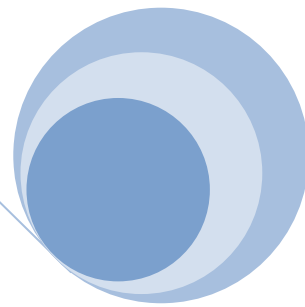
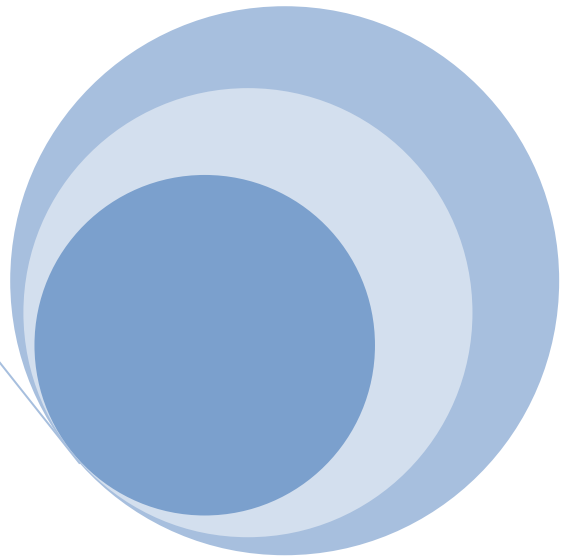


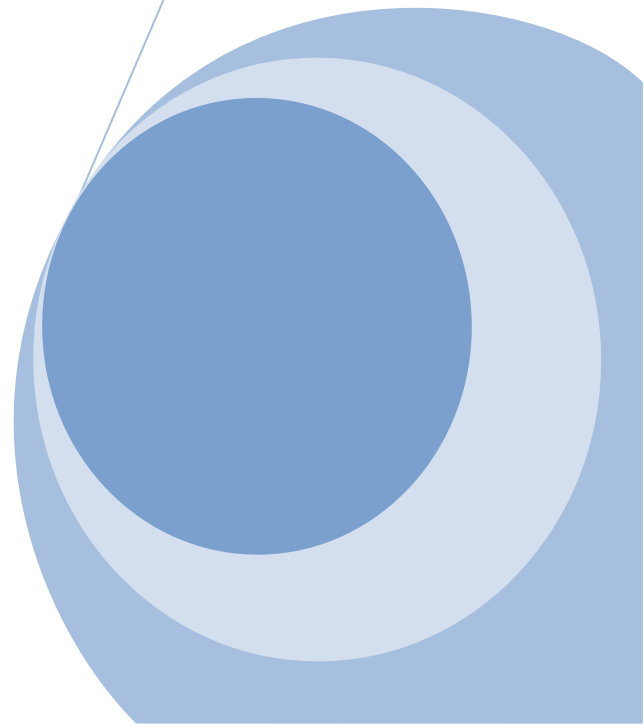
AUDIT DOCUMENT



Sheffield City Council
Audit Document

Detail of the data requirements, and how to carry out an audit of the Survey information required for the Sheffield Performance Model.

APPIA INFRASTRUCTURE SOLUTIONS
VERSION 1.2 17th July 2012



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1. INTRODUCTION

The Sheffield Performance Model relies on data produced by a range of Survey types in order to produce Carriageway and Footway Sub-Section, Section and Network Condition Indices. This document describes the checks and audit procedures to be undertaken by the Independent Surveyor to ensure that the Surveys:

1. Record the defects correctly
2. Record the area/extent of the defect correctly
3. Record defects in the correct cross sectional position
4. Have been carried out on the correct section

2. Audit Process

Survey data is to be collected in accordance with the latest specification and manuals and any subsequent updates as issued by DFT and as set out in Clause 27. To ensure this, the data supplied will be subject to an independent audit carried out by the Independent Surveyor using UKPMS accredited auditors. The Service Provider shall ensure that the auditors used by the Independent Surveyor:

- Are UKPMS assessors (in accordance with the accreditation requirements set out at Clause 27.10.12 of the Contract)
- Are able to demonstrate knowledge and experience of the Surveys being audited
- Are aware of the standard required to pass audit
- Are able to communicate deficiencies in the data identified by the audit
- Undertake audits in accordance with the requirements described in the remainder of this document
- Have the relevant Survey information from the Service Provider
- Use the latest Survey documents and their updates

This document details the way in which Survey data will be accepted or rejected.

2.1. Visual Surveys (i.e. CVI, Patching and FNS)

Data collection and validation as described in Clause 27.10, 27.14 and 27.15 of the Contract will take place over a 3 week cycle:

Surveying Week -	The Service Provider undertakes the Survey.
Week after Surveying Week -	The Service Provider has 1 week to validate and audit the Survey Data from Week 1 and issue to Independent Surveyor
Sampling Week –	The Independent Surveyor has 1 week to audit a 10% by length sample of the data supplied and then report the results to the Service Provider and the Authority within 2 Business Days of the end of the Sampling Week.

The Independent Surveyor shall carry out any re-survey audits or additional sampling as necessary in accordance with Clause 27 of the Contract.

2.2. Machine Surveys (i.e. SCRIM, Griptester, SCANNER, Deflectograph)

Data collection and validation is described in Clause 27.11, 27.12 and 27.13 of the Contract and will take place during the Contract Year and be delivered to the Independent Surveyor within the required timescales:

3. SURVEY DATA TO BE AUDITED

3.1 Carriageway Surveys

Currently there are four types of Surveys carried out on the network which feed into the Carriageway Condition Index (CCI) part of the Sheffield Performance Model namely SCANNER, SCRIM, CVI and a bespoke Patching Survey. The underlying strength of the pavement is measured using the Deflectograph Machine.

3.1.1 SCANNER Survey

For the Classified road network in England, SCANNER Surveys are undertaken for production of National Performance Indicators NI 168 & NI 169 and are carried out using Survey vehicles equipped with lasers, video image collection and inertial measurement apparatus to enable Surveys of the road surface condition to be carried out whilst travelling at variable speeds of up to 100 km/h to match prevailing traffic and hence cause minimum disruption to other road users. They are carried out over both lanes of single Carriageways and all lanes of the main Carriageway on dual Carriageways and lane 1 of slip roads. Roundabouts are excluded from SCANNER Surveys. SCANNER Surveys are controlled by an end result specification for the Survey equipment and a detailed Quality Audit procedure for the Surveys includes regular independent checks to maintain quality assurance.

3.1.2 SCRIM Survey

In accordance with HD28/04, measurements for monitoring the skid resistance are made with a Sideway-force Coefficient Routine Investigation Machine (SCRIM).

All SCRIM investigations in Sheffield are carried out in accordance with the Output Specification Performance Requirements 2.21(a) and 2.21(b) in order to ensure effective management of Skid Resistance. Annexure 1 contains the Site Categories and Investigatory levels used by Sheffield which follows HD28/04 methodology. It also contains the process to be adopted by the Service Provider for prioritising site investigations.

As an alternative to the SCRIM machine, a Griptester may be used to measure skid resistance and the results obtained converted to the equivalent CSC values.

3.1.3 UKPMS CVI Survey

The Coarse Visual Inspection Survey (CVI) is carried out in accordance with the UKPMS Visual Survey Manual, Chapter 5. It is a chainage-related Survey generally undertaken from a slow-moving vehicle. By assessing a limited range of broadly defined defects, and by recording “lateral” extents, rather than measurements of defects, it is a quick, repeatable measure of the network condition. The Survey has been adapted for Sheffield to reflect the percentage area which is defective. This has been processed through UKPMS to deliver reliable and representative data.

3.1.4 Patching Survey

The level of patching on a road is a matter of public concern but there is no nationally recognised Survey. Sheffield has therefore created for this Project a bespoke Patching Survey.

3.1.5 Deflectograph Survey

The structural monitoring of the Primary and Secondary Road Networks is assessed using the Deflectograph machine, which is a well-recognised method for assessing the structural requirements of a flexible pavement. A Deflectograph Survey shall be carried out in accordance with HD29/08 or revised.

3.2 Footway Survey

3.2.1 UKPMS Footway Network Survey (FNS)

The Footway Network Survey (FNS) is carried out in accordance with the UKPMS Visual Survey Manual, Chapter 9. It is a walked chainage-related Survey which assesses a limited range of broadly defined defects, and by recording “lateral” extents, rather than measurements of defects, it is a quick, repeatable measure of the footway condition. The Survey has been adapted for Sheffield to reflect the percentage area which is defective, the majority surface type and average footway width. This data is processed through UKPMS to deliver reliable and representative data.

4 DEFECTS TO BE AUDITED

4.1 Defects measured by SCANNER

Although SCANNER measures a number of different defects only the following are used in the Carriageway Condition Index part of the Sheffield Performance Model due to concerns over repeatability. The Service Provider shall procure that the Independent Surveyor shall ensure that the machine used for collecting this information has passed the appropriate accreditation with TRL and shall obtain a copy of the relevant certificate for inspection by the Authority.

Defect	Typical Surface	Description
Rutting	The defects within this category can occur on bituminous surfaces	Transverse Profile (rutting) is measured across a 3.2m width of Carriageway at approximately 0.1m longitudinal intervals to determine the rut depth
Longitudinal Profile Variance	The defects within this category occur on bituminous and concrete Carriageways	Longitudinal Profile Variance is measured in the nearside wheel-track at approximately 0.1m longitudinal intervals to determine the variance along 3,10 & 30m lengths

TABLE 4.1 - DEFECTS MEASURED BY SCANNER SURVEY:

4.2 Defects measured by SCRIM:

The SCRIM readings are used to establish SCRIM deficiency values. The Service Provider shall procure that the Independent Surveyor shall ensure the machine used for collecting this information has passed the appropriate accreditation with TRL and shall obtain a copy of the relevant certificate for inspection by the Authority.

If a Griptester is used to measure skid resistance then the Grip Number readings shall be converted into equivalent CSC and used to establish SCRIM deficiency values. The Service Provider shall procure that the Independent Surveyor shall ensure the machine used for collecting this information has passed the appropriate accreditation with TRL and shall obtain a copy of the relevant certificate and include it within the audit report.

4.3 Defects measured by CVI Survey:

The following defects identified using the CVI Survey are used in the calculation of the Carriageway Condition Index and shall be subject to auditing. The Service Provider shall procure that the Independent Surveyor shall check the accuracy of the extent and severity of these defects on site based upon a sample of the Service Provider's Surveys as set out in Clause 27.10 of the Contract. The Service Provider shall procure that the Independent Surveyor shall obtain the appropriate surveyor accreditation certificates from the Service Provider and provide them to the Authority.

Defect	Typical Surface	Description
CVI Wheel Track Cracking	The defects within this category can occur on bituminous surfaces	Wide single cracking or multiple cracking/coarse crazing with visible crack width >2mm within the Wheel Tracks
CVI Wearing Course Deterioration	The defects within this category can occur on bituminous surfaces	Loss of material other than surface applied chippings from the surface course or pot holing to the degree that the original surface course is no longer discernible. Includes cracking >2mm
CVI Surface Deterioration	The defects within this category can occur on bituminous surfaces	Any or all of: 1. Extensive loss of surface applied chippings with less than two thirds of chippings remaining. 2. The appearance of bituminous binder in the surface course such that the friction material is flush or covered. 3. Loss of material other than surface applied chippings from the surface course where the original surface course remains discernible
CVI Settlement/ Subsidence	The defects within this category can occur on bituminous and concrete Carriageways	Local settlement or subsidence producing a difference in level greater than 30mm, (50mm in concrete). This will include patches or Statutory Undertaker reinstatements and areas where the Carriageway has heaved, for example due to tree roots.
CVI Transverse/ Reflection Cracking	The defects within this category can occur on all surface types but the road construction will include a lower layer of concrete or cement bound material	Single or multiple transverse cracks at regular spacing

Defect	Typical Surface	Description
CVI Edge Deterioration	The defects within this category can occur on bituminous surfaces	Major cracking, fretting or deformation confined to the edge of the Carriageway, where NO edge restraint is present
CVI Major Block Deterioration	The defects within this category can only occur on blocked/sett surfaces	Depression, settlement or subsidence resulting in a difference in level of 13mm or greater. This will include patches or Statutory Undertaker reinstatements where the Footway has heaved (for example due to tree roots). Rocking blocks or missing blocks.
CVI Minor Block Deterioration	The defects within this category can only occur on blocked/sett surfaces	Areas where the pattern of blocks has been disrupted resulting in loss of interlock. Cracked, spalled or otherwise damaged blocks, which have no depressions or vertical projections greater than 13mm
CVI Concrete Cracking	The defects within this category can only occur on concrete surfaces	Cracking further than 500mm from the edge of the pavement or a joint including cracking associated with ironwork, and cracking in permanent concrete patches and reinstatements.
CVI Concrete Surface Deterioration	The defects within this category can only occur on concrete surfaces	Loss of material from the surface of the concrete slab, including scaling, punch outs, pop outs and potholes but excluding joint or crack spalling. Also includes loss of texture.
CVI Concrete Defective Surface Dressing	The defects within this category can only occur on concrete surfaces	Stripping, fretting or chip loss in surface dressing, thin bituminous overlays or high friction surfacing.
CVI Concrete Longitudinal and Transverse Joint Defectiveness	The defects within this category can only occur on concrete surfaces	Any or all of: Difference in level between slabs of 15mm or greater; Evidence of pumping; Evidence of dynamic movement; Loss of material from the joint edge; Cracking within 500mm of the joint, including cracking and/or spalling at the corner of the slab; Opening of longitudinal joints greater than 15mm.

TABLE 4.2 - DEFECTS MEASURED BY CVI SURVEY:

4.4 Defects measured by the Patching Survey:

The following defects identified using the Patching Survey are used in the calculation of the Carriageway Condition Index and shall be subject to auditing and the Service Provider shall procure that the Independent Surveyor shall check the accuracy of the extent and severity of these defects on site based upon a sample of the Service Provider's Surveys as set out in Clause 27.14 of the Contract.

Defect	Typical Surface	Description
Longitudinal Trench reinstatement	The defects within this category can occur on all surface types.	Reinstatement which runs longitudinal along the Road Section. Assumed to be 1m in width for area calculations
Transverse Trench reinstatement	The defects within this category can occur on all surface types.	Reinstatement which runs transversely along the Road Section. Assumed to be 1m in width for area calculations
Area Patching	The defects within this category can occur on all surface types.	Other reinstatements in the Carriageway.

TABLE 4.3 - DEFECTS MEASURED BY THE PATCHING SURVEY:

4.5 Defects measured by Deflectograph:

The Deflectograph machine is required to be accredited in accordance with the requirements set out at Clause 27.13.5, and the Service Provider shall procure that the Independent Surveyor ensures the machine used for collecting this information has passed the appropriate accreditation with TRL and a copy of the relevant certificate shall be obtained and provided to the Authority.

4.6 UKPMS Footway Network Survey

The following defects are used in the calculation of the Footway Condition Index and shall be subject to auditing. The Service Provider shall procure that the Independent Surveyor shall check the accuracy of the extent and severity of these defects on site based upon a sample of the Service Provider's Surveys as set out in Clause 27.15 of the Contract. The Service Provider shall procure that the Independent Surveyor shall obtain the appropriate surveyor accreditation certificates from the Service Provider and provide them to the Authority.

Footway Condition Category	Extent
As New	100%
Aesthetically Impaired	100%
Functionally Impaired	25%, 50%, 100%
Structurally unsound	25%, 50%, 100%
Kerb Deterioration	Length

TABLE 4.4 – DEFECTS & EXTENT CODES COLLECTED IN THE FNS

5 Audit Survey Results

5.1 Machine Surveys

The Service Provider shall procure that the Independent Surveyor shall undertake a desktop exercise to ensure that the machine Surveys (SCRIM, Griptester, SCANNER and Deflectograph) have been undertaken by the correct accredited Machine and within the correct Survey period. The following table states the items to be checked during audit. The Service Provider shall provide the Independent Surveyor with the whereabouts of the machine Surveys on a weekly basis, so that the Independent Surveyor can meet the machine operators to record the registration and the qualifications of the machine operator.

Audit Item	Discrepancy	Pass or Fail
Accreditation Certificate	Correctness of Date Range	PASS/FAIL
Accreditation Certificate	Correctness of Registration	PASS/FAIL
HMDIF	Correctness of Structure	PASS/FAIL
HMDIF	Correctness of Date Range	PASS/FAIL
Network Coverage	Has minimum coverage been achieved?	PASS/FAIL

TABLE 5.1 – ITEMS CHECKED DURING AUDIT OF MACHINE SURVEYS

5.2 Visual Surveys

The Independent Surveyor shall undertake a desktop exercise to ensure that the visual Surveys (CVI, Patching, Footway) have been undertaken by the correct accredited Surveyors within the correct Survey period. Prior to the site checks the Service Provider shall procure that the Independent Surveyor establishes which of the Service Provider's surveyors were surveying and what the weather conditions were like on the day of the Surveys. This information will be available from the HMDIF file which will contain the initials of the Service Provider's surveyor and the date the Survey was undertaken. The Service Provider shall procure that the Independent Surveyor requests an accreditation certificate and photo ID card for each Surveyor.

The Service Provider will provide the Independent Surveyor with the whereabouts of the visual Surveys on a weekly basis, so that the Independent Surveyor can meet the Surveyors to record their names and check against the photo ID which will ensure they have been accredited to undertake the Survey and if they haven't the Survey will be automatically rejected.

The Service Provider shall ensure that the Independent Surveyor obtains weather reports for the day of Survey from the internet, and the Service Provider shall procure that the Independent Surveyor includes a table containing this information in the audit report.

Knowing what the weather was like on the day of the Survey will allow for this to be taken into consideration during the audit, and the Service Provider shall procure that the Independent Surveyor takes this information into account as appropriate. An example of the table required is shown below in Table 5.2.

Road Section	Date inspected	Surveyor	Original Survey weather	Audit weather conditions
UU/010/123456/00	8/10/2010	JSW	Warm Sunny	Warm Sunny
UU/010/123456/05	7/10/2010	JSW	Drizzle Cloudy	Warm Sunny

TABLE 5.2 – TABLE SHOWING WEATHER CONDITIONS

The Service Provider shall procure that all audits are carried out in accordance with the provisions of the current version of the UKPMS Visual Survey Manual 2009, or the Sheffield Performance Model, dependent upon the Survey being audited and the provisions of Clause 27.

5.2.1 CVI Survey

Once the CVI Survey has passed the desktop exercise, the Service Provider shall ensure that it is subject to an on-site audit by the Independent Surveyor. The Service Provider shall procure that the Independent Surveyor shall audit CVI defects in line with the thresholds contained in Table 5.3 below. The Service Provider shall procure that every Sub-Section within an RSL is audited by the Independent Surveyor and is subject to a pass or fail. A Sub-Section can fail by any or all of the following discrepancies:

Sub-Section Discrepancy	Description	
Missing Defect - 1	If a defect has been observed in the audit but is not part of the data submission the Sub-Section has failed	And/Or
Missing Defect - 2	If a defect has been recorded within the data submission but cannot be observed within the audit then the Sub-Section has failed	And/Or
Incorrect value recorded against the defect	<p>If a defect has been observed correctly but the area/length is not within a 20% tolerance then the Sub-Section is deemed to have failed. Examples of the tolerance are set out below:</p> <p>Example of an Area Defect: Survey data states 40% of the Sub-Section area has this defect. In this instance, the 20% tolerance equates to +/- 8%, therefore the acceptable range for an audit result is 32 to 48%. If the Auditor observes the defect within this range then the Sub-Section passes, if the auditor observes the defect outside this range then the Sub-Section is deemed to have failed.</p> <p>Example of a Length Defect: Survey data states 50% of the Sub-Section length has failed. In this instance the 20% tolerance equates to +/- 10%, therefore the acceptable range for an audit result is 40 to 60%. If the Auditor observes the defect within this range then the Sub-Section passes, if the auditor observes the defect outside this range then the Sub-Section is deemed to have failed.</p>	

TABLE 5.3 – TABLE SHOWING AUDIT THRESHOLDS FOR CVI

The Service Provider shall procure that the Independent Surveyor calculates the number of individual Sub-Section failures over the full length of the RSL. These will then be compared to the tolerances set in table 5.4 below.

No. of failed Sub-Sections within 100m	% of 100m Length Failures within RSL	% of failed Sub-Sections within RSL
If two or more Sub-Sections have failed within a 100m length this equates to a 100m length failure	If the total length of the 100m Length Failures exceeds 20% of the RSL length then the RSL is deemed to have failed	If the total length of the Sub-Section Failures within an RSL exceeds 20% of the RSL length then the RSL is deemed to have failed

TABLE 5.4 – TABLE SHOWING SUB-SECTION TOLERANCE FOR CVI

The Service Provider shall procure that, if a Sub-Section fails based on the tolerances set out in Table 5.3, the Independent Surveyor makes a check against the number of Sub-Section failures within 100m, i.e. if 2 or more Sub-Sections have failed within a 100m length this equates to a 100m failure. If the total length of the 100m Length Failures exceeds 20% of the RSL length then the RSL is deemed to have failed. If the above criterion is not met then the Service Provider shall procure that the Independent Surveyor calculates the length of individual Sub-Section failures over the full length of the RSL and if the total length of the Sub-Section Failures within an RSL exceeds 20% of the RSL length then the then the RSL is deemed to have failed.

5.2.2 Patching Survey

Once the Patching Survey has passed the desktop exercise, the Service Provider shall ensure that it is subject to an on-site audit by the Independent Surveyor. The Service Provider shall procure that the Independent Surveyor shall audit patching defects in line with the thresholds contained in Table 5.5 below and that for every RSL subject to an audit, every Sub-Section within that RSL is audited and is subject to a pass or fail. A Sub-Section can fail by any or all of the following discrepancies:

Sub-Section Discrepancy	Description	
Missing Defect - 1	If a defect has been observed in the audit but is not part of the data submission the Sub-Section has failed	And/Or
Missing Defect - 2	If a defect has been recorded within the data submission but cannot be observed within the audit then the Sub-Section has failed	And/Or
Incorrect value recorded against the defect	<p>If a defect has been observed correctly but the area/length is not within a 20% tolerance then the Sub-Section is deemed to have failed. An example of the tolerance is set out below:</p> <p>Example of an Area Defect: Survey data states 70% of the Sub-Section area has Patching. In this instance the 20% tolerance equates to +/- 14%, therefore the acceptable range for an audit result is 56 to 84%. If the Auditor observes the defect within this range then the Sub-Section passes, if the auditor observes the defect outside this range then the Sub-Section is deemed to have failed.</p>	

TABLE 5.5 – TABLE SHOWING AUDIT THRESHOLDS FOR PATCHING SURVEY

The Service Provider shall procure that the Independent Surveyor calculates the number of individual Sub-Section failures over the full length of the RSL. These will then be compared to the tolerances set in table 5.6 below.

No. of failed Sub-Sections within 100m	% of 100m Length Failures within RSL	% of failed Sub-Sections within RSL
If two or more Sub-Sections have failed within a 100m length this equates to a 100m length failure	If the total length of the 100m Length Failures exceeds 20% of the RSL length then the RSL is deemed to have failed	If the total length of the Sub-Section Failures within an RSL exceeds 20% of the RSL length then the RSL is deemed to have failed

TABLE 5.6 – TABLE SHOWING SUB-SECTION TOLERANCE FOR PATCHING

The Service Provider shall procure that, if a Sub-Section fails based on the tolerances set out in Table 5.5, the Independent Surveyor makes a check against the number of Sub-Section failures within 100m, i.e. if 2 or more Sub-Sections have failed within 100m this equates to a 100m length failure. If the total length of the 100m Length Failures exceeds 20% of the RSL length then the RSL is deemed to have failed. If the above criterion is not met then the Service Provider shall procure that the Independent Surveyor calculates the number of individual Sub-Section failures over the full length and if the total length of the Sub-Section Failures within an RSL exceeds 20% of the RSL length then the then the RSL is deemed to have failed.

5.2.3 Footway Network Survey (FNS)

Once the FNS Survey has passed the desktop exercise, the Service Provider shall ensure that it is subject to an on-site audit by the Independent Surveyor. The Service Provider shall procure that the Independent Surveyor shall audit FNS defects in line with the thresholds contained in Table 5.7 below and that for every FSL subject to an audit, every Footway Sub-Section within that FSL is audited and is subject to a pass or fail. A Sub-Section can fail by any or all of the following discrepancies:

Sub-Section Discrepancy	Description	
Missing Defect - 1	If a defect has been observed in the audit but is not part of the data submission the Sub-Section is deemed to have failed	And/Or
Missing Defect - 2	If a defect has been recorded within the data submission but cannot be observed within the audit then the Sub-Section is deemed to have failed	And/Or
Incorrect value recorded against the defect	<p>If the defect has not been allocated the correct banding i.e. 25, 50 or 100% then the Sub-Section is deemed to have failed. An example of the tolerance is set out below:</p> <p>Area Defect: Survey data states 25% of the Sub-Section area is structurally unsound. If the Auditor observes the defect with the same extent i.e. 25% then the Sub-Section passes, if the auditor observes the defect at 50 or 100% then the Sub-Section is deemed to have failed.</p>	

TABLE 5.7 – TABLE SHOWING AUDIT THRESHOLDS FOR FNS

The Service Provider shall procure that the Independent Surveyor calculates the number of individual Sub-Section failures over the full length of the FSL. These will then be compared to the tolerances set in table 5.8 below.

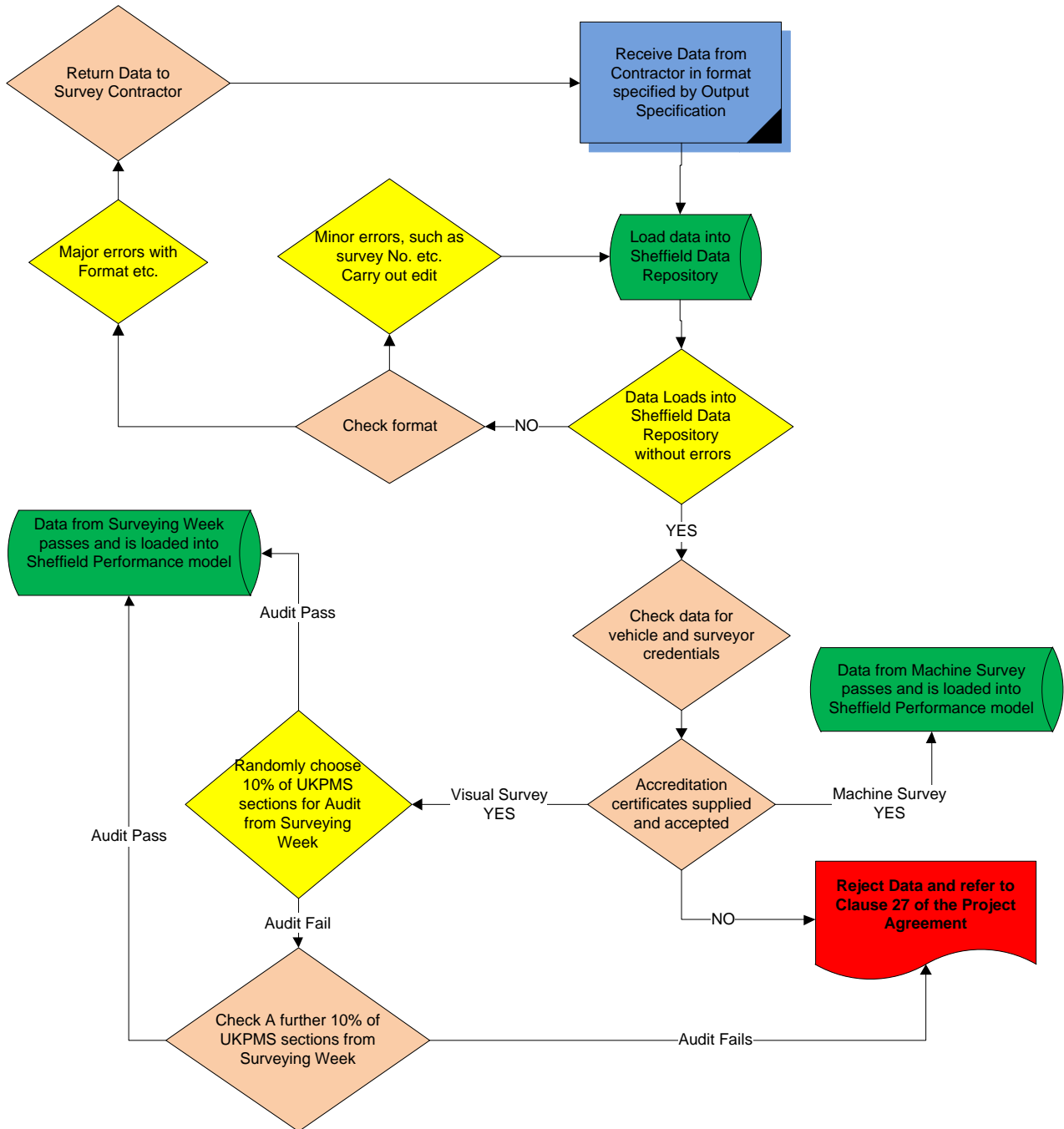
No. of failed Sub-Sections within 100m	% of 100m Length Failures within FSL	% of failed Sub-Sections within FSL
If the total length of Sub-Sections which have failed within a 100m length equates to 40m or more then this equates to a 100m Length Failure	If the total length of the 100m Length Failures exceeds 20% of the FSL length then the FSL is deemed to have failed	If the total length of the Sub-Section Failures within an FSL exceeds 20% of the FSL length then the FSL is deemed to have failed

TABLE 5.8 – TABLE SHOWING AUDIT THRESHOLDS FOR FNS

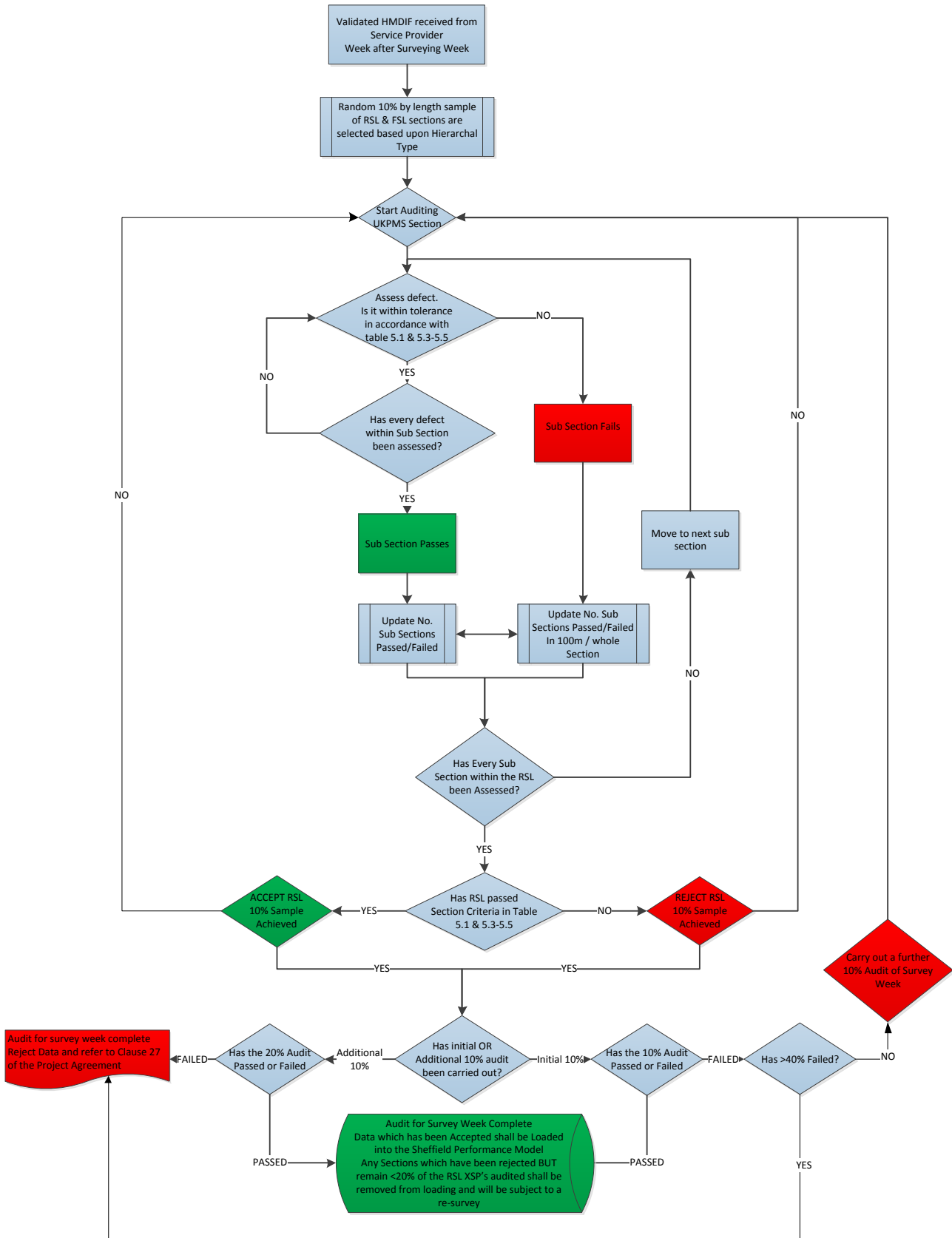
The Service Provider shall procure that, if a Sub Section fails based on the tolerances set out in Table 5.7, the Independent Surveyor makes a check against the length of Sub-Section failures within 100m ie if the length of the Sub-Sections which have failed is 40m or greater then this equates to a 100m length failure. If the total length of the 100m Length Failures exceeds 20% of the FSL length then the FSL is deemed to have failed. If the above criterion is not met then the Service Provider shall procure that the Independent Surveyor calculates the total length of individual Sub Section failures over the full length of

the FSL and if the total length of the Sub-Section failures within the FSL exceeds 20% of the FSL length, then the FSL is deemed to have failed.

5.3 The Assessment Process



5.4 Audit Survey Process update



6 Audit Report

The Service Provider shall procure that the Independent Surveyor shall produce an audit report for every Survey week for visual Surveys and for data received from Machine Surveys, in accordance with the reporting requirements set out in Clause 27.

The report will consist of:

1. Data File Names Received
2. Sections Surveyed within the data sets
3. Surveyors Initials and confirmation of their accreditation
4. Machines used and confirmation of their accreditation
5. Auditors name and confirmation of their accreditation
6. An Appendix containing On Site Audit Results see Table 6.1

Section: 0000A32020/00070		Survey Type: DVI		Survey Date: 23/10/2008		Inspector: JF		Weather Conditions:	
Section Length: 44		Audit Survey Date:		Auditor:		Audit Weather:			
Section Description: A3202 - BOROUGH ROAD - - (FROM ROUNDABOUT TO END) - SE1									
XSP	Start Chainage	End Chainage	Defect Code	Defect Type Description	Parameter	Value	Audit Value	Audit Comments	
CL1	0	20	BCRJ	Whole Carriageway Major Cracking	Area	0.5	0		
CL1	0	20	BLMS	Moderate Local Settlement/Subsidence	Area	1	0		
CR1	0	20	BCHJ	Whole Carriageway Major Chip Loss	Area	0.5	0		
L2	0	20	FBMS	Moderate Local Settlement/Subsidence	Area	0.5	0		

TABLE 6.1 – TABLE SHOWING ON SITE AUDIT RESULTS

7. A comment for each section audited i.e.
 - *The auditor has noted minor fretting in localised areas throughout the section and some transverse cracking at chainage 1050 – 1250. The inspector has recorded wheel track cracking, major fretting and transverse cracking throughout the section. The auditor understands why the contractor has recorded Major fretting but cannot explain why there is so much wheel track cracking and reflective cracking. Due to this the auditor has rejected this section.*
8. A table (see table 6.2) to simply show a rejection (X) or an acceptance (✓) of the RSL or FSL from the Desktop or On Site audit.

RSL or FSL	Survey Satisfactory	Comments
UU/010/1234567/00	X	See Results
UU/010/1234567/05	✓	See Results – some minor mistakes

TABLE 6.2 – TABLE SHOWING AUDIT RESULTS

9. If a section has failed or warnings exist across an RSL or FSL, the Service Provider shall procure that the Independent Surveyor includes within the report a Corrective Action Statement detailing why the RSL or FSL has warnings or failed.

From the data supplied by the Service Provider, the Independent Surveyor can reject a whole Survey week of a Survey type in accordance with the thresholds set out in Clause 27.