: A: healthy and vigorous

Safe useful life expectancy (SULE): L: long more than 40years

Reference number: 29



Photo number: 30

Species: Oak sp.

Height: 5.5 (m)

Stem circumference: 215 (cm @ 1.5m)

Shape: Standard(singled/maiden)

Max. crown radii: 6 (m)

Age class: semi-mature

Physiological/structural condition: A: healthy and vigorous

Safe useful life expectancy (SULE): L: long more than 40years

Reference number: 30



Photo number: 31

Species: Ash

Height: 7 (m)

Stem circumference: 80 (cm @ 1.5m)

Shape: multi-stem (7)

Max. crown radii: 5 (m)

Age class: mature

Physiological/structural condition: A: healthy and vigorous

Safe useful life expectancy (SULE): L: long more than 40years

Reference number: 31



Photo number: 32

Species: Ash

Height: 6.5 (m)

Stem circumference: 80 (cm @ 1.5m)

Shape: multi-stem (2)

Max. crown radii: 4.5 (m)

Age class: semi-mature

Physiological/structural condition: C: declining

Safe useful life expectancy (SULE): S: short 10-20 years

Reference number: 32



Photo number: 34

Species: Willow sp.

Height: 6 (m)

Stem circumference: 250 (cm @ 1.5m)

Shape: Standard(singled/maiden)

Max. crown radii: 8 (m)

Age class: mature

Physiological/structural condition: B: satisfactory

Safe useful life expectancy (SULE): L: long more than 40years

Reference number: 33



Photo number: 35

Species: Willow sp

Height: 6 (m)

Stem circumference: 150 (cm @ 1.5m)

Shape: multi-stem (4)

Max. crown radii: 7 (m)

Age class: mature

Physiological/structural condition: A: healthy and vigorous

Safe useful life expectancy (SULE): L: long more than 40years

Reference number: 34



Photo number: 36

Species: Willow sp.

Height: 7 (m)

Stem circumference: 150 (cm @ 1.5m)

Shape: multi-stem (8)

Max. crown radii: 5 (m)

Age class: mature

Physiological/structural condition: A: healthy and vigorous

Safe useful life expectancy (SULE): L: long more than 40years

Reference number: 35



Photo number: 37

Species: Willow sp.

Height: 4 (m)

Stem circumference: 80 (cm @ 1.5m)

Shape: multi-stem (8)

Max. crown radii: 5 (m)

Age class: mature

Physiological/structural condition: B: satisfactory

Safe useful life expectancy (SULE): M: medium 20-40 years

Reference number: 36



Photo number: 38

Species: Hawthorn

Height: 3.5 (m)

Stem circumference: 80 (cm @ 1.5m)

Shape: Standard(singled/maiden)

Max. crown radii: 3 (m)

Age class: mature

Physiological/structural condition: B: satisfactory

Safe useful life expectancy (SULE): M: medium 20-40 years

Reference number: 37



Photo number: 39

Species: Ash

Height: 6 (m)

Stem circumference: 98 (cm @ 1.5m)

Shape: multi-stem (8)

Max. crown radii: 4.5 (m)

Age class: semi-mature

Physiological/structural condition: A: healthy and vigorous

Safe useful life expectancy (SULE): L: long more than 40years

Appendix 3: HEDGEROW SURVEY RESULTS

Surveys were conducted in March 2009. Only hedges greater than 5m long were surveyed.

Reference number: A to B			
Photo number: 2			
Length: 150 (m)			
Type: shrubby with trees			
Species and % cover: ash (30), blackthorn (60), bramble (5), elder (5)			
Height:	2-3	(m)	Height of base: 0.2 (m)
Hedge width:	top 3.5 (m)	base 2.5 (m)	
Undisturbed ground: width 2 (m) height of veg 0.5 (m)			
nettle % cover: 5 cleavers % cover : 0 docks % cover: 1			
Diagram of cross-section:			
			
Gaps: 20	%	any greater than 5m? yes	
Adjacent Features: track, ditch(wet)			
Hedge management: none			
Ground management: none			

Reference number: C to D			
Photo number: 5			
Length: 160 (m)			
Type: shrubby hedgerow			
Species and % cover: blackthorn (90), field maple (7), bramble (3)			
Height: 1.5 (m)		Height of base: 0.2 (m)	
Hedge width: top 1 (m)		base 1 (m)	
Undisturbed ground: width 2 (m) height of veg 0.3 (m)			
nettle % cover: 5 cleavers % cover : 30 docks % cover: 2			
Diagram of cross-section:			
			
Gaps: 10 % any greater than 5m? no			
Adjacent Features: unploughed headland, track			
Hedge management: flailed			
Ground management: none			

Reference number: E to F			
Photo number: 7			
Length: 290 (m)			
Type: shrubby hedgerow			
Species and % cover: blackthorn (30), hawthorn (70)			
Height: 3 (m)		Height of base: 0.5 (m)	
Hedge width: top 4 (m)		base 3 (m)	
Undisturbed ground: width 1 (m) height of veg 0.4 (m)			
nettle % cover: cleavers % cover : docks % cover:			
Diagram of cross-section:			



Gaps: 5 % any greater than 5m? no

Adjacent Features: ploughed headland, fence, ditch(dry)

Hedge management: flailed

Ground management: none

Reference number: G to H

Photo number: 8

Length: 410 (m)

Type: shrubby with trees

Species and % cover: hawthorn (80), ash (5), willow sp. (15)

Height: 2-4 (m) **Height of base:** 0.1 (m)

Hedge width: top 3 (m) base 2 (m)

Undisturbed ground: width 3 (m) height of veg 0.5 (m)

nettle % cover: cleavers % cover : docks % cover:

Diagram of cross-section:



Gaps: 50 % any greater than 5m? yes

Adjacent Features: ploughed headland, fence, ditch(dry)

Hedge management: none

Ground management: none

Reference number: I to J			
Photo number: I I			
Length: 240 (m)			
Type: shrubby hedgerow			
Species and % cover: hawthorn (70), gorse (30)			
Height: 2-3.5		(m)	Height of base: 0.3
			(m)
Hedge width: top 2		(m)	base 1.5
			(m)
Undisturbed ground: width 2		(m)	height of veg 0.6
			(m)
nettle % cover:		cleavers % cover :	docks % cover:
Diagram of cross-section:			
			
Gaps: 60 % any greater than 5m? yes			
Adjacent Features: ploughed headland, fence, ditch(wet)			
Hedge management: none			
Ground management: none			

Reference number: K to L			
Photo number: I 2			
Length: 270 (m)			
Type: shrubby hedgerow			
Species and % cover: gorse (60), hawthorn (40)			
Height: 2		(m)	Height of base: 0.5
			(m)
Hedge width: top 2		(m)	base 1.5
			(m)
Undisturbed ground: width 1		(m)	height of veg 0.3
			(m)
nettle % cover: 5		cleavers % cover : 15	docks % cover:
Diagram of cross-section:			



Gaps: 60	%	any greater than 5m? yes
Adjacent Features: unploughed headland, banks, ditch(wet)		
Hedge management: none		
Ground management: none		

Reference number: M to N			
Photo number: 13			
Length: 300 (m)			
Type: shrubby hedgerow			
Species and % cover: blackthorn (80), hawthorn (20)			
Height: 1.5	(m)	Height of base: 0.3	(m)
Hedge width: top 1	(m)	base 1	(m)
Undisturbed ground: width 2 (m) height of veg 0.6 (m)			
nettle % cover: cleavers % cover : docks % cover:			

Diagram of cross-section:



Gaps: 30	%	any greater than 5m? yes
Adjacent Features: unploughed headland, fence, track		
Hedge management: flailed		
Ground management: none		

Reference number: O to P			
Photo number: 14			
Length: 90 (m)			
Type: shrubby hedgerow			
Species and % cover: blackthorn (100)			
Height: 2	(m)	Height of base: 0.2	(m)
Hedge width: top 2	(m)	base 2	(m)
Undisturbed ground: width 3	(m)	height of veg 0.5	(m)
nettle % cover:	cleavers % cover :	docks % cover:	
Diagram of cross-section:			
			
Gaps: 0	%	any greater than 5m? no	
Adjacent Features: grassland, track			
Hedge management: flailed			
Ground management: none			

Reference number: Q to R			
Photo number: 15			
Length: 200 (m)			
Type: shrubby hedgerow			
Species and % cover: hawthorn (100)			
Height: 3	(m)	Height of base: 0.3	(m)
Hedge width: top 3	(m)	base 2	(m)
Undisturbed ground: width 5	(m)	height of veg 0.6	(m)
nettle % cover:	cleavers % cover :	docks % cover:	
Diagram of cross-section:			



Gaps: 5 % any greater than 5m? no

Adjacent Features: grassland, ditch(wet)

Hedge management: none

Ground management: none

Reference number: S to T

Photo number: 16

Length: 60 (m)

Type: shrubby hedgerow

Species and % cover: hawthorn (100)

Height: 1 (m) **Height of base:** 0.1 (m)

Hedge width: top 1.5 (m) base 1.5 (m)

Undisturbed ground: width 3 (m) height of veg 0.5 (m)

nettle % cover: cleavers % cover : docks % cover:

Diagram of cross-section:



Gaps: 10 % any greater than 5m? no

Adjacent Features: unploughed headland, track, ditch(dry)

Hedge management: flailed

Ground management: none

Reference number: U to V			
Photo number: 17			
Length: 60 (m)			
Type: shrubby hedgerow			
Species and % cover: hawthorn (85), hazel (15)			
Height: 2.5		(m)	Height of base: 0.3
			(m)
Hedge width: top 1		(m)	base 0.8
			(m)
Undisturbed ground: width 2.5		(m)	height of veg 0.3
			(m)
nettle % cover:		cleavers % cover :	docks % cover:
Diagram of cross-section:			
			
Gaps: 0 % any greater than 5m? no			
Adjacent Features: grassland, track, ditch(dry)			
Hedge management: flailed			
Ground management: none			

Reference number: W to X			
Photo number: 18			
Length: 120 (m)			
Type: shrubby hedgerow			
Species and % cover: hawthorn (80), bramble (15), hazel (5)			
Height: 1.5		(m)	Height of base: 0.3
			(m)
Hedge width: top 1.5		(m)	base 1.5
			(m)
Undisturbed ground: width 4		(m)	height of veg 0.7
			(m)
nettle % cover:		cleavers % cover :	docks % cover:
Diagram of cross-section:			



Gaps: 5	%	any greater than 5m? no
Adjacent Features: unploughed headland, track, PROW, ditch(wet)		
Hedge management: flailed		
Ground management: none		

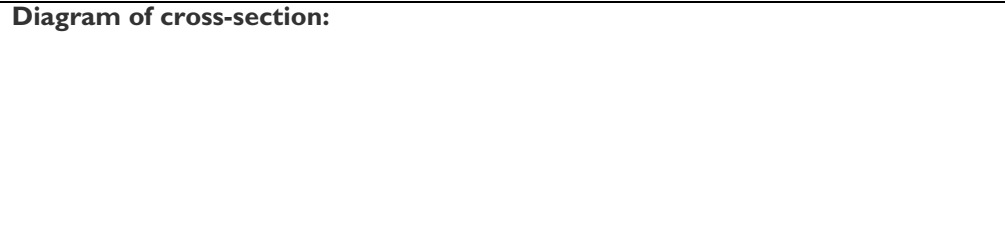
Reference number: Y to Z			
Photo number: 19			
Length: 120 (m)			
Type: shrubby hedgerow			
Species and % cover: hawthorn (95), willow sp. (5)			
Height: 1-2.5	(m)	Height of base: 0.5	(m)
Hedge width: top 2	(m)	base 3	(m)
Undisturbed ground: width 1	(m)	height of veg 0.5	(m)
nettle % cover: cleavers % cover : 10 docks % cover:			

Diagram of cross-section:



Gaps: 0	%	any greater than 5m? no
Adjacent Features: unploughed headland, ditch(wet)		
Hedge management: flailed		
Ground management: none		

Reference number: AA to BB			
Photo number: 20			
Length: 240 (m)			
Type: shrubby hedgerow			
Species and % cover: hawthorn (70), willow sp. (30)			
Height: 3	(m)	Height of base: 0.2	(m)
Hedge width: top 2	(m)	base 1.5	(m)
Undisturbed ground: width 1	(m)	height of veg 0.6	(m)
nettle % cover:	cleavers % cover :	docks % cover:	
Diagram of cross-section:			
			
Gaps: 30	%	any greater than 5m? yes	
Adjacent Features: ploughed headland, track, PROW, ditch(wet)			
Hedge management: flailed			
Ground management: none			

Reference number: CC to DD			
Photo number: 24			
Length: 130 (m)			
Type: shrubby hedgerow			
Species and % cover: hawthorn (100)			
Height: 3.5	(m)	Height of base: 0.5	(m)
Hedge width: top 2	(m)	base 1.5	(m)
Undisturbed ground: width 4	(m)	height of veg 0.6	(m)
nettle % cover:	cleavers % cover :	docks % cover:	
Diagram of cross-section:			
			
Gaps: 20	%	any greater than 5m? no	
Adjacent Features: unploughed headland, track, PROW			
Hedge management: none			
Ground management: none			

Reference number: EE to FF			
Photo number: 33			
Length: 230 (m)			
Type: shrubby with trees			
Species and % cover: ash (20), hawthorn (70), dog rose (5), oak sp. (5)			
Height: 4	(m)	Height of base: 0.5	(m)
Hedge width: top 3	(m)	base 2	(m)
Undisturbed ground: width 2.5		(m)	height of veg 0.6
nettle % cover:		cleavers % cover : 15	docks % cover:
Diagram of cross-section:			
			
Gaps: 10 % any greater than 5m? no			
Adjacent Features: unploughed headland, track, PROW			
Hedge management: flailed			
Ground management: none			

Reference number: GG to HH			
Photo number: 40			
Length: 60 (m)			
Type: shrubby hedgerow			
Species and % cover: hawthorn (75), hazel (10), willow sp. (10), bramble (5)			
Height: 2.5-3	(m)	Height of base: 0.6	(m)
Hedge width: top 2	(m)	base 1.5	(m)
Undisturbed ground: width 3		(m)	height of veg 0.5
nettle % cover:		cleavers % cover :	docks % cover:
Diagram of cross-section:			



Gaps: 5	%	any greater than 5m? no
Adjacent Features: unploughed headland, track, PROW		
Hedge management: none		
Ground management: none		