Appendix 1: EVC infrastructure development methodology UPDATED 9.11.21

Aim: to inform Part Two of the EVC strategy, with a view to arriving at a consolidated long list of future EVC sites across various asset groups. Focus on network coverage [addressing any gaps in the existing network], with network expansion [expansion of existing provision on existing sites] to follow. Focus on equity.

Infrastructure should be split into three distinct themes, with a default charger type / composition per theme:

Theme 1 charging on the move [rapid [50kw] 90mins to 2 hours to fully charge]

This theme should provide rapid chargers at/on/near the public road network [and as that relates to car ferry routes].

The assumption is that users will utilise these chargers while 'on the move' for a' top up', therefore these should be in the fastest charging category.

Theme 2 destination charging [fast [22kw] charge in 4 hours; slow [7kw] charge in 7 hours]

This theme should provide fast chargers at locations where users are likely to leave their cars for an extended period of time such as long stay off-street car parks, with the default charger in these locations being fast.

Slow chargers may be considered for transport hubs/park and ride facilities where users are likely to leave their vehicles overnight.

Theme 3 residential charging [slow [7kw] charge in 7 hours]

Gaps every 25-35 minutes		
Hierarchy	Priority rating	
A roads	1	
Principal car ferry ports [mainland side]		
Broads	2	
Principal car ferry ports [island side]		
Car ferry ports [mainland side]		
Croads	3	
Car ferry ports [island side]		
U roads	4	

Note: this is a theoretical methodology at this point – it is unlikely that significant gaps will exist further down the priority rating/hierarchy.

Theme 2 destination charging

This theme should provide for charging infrastructure where users are likely to leave their cars for an extended period of time.

Sites should be in Council ownership as part of existing medium-long stay parking provision Sites not in Council ownership can be considered if necessary to fill a network gap. Locating chargers at site within Council ownership would be preferable.

At least one fast charger		
Hierarchy	Coverage	Priority rating
Towns 1,000 – 2,000	One car park	1
Principal ferry ports [mainland side]	All	
Rail park and rides	All	
Airport [mainland]	All	
Towns 2,000 to 5,000	25% of off-street car parks [largest to smallest or as appropriate for local needs]	2
Principal ferry ports [island side]	All	
Ferry ports [mainland side]	All	