

The Biodiversity Metric 4.0

Auditing and Biodiversity

Open Tool

Calculation Tool



The Biodiversity Metric 4.0 - Calculation Tool

Start page

Project details			
Planning authority:	Burbage Parish Council		
Project name:	Land South of Burbage		
Applicant:	Redrow Homes Ltd		
Application type:	Hybrid		
Planning application reference:	24/00083/HYB		
Completed by:	FPCR		
Date of metric completion:	04.02.25		
Reviewer:	AJR		
Version control:	Rev D		
Consenting body reviewer:			
Date of consenting body review:			
Target % net gain:	10%		
Irreplaceable habitat present on-site at baseline:	No		
Total site area (including irreplaceable habitat area):	26.63	Irreplaceable habitat area at baseline:	0.00

Instructions

Main menu

Results

Cell style conventions	
	Attention required
	Input error/rules and principles not met
	Use of this cell is not appropriate
	Enter data
	Automatic lookup
	Result

View all

Reset view

On-site baseline map

Insert

On-site post intervention map

Insert

On-site baseline map reference number

On-site post-intervention map reference number

Off-site baseline map

Insert

Off-site post intervention map

Insert

Off-site baseline map reference number

Off-site post-intervention reference number

The Biodiversity Metric 4.0 - Calculation Tool Instructions

Double click the front page below to open the file

Start page

Main menu

Phase 1 - metric
habitat translation
tool

This guide can also be found as an Appendix to the main
Biodiversity Metric 4.0 – User guide.

The Biodiversity Metric 4.0

Short Data Input Guide

First published March 2023

Natural England Joint Publication JP039

www.gov.uk/natural-england



Key

Area habitats

Hedgerows and lines of trees

Watercourses

The Biodiversity Metric 4.0 - Calculation Tool

Main menu

- Start page
- Instructions
- Technical data
- Results

Tree helper						
Tree size	Number of trees and area (ha) for each condition state					
	Poor	Area	Moderate	Area	Good	Area
Small		0.0000	258	1.0504		0.0000
Medium		0.0000		0.0000	1	0.0366
Large		0.0000		0.0000	1	0.0765
Total	0	0.0000	258	1.0504	2	0.1131

Start here



On-site baseline

A-1 On-site Area Habitat Baseline

B-1 On-site Hedge Baseline

C-1 On-site Watercourse Baseline

On-site post development

A-2 On-site Area Habitat Creation

A-3 On-site Area Habitat Enhancement

B-2 On-site Hedge Creation

B-3 On-site Hedge Enhancement

C-2 On-site Watercourse Creation

C-3 On-site Watercourse Enhancement

Off-site baseline

D-1 Off-site Area Habitat Baseline

E-1 Off-site Hedge Baseline

F-1 Off-site Watercourse Baseline

Off-site post development

D-2 Off-site Area Habitat Creation

D-3 Off-site Area Habitat Enhancement

E-2 Off-site Hedge Creation

E-3 Off-site Hedge Enhancement

F-2 Off-site Watercourse Creation

F-3 Off-site Watercourse Enhancement

The Biodiversity Metric 4.0 – Calculation Tool

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Headline results

Detailed results

Habitat trading
summaries

Off-site
summary

Land South of Burbage

Headline Results

Scroll down for final results ☐

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On-site baseline	Habitat units	58.06		
	Hedgerow units	25.46		
	Watercourse units	3.57		
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	69.37		
	Hedgerow units	38.14		
	Watercourse units	3.45		
On-site net change (units & percentage)	Habitat units	11.31	19.48%	
	Hedgerow units	12.68	49.82%	
	Watercourse units	-0.12	-3.28%	On-site net gain is less than target set ☐

Off-site baseline	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	Habitat units	0.00	0.00%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	

Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	11.31		
	Hedgerow units	12.68		
	Watercourse units	-0.12		
Spatial risk multiplier (SRM) deductions	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		

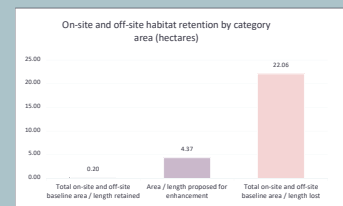
FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	11.31		
	Hedgerow units	12.68		
	Watercourse units	-0.12		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	19.48%		
	Hedgerow units	49.82%		
	Watercourse units	-3.28%		Total net gain achieved is less than target set ☐
Trading rules satisfied?	No - Check Trading Summaries ▲			

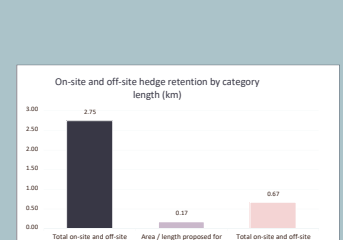
Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	58.06	63.86	0.00	Unit requirement met or surpassed ✓
Hedgerow units	10.00%	25.46	28.00	0.00	Unit requirement met or surpassed ✓
Watercourse units	10.00%	3.57	3.93	0.47	

Area habitats

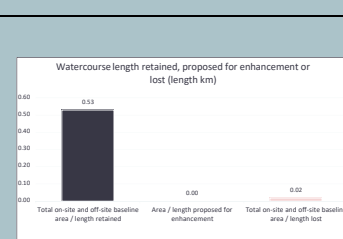
Combined area lost by distinctiveness band		
Category	Area lost (hectares)	Area lost (%)
V.High	0	
High	0	
Medium	1.6352	7
Low	19.6385	89
V.Low	0.7857	4

[illegible]

Combined length lost by distinctiveness band		
Category	Length lost (km)	Length lost (%)
V.High	0	
High	0.008	6
Medium	0.131	19
Low	0.025	63
V.Low	0.078	12



Combined length lost by distinctiveness band		
Category	Length lost (km)	Length lost (%)
V/High	0	
High	0.069	50
Medium	0.069	50
Low	0	



Bar chart showing the impact of the proposed model on the existing model across five categories: Priority habitat, Other trees and shrubs, Shrub, Cereals, and Forest. The Y-axis represents the impact, ranging from -0.5 to 2.5. The legend indicates five series: On-site existing value (blue), On-site proposed value (dark blue), Off-site existing value (light blue), Off-site proposed value (dark blue), and Confirmed unit charge (green).

Category	On-site existing value	On-site proposed value	Off-site existing value	Off-site proposed value	Confirmed unit charge
Priority habitat	0.0	0.0	0.0	0.0	0.0
Other trees and shrubs	2.4	2.3	0.0	0.0	-0.1
Shrub	0.9	0.8	0.0	0.0	-0.1
Cereals	0.0	0.0	0.0	0.0	0.0
Forest	0.0	0.0	0.0	0.0	0.0



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Trading summary hedgerows

Trading summary Watercourses

Trading Summary			
Distinctiveness Group		Trading Rule	Trading Satisfied?
Very High		Bespoke compensation likely to be required $\geq$	Yes $\checkmark$
High		Same habitat required =	Yes $\checkmark$
Medium		Some broad habitat or a higher distinctiveness habitat required $\geq$	Yes $\checkmark$
Low		Same distinctiveness or better habitat required $\geq$	Yes $\checkmark$

Very High Distinctiveness				
Habitat group	Group	On-site unit change	Off-site unit change	Project-wide unit change
Grassland - Lowland dry acid grassland	Grassland	0.00	0.00	0.00
Grassland - Lowland meadows	Grassland	0.00	0.00	0.00
Grassland - Upland hay meadows	Grassland	0.00	0.00	0.00
Heathland and shrub - Mountain heaths and willow scrub	Heathland and shrub	0.00	0.00	0.00
Lakes - Aquifer fed naturally fluctuating water bodies	Lakes	0.00	0.00	0.00
Sparsely vegetated land - Callunetum grasslands	Sparsely vegetated land	0.00	0.00	0.00
Sparsely vegetated land - Limestone pavement	Sparsely vegetated land	0.00	0.00	0.00
Wetland - Blanket bog	Wetland	0.00	0.00	0.00
Wetland - Depressions on peat substrates (H7150)	Wetland	0.00	0.00	0.00
Wetland - Fens (upland and lowland)	Wetland	0.00	0.00	0.00
Wetland - Lowland mixed bog	Wetland	0.00	0.00	0.00
Wetland - Oceanic valley mire [1] (D2.1)	Wetland	0.00	0.00	0.00
Wetland - Purple moor grass and rush pastures	Wetland	0.00	0.00	0.00
Wetland - Transition mire and quaking bog (H7140)	Wetland	0.00	0.00	0.00
Woodland and forest - Wood-pasture and parkland	Woodland and forest	0.00	0.00	0.00
Rocky shore - High energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00
Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00
Rocky shore - Low energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00
Rocky shore - Features of littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00
Intertidal sediment - Littoral scraggs on peat, clay or chalk	Intertidal sediment	0.00	0.00	0.00
		0.00	0.00	0.00

Very High Distinctiveness Summary	
Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00

High Distinctiveness				
Habitat group	Group	On-site unit change	Off-site unit change	Project-wide unit change
Grassland - Traditional orchards	Grassland	0.94	0.00	0.94
Grassland - Floodplain wetland mosaic and CUGM	Grassland	0.00	0.00	0.00
Grassland - Lowland calcareous grassland	Grassland	0.00	0.00	0.00
Grassland - Tall herb communities (H6430)	Grassland	0.00	0.00	0.00
Grassland - Upland calcareous grassland	Grassland	0.00	0.00	0.00
Heathland and shrub - Lowland Heathland	Heathland and shrub	0.00	0.00	0.00
Heathland and shrub - Dunes with sea buckthorn (H2160)	Heathland and shrub	0.00	0.00	0.00
Heathland and shrub - Upland heathland	Heathland and shrub	0.00	0.00	0.00
Lakes - High alkalinity lakes	Lakes	0.00	0.00	0.00
Lakes - Low alkalinity lakes	Lakes	0.00	0.00	0.00
Lakes - Marl lakes	Lakes	0.00	0.00	0.00
Lakes - Moderate alkalinity lakes	Lakes	0.00	0.00	0.00
Lakes - Peat lakes	Lakes	0.00	0.00	0.00
Lakes - Ponds (priority habitat)	Lakes	0.00	0.00	0.00
Lakes - Temporary lakes ponds and pools (H3170)	Lakes	0.00	0.00	0.00
Sparsely vegetated land - Coastal sand dunes	Sparsely vegetated land	0.00	0.00	0.00
Sparsely vegetated land - Coastal vegetated dune	Sparsely vegetated land	0.00	0.00	0.00
Sparsely vegetated land - Inland rock, outcrop and scree habitats	Sparsely vegetated land	0.00	0.00	0.00
Sparsely vegetated land - Maritime cliff and slopes	Sparsely vegetated land	0.00	0.00	0.00
Urban - Open mosaic habitats on previously developed land	Urban	0.00	0.00	0.00
Wetland - Fenbels	Wetland	0.00	0.00	0.00
Woodland and forest - Felled	Woodland and forest	0.00	0.00	0.00
Woodland and forest - Lowland beech and yew woodland	Woodland and forest	0.00	0.00	0.00
Woodland and forest - Lowland mixed deciduous woodland	Woodland and forest	0.00	0.00	0.00
Woodland and forest - Native pine woodlands	Woodland and forest	0.00	0.00	0.00
Woodland and forest - Upland birchwoods	Woodland and forest	0.00	0.00	0.00
Woodland and forest - Upland mixed ashwoods	Woodland and forest	0.00	0.00	0.00
Woodland and forest - Upland oakwood	Woodland and forest	0.00	0.00	0.00
Woodland and forest - Wet woodland	Woodland and forest	0.00	0.00	0.00
Coastal lagoons - Coastal lagoons	Coastal lagoons	0.00	0.00	0.00
Rocky shore - High energy littoral rock	Rocky shore	0.00	0.00	0.00
Rocky shore - Moderate energy littoral rock	Rocky shore	0.00	0.00	0.00
Rocky shore - Low energy littoral rock	Rocky shore	0.00	0.00	0.00
Rocky shore - Features of littoral rock	Rocky shore	0.00	0.00	0.00
Intertidal sediment - Littoral mud	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Littoral mixed sediments	Intertidal sediment	0.00	0.00	0.00
Coastal saltmarsh - Saltmarshes and saline reedbeds	Coastal saltmarsh	0.00	0.00	0.00
Intertidal sediment - Littoral biogenic reefs - Mussels	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Littoral biogenic reefs - Sabellaria	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Features of littoral sediment	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Littoral muddy sand	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Littoral seagrass	Intertidal sediment	0.00	0.00	0.00
		0.94	0.00	0.94

High Distinctiveness Summary	
High Distinctiveness Units available to offset lower distinctiveness deficit	0.94
Unit Deficit: Like for like not satisfied	0.00

Medium Distinctiveness				
Habitat group	Group	On-site unit change	Off-site unit change	Project wide unit change
Cropland - Arable field margins cultivated annually	Cropland	0.00	0.00	0.00
Cropland - Arable field margins game bird mix	Cropland	0.00	0.00	0.00
Cropland - Arable field margins pollen and nectar	Cropland	0.00	0.00	0.00
Cropland - Arable field margins tussocky	Cropland	0.00	0.00	0.00
Grassland - Other neutral acid grassland	Grassland	26.57	0.00	26.57
Grassland - Upland acid grassland	Grassland	0.00	0.00	0.00
Heathland and shrub - Blackthorn scrub	Heathland and shrub	0.00	0.00	0.00
Heathland and shrub - Hawthorn scrub	Heathland and shrub	-0.24	0.00	-0.24
Heathland and shrub - Gorse scrub	Heathland and shrub	0.00	0.00	0.00
Heathland and shrub - Hawthorn scrub	Heathland and shrub	0.00	0.00	0.00
Heathland and shrub - Willow scrub	Heathland and shrub	0.00	0.00	0.00
Heathland and shrub - Hazel scrub	Heathland and shrub	0.00	0.00	0.00
Lakes - Ponds (non-priority habitat)	Lakes	-0.03	0.00	-0.03
Lakes - Reservoirs	Lakes	0.00	0.00	0.00
Sparsely vegetated land - Other inland rock and scree	Sparsely vegetated land	0.00	0.00	0.00
Urban - Cemeteries and churchyards	Urban	0.00	0.00	0.00
Urban - Biodiverse green roof	Urban	0.00	0.00	0.00
Individual trees - Urban tree	Individual trees	2.54	0.00	2.54
Individual trees - Rural tree	Individual trees	0.00	0.00	0.00
Woodland and forest - Other Scots pine woodland	Woodland and forest	0.00	0.00	0.00
Woodland and forest - Other woodland/broadleaved	Woodland and forest	0.00	0.00	0.00
Woodland and forest - Other woodland mixed	Woodland and forest	0.00	0.00	0.00
Intertidal sediment - Littoral coarse sediment	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Littoral sand	Intertidal sediment	0.00	0.00	0.00
Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (OGGI)	Intertidal hard structures	0.00	0.00	0.00
		26.27	0.00	26.27

Medium Distinctiveness Summary	
Medium Distinctiveness Units available to offset Lower Distinctiveness Deficit	26.25
Medium Distinctiveness Broad Habitat Deficit to be offset by trading up	-0.03
Higher Distinctiveness Surplus Units minus Medium Distinctiveness Broad Habitat Deficit	-0.91
Cumulative surplus of units	27.16

Low Distinctiveness				
Habitat group	Group	On-site unit change	Off-site unit change	Project wide unit change
Cropland - Cereal crops	Cropland	0.00	0.00	0.00
Cropland - Horticulture	Cropland	0.00	0.00	0.00
Cropland - Intensive orchards	Cropland	0.00	0.00	0.00
Cropland - Non-cereal crops	Cropland	0.00	0.00	0.00
Cropland - Temporary grass and clover leys	Cropland	0.00	0.00	0.00
Cropland - Winter stubble	Cropland	0.00	0.00	0.00
Grassland - Modified grassland	Grassland	-25.85	0.00	-25.85
Grassland - Hecker	Grassland	0.00	0.00	0.00
Heathland and shrub - Rhododendron scrub	Heathland and shrub	0.00	0.00	0.00
Lakes - Ornamental lake or pond	Lakes	0.00	0.00	0.00
Sparsely vegetated land - Tree development	Sparsely vegetated land	-4.28	0.00	-4.28
Sparsely vegetated land - Tall forbs	Sparsely vegetated land	0.00	0.00	0.00
Urban - Riverside	Urban	0.00	0.00	0.00
Urban - Tree planting	Urban	-4.61	0.00	-4.61
Urban - Allotments	Urban	0.00	0.00	0.00
Urban - Facade-based green wall	Urban	0.00	0.00	0.00
Urban - Ground based green wall	Urban	0.00	0.00	0.00
Urban - Ground level planters	Urban	0.00	0.00	0.00
Urban - Other green roof	Urban	0.00	0.00	0.00
Urban - Intensive green roof	Urban	0.00	0.00	0.00
Urban - Intensive shrubs	Urban	0.00	0.00	0.00
Urban - Rain garden	Urban	0.00	0.00	0.00
Urban - Actively worked sand pit/quarry or open cast mine	Urban	0.00	0.00	0.00
Urban - Sustainable Urban System	Urban	2.40	0.00	2.40
Urban - Vacant or derelict land	Urban	0.00	0.00	0.00
Urban - Vegetated garden	Urban	8.07	0.00	8.07
Woodland and forest - Other coniferous woodland	Woodland and forest	0.00	0.00	0.00
Coastal saltmarsh - Artificial saltmarshes and saline reedbeds	Coastal saltmarsh	0.00	0.00	0.00
Intertidal sediment - Artificial littoral coarse sediment	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral mud	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral sand	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral muddy sand	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral mixed sediments	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral scraggs	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral biogenic reefs	Intertidal sediment	0.00	0.00	0.00
Intertidal hard structures - Artificial hard structures	Intertidal hard structures	0.00	0.00	0.00
Intertidal hard structures - Artificial features of hard structures	Intertidal hard structures	0.00	0.00	0.00
Heathland and shrub - Other sea buckthorn scrub	Heathland and shrub	0.00	0.00	0.00
		-25.85		-25.85

Low Distinctiveness Summary	
Low Distinctiveness net change in units	-25.85
Cumulative surplus of units	11.31

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Trading summary Area Habitats

Trading summary Watercourses

Trading Summary		
Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Same habitat required =	Yes ✓
High	Like for like or better	Yes ✓
Medium	Same distinctiveness or better habitat required	Yes ✓
Low/Very Low	Same distinctiveness or better habitat required	Yes ✓

Very High Distinctiveness			
Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Species-rich native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00
	0.00	0.00	0.00

High Distinctiveness			
Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Species-rich native hedgerow with trees	0.40	0.00	0.40
Species-rich native hedgerow - associated with bank or ditch	0.00	0.00	0.00
Native hedgerow with trees - associated with bank or ditch	0.20	0.00	0.20
	0.60	0.00	0.60

Medium Distinctiveness			
Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Species-rich native hedgerow	13.00	0.00	13.00
Native hedgerow - associated with bank or ditch	-0.50	0.00	-0.50
Native hedgerow with trees	-0.50	0.00	-0.50
Ecologically valuable line of trees	0.00	0.00	0.00
Ecologically valuable line of trees - associated with bank or ditch	0.00	0.00	0.00
	11.50	0.00	11.50

Low/Very Low Distinctiveness			
Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Native hedgerow	-1.50	0.00	-1.50
Line of trees	-0.14	0.00	-0.14
Line of trees - associated with bank or ditch	0.00	0.00	0.00
Non-native and ornamental hedgerow	1.74	0.00	1.74
	0.10	0.00	0.10

Very High Distinctiveness Summary	
High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Unit Deficit; Like for like not satisfied	0.00

High Distinctiveness Summary	
High Distinctiveness Units available to offset lower distinctiveness deficit	0.60
Unit Deficit; Like for like or better not satisfied	0.00

Medium Distinctiveness Summary	
Units available from higher distinctiveness habitats	0.00
Medium Distinctiveness not change in units	12.89
Cumulative availability of units	12.89

Low Distinctiveness Summary	
Low Distinctiveness net change in units	0.10
Cumulative availability of units	13.00

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Trading summary Area Habitats

Trading summary hedgerows

Trading Summary		
Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Bespoke compensation likely to be required ☒	Yes ✓
High	Same habitat required =	No ▲
Medium	Same habitat required =	No ▲
Low	Better distinctiveness habitat required	Yes ✓

Very High Distinctiveness			
Habitat group	On-site unit change	Off-site unit change	Project-wide unit change
Priority habitat	0.00	0.00	0.00
	0.00	0.00	0.00

Very High Distinctiveness Summary	
Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00

High Distinctiveness			
Habitat group	On-site unit change	Off-site unit change	Project-wide unit change
Other rivers and streams	-0.08	0.00	-0.08
	-0.08	0.00	-0.08

High Distinctiveness Summary	
High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Unit Deficit; Like for like not satisfied	-0.08

Medium Distinctiveness			
Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Ditches	-0.04	0.00	-0.04
Canals	0.00	0.00	0.00
	-0.04	0.00	-0.04

Medium Distinctiveness Summary	
Medium Distinctiveness Units available to offset Lower Distinctiveness Deficit	0.00
Unit Deficit; Like for like not satisfied	-0.04

Low Distinctiveness			
Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Culvert	0.00	0.00	0.00
	0.00	0.00	0.00

Low Distinctiveness Summary	
Low Distinctiveness net change in units	0.00
Cumulative availability of units	0.00

[illegible]

[illegible]

[illegible]