#### **DEFECT RESPONSE MATRICES - CARRIAGEWAY**

The following matrices are to be used to direct when reactive works are required.

Regardless of the intervention criteria listed above, the application of higher standards may be considered appropriate in sensitive locations such as schools, shopping centres, hospitals, elderly accommodation and in sensitive/well used locations where there is no adjacent footway (e.g. a local walking route to a school).

The matrices have been developed through a risk-based approach relating to size and location. Should defects be smaller than those in the main matrix, guidance is provided in the notes section of the relevant matrix detailing how these defects will be categorised.

#### **Defect Response Matrix A – Debris and Spillage**

## Matrix A - Debris / Spillage

				SEVE	RITY		
		Extreme	Major	Moderate	Minor	Minor	Negligible
		Road Type 2	Road Type 3a	Road Type 3b	Road Type 3b	Road Type 4a	Road Type 4b
		Strategic 'A' rd routes	Main distributor - major urban network and inter- strategic routes	Main rural secondary distributor roads	Main urban secondary distributor roads	Local roads	Minor rural roads and urban culs- de-sac
0000113711	Very Likely Environmentally hazardous and trees in the carriageway	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours
12/11	Likely Non-environmentally hazardous	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 4 10 working days	Cat 4 10 working days

#### Notes

Environmentally hazardous spillages include petrol, diesel, oil, other vehicle fluids, chemicals, bodily fluids and sewage. Non-environmentally hazardous spillages include mud, sand, grain & dry goods. Removal of non-environmental spillages should only be instructed where the spillage represents a danger to road users and cannot wait until the next routine cleanse. Under the terms of the Environmental Protection Act 1990, street cleansing (including sweeping) is the responsibility of the relevant district and borough council.

For non-environmental hazards - the 2hr response is to attend and make safe, likely by signing. A further decision on how to cleanse or remove the debris will be managed at the Service Delivery Centre.

This matrix includes the adjacent footway.

### **Defect Response Matrix B – Carriageway Level Difference**

# Matrix B - Carriageway Level Difference

			SEVERITY	
		Major	Moderate	Minor
		Road Type 2 & 3a	Road Type 3b	Road Type 4a & 4b
		Strategic 'A' rd Routes - Main Distributer - Major Urban Network and Inter Strategic routes	Main secondary distributor roads	Local Roads - Minor rural roads and urban culs-de-sac
		200mm length	200mm length	200mm length
0	Very likely >100mm	Cat 2 2 Working Days	Cat 3 5 Working days	Cat 5 20 Working Days
<b>LIKELIHOOD</b>	<b>Likely</b> 40-100mm	Cat 4 10 Working Days	Cat 5 20 Working Days	Cat 6 8 weeks
	Rare <40mm	Defects under 25	mm in depth do not ne	ed to be recorded.

#### Notes

Examples of level differences may be where a concrete slab has risen or fallen above the adjacent slab, where a carriageway widening joint or haunch has risen or fallen in relation to the adjacent carriageway.

Consideration should be given to the location of the level difference within the carriageway, including how it relates to direction of travel.

## **Defect Response Matrix C – Carriageway Defects**

			SEVERITY			
		Major	Moderate	Minor		
		Road Type 2 & 3a	Road Type 3b	Road Type 4a & 4b		
		Strategic 'A' rd Routes - Main Distributer - Major Urban Network and Inter Strategic routes	Main secondary distributor roads	Local Roads - Minor rural roads and urban culs-de-sac		
		Monthly	3 Monthly	6 Monthly		
		200mm dia	200mm dia	200mm dia		
Very likely >100mm		Cat 2 2 Working Days	Cat 3 5 Working days	Cat 5 20 Working Days		
LIKELIHOOD	<b>Likely</b> 40-100mm	Cat 4 10 Working Days	Cat 5 20 Working Days	Cat 6 8 weeks		
Γ	Rare <40mm	Defects under 40mm in depth do not need to be recorded.				
	Notes	1				
		used locations on 4a and o Cat 5. If within a control		•		

## **Defect Response Matrix D – Ironwork**

				SEVE	RITY		
		Extreme	Major	Moderate	Minor	Minor	Negligible
		Road Type 2	Road Type 3a	Road Type 3b	Road Type 3b	Road Type 4a	Road Type 4b
		Strategic 'A' rd routes	Main distributor - major urban network and inter- strategic routes	Main rural secondary distributor roads	Main urban secondary distributor roads	Local roads	Minor rural road and urban culs- de-sac
	Very likely Missing >300 x 200mm	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours
	<b>Likely</b> Missing <299 x 199mm	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 2 2 working days	Cat 2 2 working days	Cat 2 2 working days
LIKELIHOOD	Possible Sunken, risen, broken or rocking frame >100mm in depth	Cat 1 2 hours	Cat 1 2 hours	Cat 2 2 working days	Cat 3 5 working days	Cat 3 5 working days	Cat 4 10 working days
L	Unlikely Sunken, risen, broken or rocking frame 25mm to 99mm depth	Cat 2 2 working days	Cat 2 2 working days	Cat 3 5 working days	Cat 4 10 working days	Cat 4 10 working days	Cat 4 10 working days
	Rare Noisy , worn and sunken, risen or rocking <25mm depth	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works

Refer to Appendix 4 for Section 81 guidance on attending and reporting defective statutory undertakers' apparatus

### **Defect Response Matrix E – Flooding affecting the highway**

## Matrix E - Flooding affecting Highway (C/Way)

				SEVE	RITY		
		Extreme	Major	Moderate	Minor	Minor	Negligible
		Road Type 2	Road Type 3a	Road Type 3b	Road Type 3b	Road Type 4a	Road Type 4b
		Strategic 'A' rd routes	Main distributor - major urban network and inter- strategic routes	Main rural secondary distrubutor roads	Main urban secondary distributor roads	Local roads	Minor rural roads and urban culs- de-sac
	<b>Very Likely</b> Potential dangerous flooding	Cat 1 2 hours	Cat 1 2 hours	Cat 2 2 working days	Cat 2 2 working days	Cat 3 5 working days	Cat 3 5 working days
LIKELIHOOD	Possible Blocked drainage causing flooding on the highway	Cat 4 10 working days	Cat 4 10 working days	Cat 5 20 working days	Cat 5 20 working days	Cat 7 Potential future works	Cat 7 Potential future works
	Unlikely Blocked or silted up road gully, not causing flooding	Cat 5 20 working days	Cat 5 20 working days	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works

#### Notes

Blocked drainage systems will be attended to under the Matrix shown above. Remedial works will be carried out to unblock the system. (It may not be possible to treat within the timescales noted above if the drainage system is damaged or located within private land).

For blocked drainage causing flooding on the highway on Road Types 4a and 4b, review against cyclic programme before considering further action.

Blocked drainage systems will be attended to under this Matrix.

### **Defect Response Matrix F – Street Furniture**

## **Matrix F - Street Furniture**

				SEVE	RITY		
		Extreme	Major	Moderate	Minor	Minor	Negligib <b>l</b> e
		Road Type 2	Road Type 3a	Road Type 3b	Road Type 3b	Road Type 4a	Road Type 4b
		Strategic 'A' rd routes	Main distributor - Major Urban Network and Inter Strategic routes	Main rural secondary distributor roads	Main urban secondary distributor roads	Local roads	Minor rural roads and urban culs- de-sac
	Very likely Within or leaning likely to fall within the carriageway	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours
НООР	Likely Blocking the footway forcing pedestrian into the carriageway	Cat 2 2 working days	Cat 2 2 working days	Cat 3 5 working days	Cat 3 5 working days	Cat 4 10 working days	Cat 5 20 working days
ПКЕЦНООБ	Possible Within or leaning likely to fall within the footway	Cat 3 5 working days	Cat 3 5 working days	Cat 3 5 working days	Cat 4 10 working days	Cat 5 20 working days	Cat 7 Potential future works
	Unlikely/Rare Within the verge	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works

#### Notes

Non-electrical equipment, including guard posts (bolllards) restricting access, including road sign posts and pedestrian barriers. (N.B. road sign plates and reflectorised bollards with road signs are covered in Matrix G). If street furniture is within footway but pedestrians can safely travel past (including using the verge) without entering the carriageway, use the 'within the footway' row.

## Defect Response Matrix G – Road Signs

				SEVE	RITY		
		Extreme	Major	Moderate	Minor	Minor	Negligible
		Road Type 2	Road Type 3a	Road Type 3b	Road Type 3b	Road Type 4a	Road Type 4b
		Strategic 'A' rd routes	Main distributor - major urban network and inter- strategic routes	Main rural secondary distributor roads	Main urban secondary distributor roads	Local roads	Minor rural roads and urban culs- de-sac
	Very Likely/ Likely Mandatory sign missing or heavily obscured	Cat 2 2 working days	Cat 2 2 working days	Cat 2 2 working days	Cat 4 10 working days	Cat 5 20 working days	Cat 5 20 working days
LINELIHOOD	Possible Warning sign missing	Cat 5 20 working days	Cat 5 20 working days	Cat 5 20 working days	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works
	Unlikely/Rare Regulatory, information, ADS or tourist sign missing	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works
	Notes Non-electrical equip referenced as Diagrat railway level cros	ram No. 601.1; 606					
	Mandatory	601.1	Dia 606	Dia 609	Dia 610	Dia 616	Dia 670
	Diagram No.	STOP		90			40
		773	779 & 780A	784.1			
		STOP when lights show	Safe height 16'6" (5.0 m)	Drivers of LADE or SLOW VEHICLES must phone and get permission to cross  LADE mass over \$5' into or \$6' in wide at \$16 tones total wight \$500 mass draph or tos			
			515		Triangular warning signs	e.g.	

### **Defect Response Matrix H – Fencing and Barriers**

## Matrix H - Fencing and Barriers

				SEVE	RITY		
		Extreme	Major	Moderate	Minor	Minor	Negligible
		Road Type 2	Road Type 3a	Road Type 3b	Road Type 3b	Road Type 4a	Road Type 4b
		Strategic 'A' rd routes	Main distributor - major urban network and inter-strategic routes	Main urban secondary distributor roads	Main rural secondary distributor roads	Local roads	Minor rural roads and urban culs-de- sac
	Very Likely Bridge parapets	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours
	<b>Likely</b> Safety fences	Cat 2 2 working days	Cat 2 2 working days	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks	Cat 6 14 ca <b>l</b> endar weeks	Cat 6 14 calendar weeks
LIKELIHOOD	Possible Pedestrian barriers - preventing unintentional carriageway access	Cat 2 2 working days	Cat 2 2 working days	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks
   	Unlikely Pedestrian barriers - guiding to crossing points	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works
	Rare Other fences	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works

#### Notes

Where safety fencing is provided or pedestrian barrier has been provided to guide pedestrians to a crossing point, a risk assessment should be carried out to consider whether it is still necessary, before carrying out replacement. For safety fencing and pedestrian barriers on Type 2 and 3a with 48hrs make safe response, permanent repair is to be delivered as Cat 6 (14 weeks)

## **Defect Response Matrix I – Kerbing**

## Matrix I - Carriageway Kerbing

				SEVE	RITY		
		Extreme	Major	Moderate	Minor	Minor	Negligible
		Road Type 2	Road Type 3a	Road Type 3b	Road Type 3b	Road Type 4a	Road Type 4b
		Strategic 'A' rd routes	Main distributor - major urban network and inter- strategic routes	Main rural secondary distributor roads	Main urban secondary distributor roads	Local roads	Minor rural roads and urban culs- de-sac
	Very likely >50mm	Cat 1 2 hours	Cat 1 2 hours	Cat 2 2 working days	Cat 3 5 working days	Cat 3 5 working days	Cat 3 5 working days
LIKELIHOOD	Likely 25 to 50mm	Cat 3 5 working days	Cat 3 5 working days	Cat 3 5 working days	Cat 4 10 working days	Cat 4 10 working days	Cat 4 10 working days
	Unlikely <25mm		Defects ur	nder 25mm in dept	h do not need to b	e recorded.	

#### Notes

In this Matrix, the measurable defect is the extent to which any part of the kerb protrudes horizontally towards the carriageway from the face of the kerb. Any vertical protrusion relative to the top / horizontal surface of the kerb should be treated as a footway trip - please refer to Matrix L (Footway Trips).

## **Defect Response Matrix J – Verge Deterioration**

				SEVE	RITY		
		Extreme	Major	Moderate	Minor	Minor	Negligible
		Road Type 2	Road Type 3a	Road Type 3b	Road Type 3b	Road Type 4a	Road Type 4b
		Strategic 'A' rd routes	Main distributor - major urban network and inter- strategic routes	Main rural secondary distributor roads	Main urban secondary distributor roads	Local roads	Minor rural roads and urban culs-de sac
Verge	deterioration	300mm wide	300mm wide	300mm wide	300mm wide	300mm wide	300mm wide
een ent ageway	Very likely >150mm depth	Cat 2 2 working days	Cat 3 5 working days	Cat 4 10 working days	Cat 5 20 working days	Cat 6 14 calendar weeks	Cat 6 14 calendar week
difference betwe and the adjaces and the adjaces sent to the carried in length	<b>Likely</b> 100-150mm	Cat 3 5 working days	Cat 4 10 working days	Cat 5 20 working days	Cat 6 14 calendar weeks	Cat 7 Potential future works	Cat 7 Potential future works
Any change in level difference between the metalled surface and the adjacent verge immediately adjacent to the carriageway edge over 10m in length	<b>Possible</b> 75-99mm	Cat 4 10 working days	Cat 5 20 working days	Cat 6 14 calendar weeks	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works
Any the verge im	Rare <75mm		Defects (	under 75mm in dept	h do not need to be	recorded.	

If verge deterioration is greater than 7.5m and up to 10m in length, drop down 1 category; if the deterioration is greater than 5m and up to 7.5m in length, drop down 2 categories. Verge deterioration less than 5m does not need to be recorded.

**Laybys** Refer to Matrix C - Carriageway Defects

### Defect Response Matrix Q – Road Markings & Studs

## Matrix Q - Road Markings & Studs

			00	SEVE	ERITY	Υ	00
		Extreme	Major	Moderate	Minor	Minor	Negligible Road Type 4b
		Road Type 2	Road Type 3a	Road Type 3b	Road Type 3b	Road Type 4a	
g-		Strategic 'A' rd routes	Main distributor - major urban network and inter-strategic routes	Main rural secondary distributor roads	Main urban secondary distributor roads	Local roads	Minor rural roads and urban culs-de- sac
LIKELIHOOD	Very Likely Stop line	Cat 3 5 working days	Cat 4 10 working days	Cat 4 10 working days	Cat 5 20 working days	Cat 5 20 working days	Cat 5 20 working days
LIKELI	Possible Other priority road markings and studs	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks

#### Notes

Priority road markings are: stop and give way markings; markings associated with traffic regulation orders; double line

systems; warning markings; formal pedestrian crossings places; mini-roundabouts Priority road studs are those associated with double line road marking systems and other mandatory markings (e.g. hatching edged by solid lines).

Any loose road studs will be made safe.

Other road markings/studs will only be maintained following carriageway surface treatment and in response to specific

#### **DEFECT RESPONSE MATRICES - FOOTWAY AND VERGE**

The following matrices are to be used to direct when reactive works are required.

Regardless of the intervention criteria listed above, the application of higher standards may be considered appropriate in sensitive locations such as schools, shopping centres, hospitals and elderly accommodation.

There is also a need to apply footway intervention criteria to areas of carriageway included within controlled pedestrian crossings.

The matrices have been developed through a risk-based approach relating to size and location. Should defects be smaller than those in the main matrix, guidance is provided in the notes section of the relevant matrix detailing how these defects will be categorised.

#### **Defect Response Matrix K – Footway Potholes**

			SEVERITY				
		Extreme	Major	Moderate			
		Footway Type 1	Footway Type 2	Footway Types 3 & 4 (mandatory cycle lanes c/way)			
		Busy urban shopping and business areas	Medium use routes, local areas local shopping areas	Linking local access ways through urban areas and busy rural areas - low usage			
		Monthly	6 Monthly (Walked)	12 Months (Driven or Walked)			
2 %	3	100mm diameter	100mm diameter	100mm diameter			
	Likely / Very likely >40mm	Cat 3 5 working days	Cat 3 5 working days	Cat 4 10 working days			
LIKELIHOOD	Possible 20 - 40mm	Cat 4 10 working days	Cat 4 10 working days	Cat 5 20 working days			
	Rare <20mm	Defects under 20mm in depth do not need to be recorded.					

	Ť		SEVERITY				
	1	Extreme	Major	Moderate			
		Footway Type 1	Footway Type 2	Footway Types 3 & 4 (mandatory cycle lanes c/way)			
		Busy urban shopping and business areas	Medium use routes, local areas local shopping areas	Linking local access ways through urban areas and busy rura areas - low usage			
		Monthly	6 Monthly (Walked)	12 Months (Driven or Walked)			
	X X	100mm length	100mm length	100mm length			
	Likely / Very likely >40mm	Cat 3 5 working days	Cat 3 5 working days	Cat 4 10 working days			
LIKELIHOOD	Possible 20 - 40mm	Cat 4 10 working days	Cat 4 10 working days	Cat 5 20 working days			
	Rare <20mm	Defects under 20mm in depth do not need to be recorded.					
	Very likely Any change in level difference between the existing footway and adjacent verge - exceeding 100mm immediately adjacent to the walking surface over 1m in length.	Cat 3 5 working days	Cat 5 20 working days	Cat 7 Potential future works			
	Notes						
	Mandatory cycle lanes on the carriageway should be treated as Type 4 footway for intervention timescales.  Examples of level differences may be where a paving slab has risen or fallen above the						

### **Defect Response Matrix M – Footway Ironworks**

## Matrix M - Footway Ironworks

	SEVERITY							
	Extreme	Major	Moderate	Minor / Negligible				
	I	2	3	4 (Mandatory cycle lanes c/way)				
	Busy urban shopping and business areas	Medium use routes, local areas local shopping areas	Linking local access ways through urban areas and busy rural areas	Low usage				
Very likely Missing and collapsed >150 x 150mm	Cat 1 2 hours	Cat 1 2 hours	Cat 2 2 working days	Cat 2 2 working days				
Likely Missing and collapsed <150 x 150mm	Cat 2 2 working days	Cat 2 2 working days	Cat 2 2 working days	Cat 2 2 working days				
Possible Sunken or risen >20mm	Cat 2 2 working days	Cat 2 2 working days	Cat 5 20 working days	Cat 5 20 working days				
Possible Cat 5 Broken 20 working days		Cat 5 20 working days	Cat 5 20 working days	Cat 5 20 working days				
Unlikely Sunken or risen <20mm	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works				
Rare Noisy / worn	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works				
	Missing and collapsed >150 x 150mm  Likely Missing and collapsed <150 x 150mm  Possible Sunken or risen >20mm  Possible Broken  Unlikely Sunken or risen <20mm	Busy urban shopping and business areas	Extreme Major  I 2  Busy urban shopping and business areas  Very likely Missing and collapsed >150 x 150mm  Likely Missing and collapsed <150 x 150mm  Possible Sunken or risen >20mm  Possible Broken  Cat 2 2 2 working days  Cat 3 2 2 2 working days  Cat 4 2 2 2 working days  Cat 5 2 2 working days  Possible Broken  Cat 5 5 20 working days  Cat 7 Cat 7  Potential future works  Rare Noisy / worn  Potential future works  Potential future works  Potential future works	Extreme Major Moderate  I 2 3  Busy urban shopping and business areas Potential future works  Very likely Missing and collapsed >150 x 150mm  Likely Missing and collapsed <150 x 150mm  Possible Sunken or risen <20mm  Cat 5 20 working days  Cat 7 Cat 7 Cat 7 Potential future works  Rare Noisy / worn  Medium use routes, lunking local access ways through urban areas and busy rural areas  Likely Medium use routes, local areas local shopping areas  Linking local access ways through urban areas and busy rural areas  Linking local access ways through urban areas and busy rural areas  Linking local access ways through urban areas and busy rural areas  Linking local access ways through urban areas and busy rural areas  Linking local access ways through urban areas and busy rural areas  Linking local access ways through urban areas and busy rural areas  Linking local access ways through urban areas local shopping areas  Linking local access ways through urban areas local shopping areas  Linking local access ways through urban areas local shopping areas  Linking local access ways through urban areas local shopping areas  Linking local access ways through urban areas local shopping areas  Linking local access ways through urban areas local shopping areas  Linking local access ways through urban areas local shopping areas  Linking local access ways through urban areas local shopping areas  Linking local access ways through urban areas local shopping areas  Linking local acces ways through urban areas local shopping areas  Linking local acces ways through urban areas local shopping areas  Linking local acces ways through urban areas and busy rural areas  Linking local acces ways through urban areas and busy rural areas  Linking local acces ways through urban areas and busy rural areas  Linking local acces ways through urban areas areas  Locat 1 Cat 1 Cat 1 Cat 2 Cat 2 Cat				

#### Notes

Reference is required in ordering a defect as to whether the ironwork is missing, collapsed, sunken or broken.

For utility covers, refer to Section 81 notes for guidance.

For broken covers, if the area broken is  $150 \text{mm} \times 150 \text{mm}$  or greater, use Missing and collapsed timescales.

Refer to Appendix 4 for Section 81 guidance – Attending and Reporting Defective Statutory Undertakers Apparatus

## **Defect Response Matrix P – Vegetation**

Matrix P - Vegetation	ition
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		SEVERITY					
		Extreme	Major	Moderate	Minor	Minor	Negligible
		Road Type 2	Road Type 3a	Road Type 3b	Road Type 3b	Road Type 4a	Road Type 4b
		Strategic 'A' rd Routes	Main Distributer - Major Urban Network and Inter Strategic routes	Main rural secondary distributor roads	Main urban secondary distributor roads	Local Roads	Minor rural roads and urban culs-de- sac
		Monthly	Monthly	3 Monthly	3 Monthly	6 Monthly	6 Monthly
	Tree threatening the highway	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 2 2 working days	Cat 2 2 working days
ГІКЕГІНООБ	Branches threatening to fall into the highway or likely to be in collision with passing vehicles	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 2 2 working days	Cat 3 5 working days	Cat 3 5 working days
	Vegetation forcing pedestrians into the carriageway	Cat 2 2 working days	Cat 2 2 working days	Cat 3 5 working days	Cat 3 5 working days	Cat 4 10 working days	Cat 5 20 working days
	Vegetation forcing traffic into opposing traffic lanes or preventing access for emergency vehicles	Cat 3 5 working days	Cat 3 5 working days	Cat 4 10 working days	Cat 4 10 working days	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks
	Vegetation obscuring visibility at junction	Cat 4 10 working days	Cat 5 20 working days	Cat 5 20 working days	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks	Cat 6 14 calendar weeks
	Vegetation affecting overhead or underground utility equipment	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works

#### Notes

Refer to Road Sign Matrix G for vegetation obscuring signs. For fallen trees refer to the Debris and Spillage Matrix A. Branches are defined as being of significant size, in that if they fell they would cause serious injury or damage. In terms of rows 1 and 2 this is also relevant to a highway tree or its branch, that may fall outside of the highway and has been risk assessed to potentially cause serious injury or damage.

#### **DEFECT RESPONSE MATRICES - ELECTRICAL ASSETS**

The following matrices are to be used to direct when reactive works are required.

The matrices have been developed through a risk-based approach relating to the potential hazard and the likelihood that the hazard might cause harm.

### Defect Response Matrix N – Street Lighting & Electrical Equipment

	ſ				SEVERITY			
		Extreme	Major	Moderate	Minor	Minor	Negligible	Negligible
		Road Type 2	Road Type 3a	Road Type 3b	Road Type 3b	Road Type 4a	Road Type 4b	N/A
		Strategic 'A' rd routes	Main distributor - major urban network and inter- strategic routes	Main rural secondary distrubutor roads	Main urban secondary distributor roads	Local roads	Minor rural roads and urban culs- de-sac	Non Associated Footpath
	Very likely Damaged equipment following a road traffic collison (e.g. lighting column, illuminated signage, electrical feeder pillar)	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours
	Very likely Electrical cover missing, open or hanging, likely to fall (e.g. lighting column/lantern, Illuminated signage, electrical feeder pillar)	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours
ПКЕПНООБ	Very likely Illuminated traffic bollard shell damaged and missing	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours
	Possible/unlikely Illuminated signage not lit (i.e. lamp fault)	Cat 3 5 working days	Cat 3 5 working days	Cat 3 5 working days	Cat 4 10 working days	Cat 5 20 working days	Cat 5 20 working days	Cat 5 20 working days
	<b>Unlikely</b> Street light not lit (i.e. lamp fault)	Cat 4 10 working days	Cat 4 10 working days	Cat 4 10 working days	Cat 4 10 working days	Cat 4 10 working days	Cat 4 10 working days	Cat 4 10 working days
	Rare Street lighting column or illuminated sign post leaning but unlikely to fall	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works	Cat 7 Potential future works

### **Defect Response Matrix O – Intelligent Transport Systems**

## Matrix O - Intelligent Transport Systems

		SEVERITY						
		Extreme	Major	Moderate	Minor / Negligible			
		Priority traffic signal sites	Other traffic signal sites	Weather stations	VAS / VMS			
	<b>Very likely</b> Road traffic collison	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours			
	Very likely Electrical fault (exposed wires)		Cat 1 2 hours	Cat 1 2 hours	Cat 1 2 hours			
LIKELIHOOD	Very likely Urgent faults (i.e. all lights out, omitting phase, numerous red lights out)	Cat 1 2 hours	Cat 1 2 hours	Cat 2 2 working days	Cat 3 5 working days			
	Possible Non-urgent faults (i.e. lamp out, push button not working)	Cat 2 2 working days	Cat 2 2 working days	Cat 3 5 working days	Cat 4 10 working days			
	<b>Rare</b> Broken loops	Cat 5 20 working days	Cat 5 20 working days	Not applicable	Cat 5 20 working days			

#### Notes

All ITS faults identified should be called through to the Control Hub at the Phoenix House SDC.

Cat 1 is attended in 2 working hours.

Priority sites will be attended in 2 hours and brought back into operation in a further 6 hours. Priority sites are managed 24hrs.

For other sites, these are managed between the hours of 07.30 and 21.30, Monday to Friday. Any fault received outside of these hours as a Cat 1 or 2 will be made safe.

For traffic signals that are obscured by vegetation, use row 1.

#### **CYCLEWAYS INTERVENTION**

The inspection criteria to be applied to cycleways will depend upon the status and position within the highway. (Appendix 2)

For mandatory cycleways, within the carriageway i.e. where defined by a continuous road marking, the relevant carriageway inspection frequency will apply, as will Category 4 footway intervention criteria. (Appendix 1)

For advisory cycleways within the carriageway i.e. where defined by an intermittent road marking, the adjacent carriageway inspection frequency will apply, as will the carriageway intervention criteria.

Shared cycleways and footways will attract the maintenance standards associated with the footway. This is appropriate since footways tend to attract higher maintenance standards than cycleways. (Appendix 2)