Response to the Regulation 28 Report from the Assistant Coroner dated 6 July 2015 following the Coroner's Inquest held into the tragic death of John Paul Clarke

Date: 17 November 2015

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Growth, Planning and Housing Department

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1.0   Executive Summary

This report sets out the City Council's response to the Assistant Coroner's concerns regarding inspection of regulatory traffic signs, inventory accuracy and maintenance, temporary and permanent remedial works, and, inspector training.

The aim of the measures that the City Council already has in place, and those to be implemented, is that the City Council maintains an accurate inventory. The systems in place ensure that where an asset is missing or the record of it is incorrect, that the inventory database, contingency protocols and inspector knowledge and awareness ensure that the required remedial work is always ordered for our service provider to action and that the required update to the inventory database occurs promptly.

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2.0   Highways Inspections

2.1   The City Council's routine highways inspection of regulatory traffic signs and other highway assets is undertaken on a monthly, quarterly or six monthly basis. The frequency of inspections is based upon the road network hierarchy and its functionality, which includes its intensity of use by pedestrians and other road users.

2.2   The highways inspectors undertake planned visual inspections and are trained to understand and interpret the City Council's Code of Practice for Highways Inspections, which includes the Highways Risk Register. These documents align to the recommendations set within the National Code of Practice for Well Maintained Highways.

2.3   The inspectors use hand held units and mobile software called Confirm Connect. This interfaces with the main Confirm OnDemand system, which holds the asset database (inventory) and works order records.

2.4   The inspector downloads the highway inspection route into their handheld unit before beginning the planned inspection and will raise a works order against the individual asset for a defect, which meets or is above the investigatory levels set out within the Highways Risk Register. The risk matrix uses the scale of the defect, e.g. the depth of a pothole, and the location of the defect from the road hierarchy, to produce a risk score. The priority of the response time is then set against the risk score, with more hazardous defects in high pedestrian/road use areas producing a higher risk score and a faster response time.

2.5   When raising a defect, the Confirm Connect software draws down from the main Confirm database all assets within a 25 metres radius of the inspector's location

and displays them to the inspector. Where the asset does not appear, the system holds a 'dummy asset' number called a 'whole site feature', which can be used to raise a works order. Inspectors are trained to be able to record defects and raise a works order even if the asset is not recorded on the Confirm inventory.

2.5 Works orders are raised with the City Council's service provider through the Confirm Connect system and they receive the committed order within minutes of it being placed through the hand held unit. The response time required for our service provider to attend the defect is based upon the Risk Register and this is configured within the Confirm Connect software. These are:

- Within two hours for an emergency repair for certain category 1 defects (Priority 1 response – highway and lighting defects)

- Within 24 hours for certain category 1 defects (Priority 2 response – highways and lighting defects)

- Within 48 hours for certain category 2 defects (Priority 3 response – lighting defects)

- Within ten days for certain category 2 defects (Priority 3 response highways defects)

- Within 28 days for certain category 2 defects (Priority 4 Response – highways defects)

- Over 28 days for other defects that can await a programmed response (Priority 5 Response – highways and lighting defects)

2.6 The terms category 1 and category 2 defects are set in the Code of Practice for Well Maintained Highways. Category 1 responses are deemed more urgent and

need to be responded to in a shorter time period as they represent a significant hazard. Category 2 repairs are non-urgent and a more planned approach can be taken. Where an asset is missing, but in the Confirm inventory, the risk priority is set in the handheld already. Where the asset is missing and is also not in the inventory, the inspector will use their training and knowledge of the risk register to determine appropriate priority and response time for the given defect. The inspector can override the risk register response times through Confirm Mobile at their discretion and the reasons for this are then recorded against the relevant record (see page 56 of this document, contained within the Confirm User guide in Appendix 1).

2.7 Where the defect requires that a category 1 response is needed, in the vast majority of cases this is to make the hazard safe as a permanent repair is not possible due the length of time it will take to complete, the need for road closure/parking suspensions or special materials. In these circumstances, the inspector will also raise a works order for the permanent repair as a category 2 response according to the risk register.

2.8 Where the category 1 defect is reported by the public through the contact centre, the same risk register logic to categorise the repair as urgent or non-urgent is built into the web form system used by the call centre agent. For a non-urgent public report, the service provider crew will record when they have completed making the hazard safe and use a system status to record that further work is needed. The defect is then sent to the reactive inspector's handheld unit for the location in question. The inspector visits the location and raises the appropriate works order for any permanent repair that is needed as described in paragraphs 2.4 and 2.5 above.

2.9 Outstanding committed works orders issued to the service provider are monitored every day through a report generated from Confirm and at regular monitoring meetings. In certain circumstances works orders can become stuck and stay 'uncommitted' in the system. When this happens, the works order does not go through to the service provider. However, a new report has been introduced to allow staff and the provider to monitor these on a daily basis as well.

3.0   Highways Inventory – Traffic Signage

3.1   The City Council's inventory is held in the Confirm database and holds details of traffic signs, which are the responsibility of the City Council to maintain. Data is held as the asset type (feature type) and its related attributes, e.g. colour, size. Each signage asset type is held in one of three categories of signs: (i) Public Lighting (PL) Internal Illuminated Sign, (ii) Public Lighting (PL) External Illuminated Sign and (iii) Highways (HW) Sign. Where a sign is illuminated, the type of illumination is stated within the asset type name (internal/external).   Non-illuminated signs are in most cases for parking controls.

3.2   Non-illuminated sign attributes

Figure one below shows an example of the attributes held in the inventory for a non-illuminated sign, in this case a parking sign. The field names are as follows:

ID Number – Traffic Signs Regulations and General Directions (TSRGD) sign diagram number

Plate Size – actual size of sign plate

Sign Face Type – Reflectorised, Diamond Grade, Class 1

Sign Type – Regulatory, Information, Bus Lane, Warning, Directional, Information

Additional	Geography	Attributes	
Number	1.00	Number	
Height	2.50	Metre	
ID Number	640		
Plate Size	200x200		
Sign Face Type	Reflectorised		Notes
Sign Type	Regulatory		Notes
Sign Type (Other)	Other		Notes
Sign Mounting Method	Lamp Column		Notes
Sign Zone			

Fig.1: Example of a non-illuminated sign type 640

3.3 Illuminated sign attributes

Figure 2 below is an example of the attributes held in the inventory for an externally illuminated sign. It should be noted that this is a standard list of attributes for both lighting columns and illuminated sign posts and bollards. As a result, not all of the attributes are applicable to every asset type and some of the fields do not therefore need to be completed. The two main attributes for the illuminated sign types are as follows:

Illuminated Sign Reference – Description

Illuminated Sign Number – TSRGD Number

Fig.2: External Illuminated sign type 504.1 - Crossroads Sign.

3.4   With the move to handheld technology, a new attribute of Sign Number and Description has been added to enable site staff, including highways inspectors, to easily select the sign type by description without having to know the TSRGD ref number (Figure 2). The drop down menu has the TSRGD number at the end of the description. This will replace the two existing Illuminated sign attributes listed in paragraph 3.3. This is a work in progress and if successful, it will be rolled out to Highways non-illuminated signs as well (Figure 1).

3.5   The inspectors are able to see whether the asset is illuminated or non-illuminated through the feature type description. In addition, any cases where the asset is missing, inspectors can still take action by raising a defect using the 'whole site feature' function described in paragraph 2.5. This enables a works order to be issued to the service provider with a description of the work needed. Our service provider completes the work and records the action that it has taken on a handheld unit and this is transferred to the Confirm database. Where the service provider is unable to complete a first time repair on the first visit and leaves temporary arrangements, it will record this action on the system and photographs are taken.

3.6   An exception report from the Confirm system is generated each week for orders that have been raised using 'whole site feature'. This is then investigated to ensure that any change to the inventory is carried out.

4.0   Inventory Maintenance

4.1   The inventory is updated as a result of either reactive or routine maintenance works or through schemes when new assets are installed, moved or removed from the network. It should be noted that assets are never deleted from the inventory since this loses the maintenance history for that asset. The system holds current assets, which are seen by inspectors and call centre agents, but retains the historical record of changes to the inventory such as when a new asset has been added, moved or made redundant.

4.2   There are two methods of updating the inventory. The first is using handheld units and this method updates the inventory for reactive and routine maintenance works carried out using the same Confirm Connect software as the inspectors. This is already used by our drainage provider and shortly will be used by our lighting service provider for both reactive and routine maintenance. This brings much greater opportunity to keep the inventory updated in real time.

4.3   The second method is to manually update the inventory, either by importing files with the relevant data or individually inputting details from scheme 'as built' drawings.   The file import method is already used in lighting to update the inventory with routine maintenance works, but this will be replaced with real time updates when Confirm Connect is implemented. This is currently programmed for January 2016. The individual input manual method is used to update the inventory with scheme works, including those carried out by third parties. Manual updates are also used for whole site features reported by inspectors using the exception report method described in paragraph 3.6.

4.4   All illuminated signage assets currently receive a bi-annual maintenance inspection, which looks at the internal condition and functional status of the asset as well as a visual inspection. This inspection will identify if the asset is missing from the database, is numbered incorrectly or is in the incorrect location. This is a separate programme of inspections to the monthly, three monthly or six monthly planned visual inspections by the highways inspectors.

4.4   As a result of the implementation of Confirm Connect in the lighting service, we are currently developing protocols that will enable the lighting crews to not only update the inventory with maintenance works carried out, but also to make corrections to the base inventory asset data during routine maintenance inspections.   This means that over the course of the next two full year's maintenance inspection cycles (by 31 March 2018) when every illuminated asset will have been inspected using the new hand held units, the inventory will be updated.   Taken together with the other update protocols, this provides a complete cycle of keeping the inventory updated.

4.5   There remain some schemes from our previous contract that have not been updated in the inventory.   A scope of works and method are actively in discussion, including the need to resurvey these areas and whether the Confirm Connect could be used. The timeline to complete the physical inventory updates is by the end of the current financial year (31 March 2016).

5.0   Temporary Signage Measures

5.1   In some instances the attending service provider crew will not have the required replacement signage to complete the repair on the first visit.   In these circumstances, for priority one defects (see paragraph 2.5), temporary traffic cones are put in place and recorded on the Confirm database with photographs. To track these, this process is being enhanced. The intention is that a new report will be generated from Confirm every two weeks showing the locations where temporary signage has been left and monitored to ensure that the permanent repair is completed. Where the works order is still outstanding after two weeks, a follow up visit by the service provider will be carried out to check that the temporary traffic cones are still in place and have not been moved. This protocol will be implemented by 1 December 2015.

6.0   Training

6.1   The user guide produced for the inspectors on the use of Confirm Connect is attached as Appendix 1. This is used as part of the inspector training, including induction for new staff, and has been updated to include the protocol for raising works orders when the asset is missing (page 32 for highways assets, page 56 for lighting assets and page 61 for gully assets).

6.2   All inspectors have been trained on the changes to the protocol and on the importance of reporting anomalies in the inventory and keeping it up to date. Training takes place through staff briefings, which are held fortnightly and through formal training sessions. Formal training for the implementation of Confirm Connect took place in July and August 2014. Refresher briefings on new protocols for missing assets took place in April and May 2015.

6.3   Where the asset is missing and not in the inventory, inspectors will use their training and knowledge of the TSRGD to raise the appropriate works order to the service provider. In these circumstances, the inspector will put a full description of the works required, e.g. missing no entry plate on sign column S1, location Victoria Street.

6.4   While the inventory holds the sign diagram number already and will be updated to give both the TSRGD diagram number and the description so the inspectors see this, given the latter will take some time to complete, additional training on regulatory signage and TSRGD is being provided to the inspectors in January 2016.

6.5   The City Council only recruits Inspectors with a minimum of 2 years' experience. Most are recruited from other London Boroughs, utility companies, or roadworks contractors, and most have worked in this industry for many years before starting

with the City Council. On starting with the Council a new inspector spends a couple of months buddied with an existing Inspector to learn how the Council's systems work and how to apply their knowledge within the City Council's policy framework. Three Lead Inspectors and the Inspectorate Manager undertake regular reviews of the Inspectors' work and make sure that they are maintaining the necessary standards and consistency.

6.5   While not a statutory requirement, the City Council requires that all of the Inspectors hold a current City and Guilds "Streetworks Supervisor" accreditation, which qualifies them to oversee and instruct roadworks contractors on the highway and to diagnose highway defects or errors in working practice. This qualification remains valid for 5 years and has to be renewed with a full week's training course and examination at an accredited training centre. The Council has funded training for all Inspectors in various other industry standards; these include qualifications in setting out signage and managing traffic, safe working practices, and disability awareness. The Council also funds any specific training that an Inspector wishes to undertake which supports their skills in work. This has included detailed industry qualifications, foundation degrees, and various legislation-specific courses.