CAVAT (Capital Asset Value for Amenity Trees) Assessment of 3 trees at the entrance to the proposed solar farm development, Blyth Road, Ollerton.

The capital asset value for amenity trees is regarded as one of the principal methods of tree valuation in the UK. The CAVAT group has launched an updated CAVAT Full Method on March 27th 2023 and this is the method that has been used to assess the amenity value of the highway trees:

Tree 1

CAVAT Steps	Data Input	Values	Comments
1. Base Value			
Stem diameter (cm)	60		
Unit Value Factor	£24.59		
Link to latest Unit Value Factor			
Base Value		£69,526.59	
2. CTI			
Community Tree Index (CTI) Factor	100%		
Link to CTI factors spreadsheet			
3. Visibility			
Visibility Factor	100%		
4. Attributes			
Positive Attributes Factor	0%		
Negative Attributes Factor	0%		
	100%		
Location value		£69,527	
5. Primary structure completeness			
Primary structure completeness factor	>75%		
6. Primary structure quality			
Primary structure quality factor	Fair		
7. Crown completeness			
Link to Crown completeness calculator			
Crown completeness factor	30%		
8. Canopy completeness			
Canopy completeness factor	41-60%		limited growth east side of crown
9. Crown quality			
Crown quality factor	Fair		deadwood throughout crown
Functional Value		£17,660	
10. Life Expectancy			
Life expectancy	20 - <40 years		
CAVAT VALUE		£14,128	

Figure 1: CAVAT assessment – Full method – Tree 1, Norway maple – Blyth Road, Ollerton.

The above table details the attributes of the highway tree. The CTI factor for Newark and Sherwood is based on the value on the CTI factors spreadsheet. The tree has 100% visibility as it is fully visible to members of the public.

The tree has limited growth to the east side of the canopy and deadwood throughout the crown. Primary structure quality and crown quality has been assessed as fair.

Crown completeness has been determined based on the crown completeness calculator within the CAVAT assessment spreadsheet. Crown completeness is assessed based on what is expected of an optimum specimen of the same species and stem diameter.

The life expectancy of the tree has been estimated at 20 - <40 years based on current conditions and management.

As per figure 1, the CAVAT value of the highway tree is £14, 128.

Photo of tree relating to Figure 1:

Tree 2:

1. Base Value			
Stem diameter (cm)	47		
Unit Value Factor	£24.59		
Link to latest Unit Value Factor			
Base Value		£42,662.29	
2. CTI			
Community Tree Index (CTI) Factor	100%		
Link to CTI factors spreadsheet			
3. Visibility			
Visibility Factor	75%		
4. Attributes			
Positive Attributes Factor	10%		Produces conkers, good wildlife value
Negative Attributes Factor	0%		
	110%		
Location value		£35,196	
5. Primary structure completeness			
Primary structure completeness factor	>75%		
6. Primary structure quality			
Primary structure quality factor	Fair		helical stem ribs
7. Crown completeness			
Link to Crown completeness calculator			
Crown completeness factor	10%		
8. Canopy completeness			
Canopy completeness factor	61-80%		pruning of lower branches for roadside clearances
9. Crown quality			
Crown quality factor	Fair		deadwood throughout crown
Functional Value		£7,884	
10. Life Expectancy			
Life expectancy	40 - <80 years		
CAVAT VALUE		£7,490	

Figure 2: CAVAT assessment – Full method – Tree 2, Horse Chestnut – Blyth Road, Ollerton.

The above table details the attributes of the highway tree. The CTI factor for Newark and Sherwood is based on the value on the CTI factors spreadsheet. The tree has 100% visibility as it is fully visible to members of the public.

The tree has helical stem ribbing on the main stem and pruning of the lower branches roadside for highway clearances. There is deadwood throughout the crown. Primary structure quality and crown quality has been assessed as fair.

Crown completeness has been determined based on the crown completeness calculator within the CAVAT assessment spreadsheet. Crown completeness is assessed based on what is expected of an optimum specimen of the same species and stem diameter.

The life expectancy of the tree has been estimated at 40 - <80 years based on current conditions and management.

As per figure 2, the CAVAT value of the highway tree is £7, 490.

Photo of tree relating to Figure 2:

Tree 3:

CAVAT Steps	Data Input	Values	Comments
1. Base Value			
Stem diameter (cm)	52		multistemmed tree stem diameters 19,30,27,29 - stem diameter calculated based on BPA value of
Unit Value Factor	£24.59		
Link to latest Unit Value Factor			
Base Value		£52,222.19	
2. CTI			
Community Tree Index (CTI) Factor	100%		
Link to CTI factors spreadsheet			
3. Visibility			
Visibility Factor	50%		Reduced visibility from road
4. Attributes			
Positive Attributes Factor	10%		Attractive bark
Negative Attributes Factor	0%		
	110%		
Location value		£28,722	
5. Primary structure completeness			
Primary structure completeness factor	>75%		
6. Primary structure quality			
Primary structure quality factor	Fair		poor form, two stems growing out towards the east, one stem with weak union
7. Crown completeness			
Link to Crown completeness calculator			
Crown completeness factor	20%		
8. Canopy completeness			
Canopy completeness factor	81-100%		
9. Crown quality			
Crown quality factor	Good		
Functional Value		£8,329	
10. Life Expectancy			
Life expectancy	10 - <20 years		
CAVAT VALUE		£4,581	

Figure 3: CAVAT assessment – Full method – Tree 3, Silver birch – Blyth Road, Ollerton.

The above table details the attributes of the highway tree. The CTI factor for Newark and Sherwood is based on the value on the CTI factors spreadsheet. The tree has 100% visibility as it is fully visible to members of the public.

The tree is multi-stemmed with two stems growing out towards the east with poor form. One upright stem has a weak main union. Primary structure quality has been assessed as fair and crown quality has been assessed as good.

Crown completeness has been determined based on the crown completeness calculator within the CAVAT assessment spreadsheet. Crown completeness is assessed based on what is expected of an optimum specimen of the same species and stem diameter.

The life expectancy of the tree has been estimated at 10 - <20 years based on current conditions and management.

As per figure 3, the CAVAT value of the highway tree is £4, 581.

Photo of tree relating to Figure 3:

The total CAVAT value for the 3 trees proposed for removal is **£26, 199.**