

OSAC 2023-N-0002 Standard for Scene Documentation Procedures

*Crime Scene Investigation and Reconstruction Subcommittee
Scene Examination Scientific Area Committee
Organization of Scientific Area Committees (OSAC) for Forensic Science*



Draft OSAC Proposed Standard

Standard for Scene Documentation Procedures

Prepared by
Crime Scene Investigation and Reconstruction Subcommittee
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1 **Foreword**

2 This document provides standards for scene documentation. Proper documentation procedures
3 ensure that the integrity of the documentation is maintained from the point of recording to the
4 presentation of the documentation or content therein at the time of judicial proceedings.

5 This standard should be utilized in conjunction with local laws and any requirements set forth by
6 forensic service providers documenting scenes to inform individual agency protocols relating to the
7 documentation of scenes. This document recommends generally accepted professional principles
8 and practices. This document does not cover all document types that may be utilized at a given scene.

9 This document has been drafted by the Crime Scene Investigation and Reconstruction Subcommittee
10 of the Organization of Scientific Area Committees (OSAC) for Forensic Science through a consensus
11 process.

12 All hyperlinks and web addresses shown in this document are current as of the publication date of
13 this standard.

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30 **Keywords:** crime scene investigation, documentation, record, notes, note taking, photography,
31 imaging, imagery, diagram, diagramming

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56 **1 Scope**

57 This document describes the minimum requirements for scene documentation regarding purpose,
58 considerations, and preservation. Documentation encompasses written or typed material,
59 imagery, and diagramming. The focus of this document will be on those methods as forms of
60 documentation.

61 **2 Normative References**

62 Organization of Scientific Area Committees (OSAC) for Forensic Science, Scene Investigation
63 Subcommittee. *Guiding Principles for Scene Investigation and Reconstruction* [OSAC Proposed
64 Standard], March 2020.

65

66 **3 Terms and Definitions**

67 For the purposes of this document, the following definitions apply.

68 **3.1**

69 **datum**

70 A reference point at a scene from which measurements are taken. (OSAC Lexicon)

71

72 **3.2**

73 **diagram**

74 two-dimensional representations of features found at the scene that are derived from measurements
75 or visual data collected by hand, electronically, or a combination of both.

76 **3.3**

77 **document**

78 information and the medium on which it is contained (e.g., specification, procedure document,
79 policy, instruction or form, drawing, record, note, report, standard, flowchart.) The medium can
80 be paper, magnetic, electronic or optical computer disc, photograph, or a combination thereof.
81 [SOURCE: ISO 9000:2015, modified]

82 **3.4**

83 **documentation (n)**

84 a set of documents, for example, specifications and records [SOURCE: ISO 9000:2015, modified]

85 **3.5**

86 **image**

87 an imitation or representation of a person or thing drawn, painted, or photographed. [SOURCE:
88 E2916-19e1]

89 **3.6**

90 **note**

91 see document (3.2)

92 **3.7**

93 **record**

94 see document (3.2)

95 **4 Documentation**

96 Scene documentation is an essential component of scene investigation and reconstruction, the
97 quality and completeness of which are critical to ensure a complete scene recording. All scenes
98 shall be documented using an established protocol even if it is determined that a scene is
99 unrelated to criminal activity (e.g., a natural death scene). Documentation can be created in
100 different formats (e.g., handwritten, typed, drawn, photographed, audio or video recorded,
101 electronically diagrammed, etc.) and provides a detailed record of observations, aids in report
102 writing, assists with testimony, and allows for independent review by others.

103 **4.1 Purpose**

104 4.1.1 Scene documentation as part of a scene investigation or reconstruction is a continuous
105 process in which the procedures, observations, actions, and aspects of the scene and
106 evidence are contemporaneously recorded

107 4.1.2 The purposes of scene documentation include:

- 108 a. To create a factual, fair, and accurate record of the actions, observations, and conditions
109 at a given scene using various documentation methods and technologies.
- 110 b. To provide the basis from which a report or scene reconstruction could be created from
111 the documentation alone.
- 112 c. To support all work, such that another practitioner could evaluate what was done and
113 understand the basis of the results.

114 **4.2 Considerations**

115 4.2.1 All facts in scene documentation are typically subject to questioning in legal settings.
116

117 4.2.2 The following considerations apply to scene documentation:

- 118 a. Case-related materials created or maintained as part of a scene investigation or
119 reconstruction shall be saved per agency retention policy. This documentation may
120 include but is not limited to the chain of custody, search warrants, case-related
121 paperwork, and crime scene logs.
- 122 b. Documentation may exist in many different forms besides written records, including
123 note-taking, imaging, and diagramming.

124 4.2.3 Handwritten documentation should be created using permanent ink, except when
125 conditions exist which may alter or destroy the contents of the documentation (e.g.,
126 rain causing ink to run or bleed or the use of pencil when labeling entomological
127 evidence) or creating a rough diagram.

128 4.2.4 The conditions shall be recorded when non-permanent methods are used due to adverse
129 conditions. Any non-permanent methods shall be made permanent per agency policy
130 (i.e., making a photocopy to create permanence).

131 4.2.5 The forensic science service provider shall be aware of applicable laws regulating the
132 manner, duration, and storage of documentation and should have policies that comply
133 with those measures.

134 **4.3 Minimum Requirements**

135 4.3.1 All persons tasked with documenting a scene investigation or reconstruction are
136 responsible for documentation applicable to their involvement with the investigation
137 or reconstruction.

138 4.3.2 Documentation that is part of a scene investigation or reconstruction shall contain the
139 following information, when applicable, to the event or the medium of recording:

- 140 a. Names of involved persons (e.g., suspects, victims, witnesses)
- 141 b. The scene's description and location include structures, boundaries, barriers, and
142 anything that could impact the physical or mechanical reconstruction of events.
- 143 c. Environmental conditions (e.g., weather, lighting conditions, temperature, odors).
- 144 d. Description and location of all collected evidence, including measurements.
- 145 e. Chain of custody information for all collected evidence.
- 146 f. The date(s) on which the work was conducted.
- 147 g. Identifying information for the individual(s) completing the action.
- 148 h. Arrival and departure time(s) on the scene and relevant tasks or assignments as
149 related to the scene.
- 150 i. Unique case or scene identifier.
- 151 j. Information that clarifies the completeness of a set of notes (e.g., page number or
152 another manner of identifying the start and end of a set of notes).

153 4.3.3 If abbreviations or symbols specific to the forensic science service provider are used,
154 the meaning of the abbreviations or symbols shall be defined either in agency policy or
155 contained within the documentation.

156 4.3.4 Agency-assigned testing equipment, calibrated instruments, and reagent tests,
157 including identifying information of the equipment, instrument, or reagent (e.g., lot
158 number, equipment identifier, etc.) used as part of the scene investigation or
159 reconstruction, shall be recorded.

160 4.3.5 Quality control tests performed, the result of the test and the lot number or identifying
161 number of the reagent shall be recorded.

162 **4.4 Preservation**

163 4.4.1 All documentation, regardless of type, recording format, or medium, created as part of
164 an investigation or reconstruction shall be maintained in either original, copy or
165 electronic form.

- 166 4.4.2 Documentation shall be retained according to the agency retention policy.
- 167 4.4.3 Alterations to original records shall be made without obliteration, and the change
168 readily available to the reader. The identity of the person (e.g., initials, name, signature)
169 making the change and the date shall be documented.

170 **5 Imaging**

171 **5.1 Purpose**

- 172 5.1.1 Imaging technology and techniques can be used to document a scene to generate a
173 visual product showing what was observed at the scene. The image should be a fair and
174 accurate representation of the subject or scene being memorialized. The photographer
175 may focus on certain relevant focal points, but capturing the item as a whole is equally
176 important so that those focal points may be put into context.
- 177 5.1.2 Images may be used to supplement minimum scene documentation requirements.
- 178 5.1.3 Technology, such as still cameras, scanning stations, and video recorders, can be used
179 to provide clear, accurate, high-quality images that document the condition of a scene,
180 including its immediate surroundings, evidence, actions, and persons related to an
181 investigation.

182 **5.2 Considerations**

- 183 5.2.1 The choice of imaging equipment shall be based on capturing images that meet or
184 exceed the requirements for their end uses.
- 185 5.2.2 Camera settings that record the date and time an image is captured shall be monitored
186 and adjusted for accuracy.
- 187 5.2.3 The sequence and methodology of capture should include long-range/overall, mid-
188 range, and close-up images. The choice of images shall aid the viewer in understanding
189 the identification or dimensions of items, spatial relationships, and orientation to the
190 scene and its contents.
- 191 5.2.4 Images can be of value for both evidentiary as well as documentation purposes, and the
192 choice of image composition, format, resolution, perspective, and quality is a result of
193 the intended purpose of the image.

194 **5.3 Minimum Requirements**

- 195 5.3.1 Information pertaining to imaging settings/parameters is typically captured in the
196 Exchangeable Image File Format (EXIF)/metadata. If the information is not captured,
197 it should be otherwise documented according to agency requirements.
- 198 5.3.2 The identity of the photographer shall be documented.
- 199 5.3.3 Any implements (e.g., filters, lenses, etc.) or methodologies should be documented.

200 **5.4 Preservation**

201 5.4.1 The operator should not delete original scene images. All photographs, including poor-
202 quality or unintended images, should remain part of the case file. (Standard Guide for
203 Crime Scene Photography, section 7, OSAC proposed)

204 5.4.2 Original scene images shall be stored and maintained to minimize damage, destruction,
205 or loss.

206 5.4.3 Actions shall be taken to preserve, copy, and archive images to maximize the security
207 and preservation of the original scene images.

208 5.4.4 Original scene images shall be copied and stored for archival purposes using methods
209 and devices that minimize any potential for alteration, destruction, or loss of the
210 images. Working copies of images may be created for other purposes beyond the scope
211 of documentation; handling of these copies is not within the scope of this document.

212 **6 Diagramming**

213 **6.1 Purpose**

214 6.1.1 Diagramming a scene involves representing environmental features such as structural
215 elements or topography within the scene in relation to the identified items of evidence
216 to create a permanent record and visual depiction of spatial relationships and
217 orientation of the documented items.

218 **6.2 Considerations**

219 6.2.1 The use of other terms such as sketch and drawing are used in different ways depending
220 on agency policy and may be used interchangeably with the term diagram.

221 6.2.2 The completion of final scene diagrams may not be required in some instances. The
222 decision to complete a final scene diagram will be determined by the investigator,
223 agency policy, and the scope of the investigation.

224 6.2.3 On-scene measurements are collected to give spatial meaning to diagrams.
225 Measurements can be collected manually or electronically (e.g., tape measures, total
226 stations, laser scanners).

227 6.2.4 Scene diagrams can be hand-drawn or computer-generated. Often, an initial draft is
228 created on-scene, and when necessary, a final diagram is later produced based on the
229 draft or electronically measured scene data.

230 6.2.5 Two-dimensional (2D) diagrams may be created from multiple planes if needed (e.g.,
231 plan view, elevation view, vertical surface view), as dictated by the circumstances of
232 the scene and the depiction required.

233 6.2.6 Equipment used to measure scenes can create dynamic 3D deliverable products.
234 Enhanced use of 3D data is subject to coverage in a separate standard of operation (e.g.,
235 point clouds, 3D models, etc.).

236 6.2.7 The minimum accuracy of each tool depends upon its application and intended use.
237 The final product shall meet the minimum admissibility requirements of a fair and
238 accurate scene representation.

239 6.2.7.1 Measuring equipment shall be capable of achieving the accuracy necessary
240 according to the intended purposes of the diagram. Minimum requirements for
241 traceability and calibration should be considered but are outside the scope of this
242 document.

243 6.2.8 All measurement tools and instruments shall be handled, transported, and stored in
244 accordance with the manufacturer's recommendations and in a manner to minimize
245 damage or alteration between uses.

246 6.2.9 Proper safety and decontamination procedures shall be employed before, during, and
247 following measurement devices.

248 **6.3 Minimum Requirements**

249 6.3.1 The minimum requirements for documentation are specified in 4.3.1 above; diagrams
250 shall also include:

- 251 a. A legend describing any symbols
- 252 b. A scale (if used) with a scale factor; "Not to Scale" if none used
- 253 c. Direction or orientation indicator, if applicable
- 254 d. Datum (if relevant) used for reference

255 **6.4 Preservation**

256 6.4.1 Measurements, diagrams, and data created as a result of the diagramming process shall
257 be copied into a working version, and the original shall be archived per agency policy.
258 Copies shall be made using methods and devices that minimize any potential for
259 alteration, destruction, or loss of the data.

260 6.4.2 Due to the nature of hand-drawn drafts, using non-permanent writing utensils (e.g.,
261 pencil) is acceptable. If non-permanent writing utensils are used during data collection,
262 the hand-drawn components should be made permanent via photocopy, photography,
263 or document scanning as soon as practicable.

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Annex A (informative) Bibliography

271 ASTM E1188-11 (2017) Collection and Preservation of Information and Physical Items by a
272 Technical Investigator.

273 ASTM E620-18 Standard Practice for Reporting Opinions of Scientific or Technical Experts.

274 ASTM E-678-07 Standard Practice for Evaluation of Scientific or Technical Data.

275 Standard Guide for Crime Scene Photography [VITAL Submitted to SDO]

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