SHERIFFDOM OF GLASGOW AND STRATHKELVIN AT GLASGOW

[2025] FAI 31

GLW-B1515-23

DETERMINATION

BY

SHERIFF S REID

UNDER THE INQUIRIES INTO FATAL ACCIDENTS AND SUDDEN DEATHS ETC (SCOTLAND) ACT 2016

into the death of

SHEA JOHN RYAN

Glasgow, 30 July 2025

The Sheriff, having considered the evidence presented at the Fatal Accident Inquiry,

Determines, in terms of section 26 of the Inquiries into Fatal Accidents and Sudden Deaths etc

(Scotland) Act 2016 (hereinafter referred to as "the 2016 Act"), as follows:

STATUTORY FINDINGS

- 1. In terms of sections 26(2)(a) & (b) of the 2016 Act, the time and place of the death, and of the accident resulting in the death, were as follows:
 - 1.1 Shea John Ryan (born on 22 February 2010) ("Shea") died as a result of an accident on Thursday 16 July 2020 between approximately 9pm and 10pm within an incomplete manhole (known as "MH 22") on a construction site (known as "the Garscadden Burn Outfall area" but referred to herein as "the Garscadden site") then in

the possession and control of RJ McLeod (Contractors) Limited ("RJM"), which construction site was located close to the Garscadden Burn and was bounded in part by Kinfauns Drive, and in part by a footpath connected to Glenkirk Drive, all in Drumchapel, Glasgow; and

- 1.2 Shea's life was formally pronounced extinct at 23.07pm on that date.
- 2. In terms of section 26(2)(c) of the 2016 Act, the cause of Shea's death was as follows:
 - 2.1 A head injury with drowning.
- 3. In terms of section 26(2)(d) of the 2016 Act, the causes of the accident resulting in Shea's death were as follows:
 - 3.1 A cause of the accident resulting in Shea's death was the action of Amey Black & Veatch ("ABV")¹ on or about 2 July 2020 in removing a heavy ballast bag full of building material (known as "Grano") from the top of MH 22, shortly prior to the temporary transfer of the Garscadden site to RJM on 3 July 2020.
 - 3.2 A cause of the accident resulting in Shea's death was the failure of ABV to cooperate better with RJM before and after the transfer of the Garscadden site to RJM, specifically:
 - 3.2.1 ABV's failure to disclose and communicate to RJM, prior to the temporary transfer of the site on 3 July 2020, ABV's accumulated knowledge of the general and specific risks associated with that construction site and its

¹ Amey Black & Veatch (referred to here as "ABV") is an unincorporated joint venture formed between Byzak Ltd (part of the Amey group of companies) and Binnies UK Ltd (formerly part of the Black & Veatch group of companies). It was formed to deliver a portfolio of projects for its client, Scottish Water. The joint venture was formerly known as ABV (an abbreviation of Amey

Black & Veatch) but is now known as Amey.Binnies.

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features, and of the precautionary measures identified by ABV to control those risks (specifically, ABV's knowledge of (i) the risk presented to children by MH 22 in its incomplete condition, and (ii) the precaution taken by ABV to control that risk (namely, the placing of a heavy ballast bag full of building material over the access hole to MH 22);

- 3.2.2 ABV's failure to disclose and communicate to RJM, prior to the temporary transfer of the site on 30 July 2020, ABV's accumulated knowledge of multiple incidents of vandalism to the ABV perimeter fencing in the vicinity of the play park and public footpath alongside the Garscadden site;
- 3.2.3 ABV's failure to disclose and communicate to RJM, prior to the temporary transfer of the site on 3 July 2020, ABV's accumulated knowledge of multiple incidents of unauthorised access (by children and others) onto the ABV construction site (of which the Garscadden site then formed part);
- 3.2.4 ABV's failure to disclose and communicate to RJM, after the temporary transfer of the site on 3 July 2020, ABV's knowledge of a further reported incident on 11 July 2020 of unauthorised access (by children) onto the ABV construction site (then located adjacent to the Garscadden site).
- 3.3 A cause of the accident resulting in Shea's death was the failure of RJM to take reasonable and sufficient measures to prevent unauthorised access, outwith operational hours at the construction site, to the inspection chamber of MH 22 either (a) by placing a heavy object (being not merely an unsecured metal lid) over the access hole to the inspection chamber of MH 22, so that the access hole was fully covered and the object

itself was of sufficient weight that it could not be moved other than with mechanical assistance; or, alternatively, (b) by erecting fully enclosed fencing around (and over) MH 22.

- 3.4 A cause of the accident resulting in Shea's death was the failure of RJM to take reasonable and sufficient measures:
 - 3.4.1 to assess the risk of unauthorised persons (especially children) gaining access to the Garscadden site;
 - 3.4.2 to inspect and maintain suitable perimeter fencing around the site to prevent unauthorised access thereto (in particular, unauthorised access by children); and
 - 3.4.3 to inspect MH 22 at the end of each working day, prior to the closure of the site, to check that the access hole to the inspection chamber of MH 22 was fully covered and was not accessible to children.
- 3.5 A cause of the accident resulting in Shea's death was the action of Shea in climbing into the open access hole to the inspection chamber of MH 22, seeking to descend the integrated ladder therein, slipping, losing his grip on the ladder, and falling a distance of approximately 5 to 6 metres into the chamber and onto a concrete platform and connecting water pipe beneath.
- 4. In terms of section 26(2)(e) of the 2016 Act, the following precautions could reasonably have been taken, and, had they been taken, they might realistically have resulted in the accident (and Shea's death) being avoided:

- 4.1 ABV could reasonably have prevented unauthorised access to the inspection chamber of MH 22 by not removing, on or about 2 July 2020, a heavy ballast bag full of building material (known as "Grano") from the top of MH 22, shortly prior to the temporary transfer of the Garscadden site to RJM on 3 July 2020; and, had ABV done so, the accident resulting in Shea's death might realistically have been avoided.
- 4.2 ABV could reasonably have cooperated better with RJM:
 - 4.2.1 by disclosing to RJM, prior to the temporary transfer of the Garscadden site to RJM on 3 July 2020, ABV's accumulated knowledge of the general and specific risks associated with the construction site and its features, and of the precautionary measures identified by ABV to control those risks (specifically, ABV's knowledge of (i) the risk presented to children by MH 22 in its incomplete condition, and (ii) the precaution taken by ABV to control that risk (namely, the placing of a heavy ballast bag full of building material over the access hole to MH 22);
 - 4.2.2 by disclosing to RJM, prior to the temporary transfer of the Garscadden site to RJM on 3 July 2020, ABV's accumulated knowledge of multiple incidents of vandalism to the ABV perimeter fencing in the vicinity of the play park and public footpath alongside the Garscadden site;
 - 4.2.3 by disclosing to RJM, prior to the temporary transfer of the Garscadden site to RJM on 3 July 2020, ABV's accumulated knowledge of multiple incidents of unauthorised access by children onto the ABV construction site (of which the Garscadden site then formed part);

4.2.4 by disclosing to RJM, after the temporary transfer of the site to RJM on 3 July 2020, ABV's knowledge of a further reported incident on 11 July 2020 of unauthorised access (by children) onto the ABV construction site (then located adjacent to the Garscadden site).

and, had ABV done so, the accident resulting in Shea's death might realistically have been avoided.

- 4.3 RJM could reasonably have prevented unauthorised access to the inspection chamber of MH 22, outwith operational hours at the construction site, either (a) by placing a heavy object (being not merely an unsecured metal lid) over the access hole to the inspection chamber of MH 22, in such a way that the access hole was fully covered and the object itself was of sufficient weight that it could not be moved other than with mechanical assistance; or, alternatively, (b) by erecting fully enclosed fencing around (and over) MH 22; and, had RJM done so, the accident resulting in Shea's death might realistically have been avoided.
- 4.4 RJM could reasonably have prevented unauthorised access to the inspection chamber of MH 22, outwith operational hours at the construction site, by inspecting MH 22 at the end of each working day, prior to the closure of the site, to check that the access hole to the inspection chamber of MH 22 was fully covered and was not accessible to children; and, had RJM done so, the accident resulting in Shea's death might realistically have been avoided.
- 4.5 RJM could reasonably have made the perimeter fencing around the Garscadden site more secure:-

- 4.5.1 by carrying out a proper assessment of the risk of unauthorised persons (especially children) gaining access to the Garscadden site, particularly in the vicinity of the adjacent playpark;
- 4.5.2 by erecting triangulated fencing along the perimeter fence line in the vicinity of the adjacent play park, to strengthen the perimeter fence line at that location;
- 4.5.3 by introducing recorded daily checks (including at the end of each working day, prior to closing the site) of the adequacy of the perimeter fencing in the vicinity of the adjacent play park, to ascertain (i) whether any fencing panels there were damaged or weakened; (ii) whether the fencing panels were tightly double-clipped together; (iii) whether any damaged or weakened fencing panels required to be replaced; and (iv) whether there were any breaches in the fence line that might afford the opportunity for unauthorised access to the construction site (especially by children);
- 4.5.4 by recording and monitoring instances of damage to, and breaches of, the perimeter fence line (especially by children, and especially in the vicinity of the play park adjacent to the Garscadden site), and of the repairs and replacements effected thereto, in order to better inform RJM's assessment of the risk of unauthorised access to the construction site;

and, had RJM done so, the accident resulting in Shea's death might realistically have been avoided.

- 5. In terms of section 26(2)(f) of the 2016 Act, the following defects in systems of working contributed to the accident resulting in Shea's death:
 - 5.1 There was no system of working in place within RJM for employees to record, document, report, and monitor (i) incidents of damage to the perimeter fencing around its construction sites (including the Garscadden site) or (ii) incidents of suspected unauthorised access to the construction sites (especially by children).
 - 5.2 There was no system of working in place within RJM whereby, outwith operational hours on its construction sites, unauthorised access to the inspection chamber of any incomplete manhole thereon was prevented either: (a) by placing an object (being not merely an unsecured metal lid) over the access hole to the inspection chamber of the manhole, so that the access hole was fully covered and the object itself was of sufficient weight that it could not be moved other than with mechanical assistance; or, alternatively (b) by erecting fully enclosed fencing around (and over) the incomplete manhole.
 - 5.3 There was no system of working within RJM whereby documented daily checks were carried out (specifically at the end of each working day, prior to closing the site) of the adequacy of the perimeter fencing, specifically to ascertain (i) whether any fencing panels were damaged or weakened; (ii) whether the fencing panels were tightly double-clipped together; (iii) whether any damaged or weakened fencing panels or clips required to be replaced; and (iv) whether there were any breaches in the fence line that might afford the opportunity for unauthorised access to the construction site (especially by children).

- 5.4 There was no system of working within RJM whereby documented daily checks were carried out (specifically at the end of each working day, prior to closing the construction site) to check that any incomplete manhole on the site was fully covered and was not accessible to children.
- 5.5 There was no system of working in place within ABV whereby, in advance of the transfer (temporary or otherwise) of any part of its construction site to a proximate principal contractor² ("the transferee"), ABV was prompted and compelled to cooperate with the transferee:
 - 5.5.1 by disclosing to the transferee ABV's knowledge of the general and specific risks associated with that construction site and its features, and of the precautionary measures identified by ABV to control those risks (especially, ABV's knowledge of (i) any risk presented to children by the site, and (ii) any precaution identified by ABV to control that risk);
 - 5.5.2 by disclosing to the transferee ABV's knowledge of any incident of damage to, or breach of, ABV's perimeter fencing (especially by children) in the vicinity of the site to be transferred.
- 5.6 There was no system of working in place within ABV whereby, after the transfer (temporary or otherwise) of any part of its construction site to a proximate principal contractor ("the transferee"), ABV was prompted and compelled to further cooperate

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² I use the term "proximate" a convenient shorthand to mean principal contractors working on or in relation to the same project, or on adjoining sites. This reflects the wording of the existing statutory duty of cooperation under Regulation 8(4) of the Construction (Design & Management) Regulations 2015.

with the transferee by disclosing timeously to the transferee ABV's knowledge of any further incident of damage to, or breach of, ABV's perimeter fencing (especially by children) in the vicinity of the transferred site.

6. In terms of section 26(2)(g) of the 2016 Act, the following "other facts" are relevant to the circumstances of the death:

The proximity of the play park to the site

- 6.1 Prior to construction work commencing at the ABV and RJM construction sites at Drumchapel, Glasgow City Council had expressly directed that the small play park located on the footpath (connecting to Glenkirk Drive) which ran alongside the perimeter fence line of the ABV construction site (latterly, the Garscadden site), must remain open and accessible to children throughout the construction works.
- out by or on behalf of Glasgow City Council of the risks presented to children by the proximity of the play park to the construction site; or of the risks associated with keeping the play park open and functional during the construction works; or of the feasibility or desirability of alternative options, such as the temporary dismantling, disabling, or relocation of the play park during the construction works.

COVID lockdown, school closures, and safety awareness visits

6.3 Prior to the national COVID lockdown in April 2020, it was the usual practice of RJM, in advance of commencing large construction projects of this nature, to visit local

schools to educate and alert children to the dangers of trespassing upon construction sites, and to discourage them from doing so.

6.4 However, as a consequence of the dislocation caused by the COVID lockdown in April 2020 (specifically, the closure of schools and subsequent disruption to school attendance), RJM was unable to implement this usual practice.

RECOMMENDATIONS

And, further, in terms of section 26(1)(b) of the 2016 Act, the Sheriff Makes the following recommendations:

Promoting the objective of protecting children

(1) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction (including HSG 150 "Health and Safety in Construction"; HSG 151 "Protecting the Public – Your Next Move"; and HSG L153 "Managing Health and Safety in Construction") generally to emphasise and to promote the objective of protecting children from the risks arising from construction sites; and specifically, without prejudice to the foregoing generality, to promote the taking of precautionary measures (i) to reduce the risk of children trespassing on a construction site, and (ii) to protect trespassing children from the particular risks presented to them by any incomplete manhole thereon.

Recording incidents of perimeter breaches (especially involving children)

(2) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction to include express provision for principal contractors to establish systems of working formally to record, document, report (both internally to suitable duty-holders, and to the employer/client), and monitor (i) all incidents of damage to perimeter fencing around the construction site, and the action taken to repair or replace such damaged fencing, and (ii) all incidents of suspected unauthorised access to the construction site (especially by children), and the action taken to prevent a recurrence thereof.

Preventing unauthorised access to incomplete manholes

(3) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction to include express provision that, outwith operational hours on construction sites, effective measures should be taken by principal contactors to prevent unauthorised access to the inspection chamber of any incomplete manhole thereon, either: (a) by placing an object (being not merely an unsecured metal lid) over the access hole to the inspection chamber of the manhole, so that the access hole is fully covered and the object itself is of sufficient weight that it cannot be moved other than with mechanical assistance; or, alternatively (b) by erecting fully enclosed fencing around (and over) the incomplete manhole.

Promoting the duty of cooperation between principal contractors

(4) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction generally to further promote the statutory duty upon proximate principal contractors to cooperate with each other to enable the fulfilment of their respective statutory duties under Regulation 8(4) of the Construction (Design and Management) Regulations 2015 ("the CDM Regulations 2015"); and, specifically, with a view to promoting the protection of children from the risks arising from construction sites.

Duty to share information

(5) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction to include express provision for cooperation between proximate principal contractors by promoting the establishment of systems of working to facilitate the routine and timely disclosure of information between such contractors concerning incidents (especially involving children) of (i) unauthorised access to construction sites or compounds, (ii) vandalism or damage to perimeter fencing, equipment, materials, or buildings on construction sites or compounds, (iii) theft from construction sites or compounds, or (iv) abusive or disorderly conduct by a member of the public towards any worker at such sites or compounds.

Transfer of construction sites: duty to share information

(6) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction to include express provision for greater cooperation between principal contractors in circumstances where possession and control of a construction site (or part thereof) is to be transferred (temporarily or otherwise) from one principal contractor ("the transferor") to another ("the transferee"); and, specifically, without prejudice to the foregoing generality, in the context of such site transfers, to include express provision for the timeous disclosure by the transferor to the transferee of the following information, so far as within the transferor's possession: (i) any identified risk of injury or death (to workers or to members of the public who may access the site, including children) arising from the construction site, or any feature thereof, or operation thereon; (ii) the precautionary measure(s) identified by the transferor to control that risk; (iii) any incident of unauthorised access (especially by children) to the site to be transferred or adjacent sites; (iv) any incident of vandalism or damage (especially by children) to perimeter fencing, equipment, materials, or buildings on the site to be transferred or adjacent sites; (v) any incident of theft from the site to be transferred adjacent sites; or (vi) any incident of abusive or disorderly conduct towards any worker by a member of the public at the site to be transferred or adjacent sites.

Children's play parks: increased risks

(7) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction to include express provision highlighting to principal contractors (i) the increased risk of damage to and breach of perimeter

fencing at construction sites in the vicinity of children's play parks; (ii) the resulting increased risk of children seeking to gain unauthorised access to such sites at such locations; (iii) the necessity to consider these increased risks in any risk assessment undertaken by the principal contractors in relation to the site; and (iv) the necessity, in the context of any such risk assessment, to consider taking enhanced precautionary measures, both around and within such sites, to control those increased risks.

Children's play parks: risk assessment by local authorities

(8) Glasgow City Council, and other Scottish local authorities, should review and consider revising their practices, procedures and policies to ensure that, in respect of any children's play park for which they have management responsibility and which is located in the vicinity of a construction site, a risk assessment is carried out by or on behalf of the local authority to determine the nature and extent of the risks, if any, presented to children by the nearby construction site; and specifically, without prejudice to the foregoing generality, to determine (i) whether suitable precautionary measures can be put in place and maintained (by the local authority or others) effectively to control those risks; (ii) whether the play park should remain open and functional during the construction works on the nearby site; or (iii) whether the play park should temporarily be dismantled, disabled, or relocated, pending completion of the construction works on the nearby site.

The inquiry (procedure and evidence)

- [1] This Determination is made following a fatal accident inquiry ("FAI") into the death of Shea John Ryan (referred to herein as "Shea").
- [2] Fatal accident inquiries are governed by the Inquiries in Fatal Accidents and Sudden Deaths etc., (Scotland) Act 2016 ("the 2016 Act") and the Act of Sederunt (Fatal Accident Inquiry Rules) 2017 ("the 2017 Rules"). The form of this Determination is itself prescribed by the 2017 Rules³ which stipulates the inclusion of certain minimum information.
- [3] An FAI can be either mandatory or discretionary, depending upon the circumstances of the fatality. For example, it is mandatory to convene an FAI into a death occurring while a person is in legal custody. This Inquiry is discretionary. It was convened because the Lord Advocate considered that Shea's death occurred in circumstances giving rise to serious public concern.4
- [4] On 10 October 2023, this Inquiry commenced, when the Procurator Fiscal at Glasgow, acting in the public interest, lodged a Notice of Inquiry at Glasgow Sheriff Court. A preliminary hearing⁵ was held on 24 November 2023 to determine further procedure.
- [5] Given the number of parties involved, further preliminary hearings were held on 27 February 2023 and 1 May 2024.
- [6] On that latter date, the Inquiry was assigned for a ten day evidential hearing within Glasgow Sheriff Court, commencing on 26 August 2024 and ending on 6 September 2024.

⁴ 2016 Act, section 4

³ 2017 Rules, rule 6.1

⁵ 2017 Rules, rule 3.8

- [7] In an effort to secure the expeditious progress of the Inquiry, in the interlocutor dated 1 May 2024, I ordained parties to lodge, in advance, signed witness statements of all persons who were to be called by them to give evidence at the Inquiry; and I ordered that the content of those signed statements would constitute the evidence-in-chief of the signatories thereto, subject to supplementary examination-in-chief, cross-examination and re-examination. In the event, regrettably, that Order was not implemented.
- [8] The Inquiry proceeded to hear oral testimony over ten days commencing on 26 August 2024. However, by 6 September 2024, the evidence was not concluded.
- [9] Therefore, the Inquiry was adjourned to a further five day diet (commencing on 18 November 2024) for further evidence and closing submissions to be heard.
- [10] On 22 November 2024, evidence having been concluded, a further hearing was assigned for 17 January 2025 for closing submissions to be heard. I also assigned a timetable for written submissions and supplementary submissions to be lodged in advance of that hearing.
- [11] On 17 January 2025, having considered the parties' written submissions, and having heard supplementary oral submissions, I reserved judgment.
- [12] In summary, therefore, the Inquiry heard evidence in Glasgow Sheriff Court over 15 days (from 26 to 30 August 2024; from 2 to 6 September 2024; and from 18 to 22 November 2024), with closing submissions (in written form, supplemented by oral submissions) being heard on one further day thereafter (on 17 January 2025).
- [13] The persons listed in Appendix A participated in the Inquiry.
- [14] The persons listed in Appendix B gave oral evidence at the Inquiry, either in person or remotely (by WebEx video conference call).

- [15] Affidavits (or in some cases signed statements) from the following witnesses were also tendered and, by agreement, were taken to comprise the whole (or a supplementary part) of their testimony to the Inquiry: (i) Joanne Ferguson, Shea's mother; (ii) Alex Gilmour; (iii) David McCafferty; (iv) Hishima Saidi; (v) Stuart Laurence; (vi) Graeme McMinn. These documents were available for inspection by the public throughout the Inquiry.
- [16] Two joint minutes of agreement were executed by all participants at the Inquiry. (The first joint minute was particularly lengthy and detailed. It represented the product of significant and commendable effort by the Crown and parties' agents to limit the scope of the evidence.)
- [17] Multiple inventories of productions were lodged by the Crown and parties.
- [18] The Crown also usefully prepared an inventory of the witness statements that had been provided to the police as part of their investigation into the accident.
- [19] All of the foregoing information was referred to at the Inquiry and was available to me in my findings and determination.
- [20] I wish to thank the parties' solicitors and counsel for their contributions to the Inquiry.
- [21] It is not necessary to summarise all of the evidence led in this case. To do so would be of limited value, particularly as much of the evidence was repetitive in nature and, in large part, not controversial. Where there was conflicting evidence on matters of importance, I have set out my assessment of that evidence below.

The legal framework

- [22] It is important to clarify, at the outset, the purpose of a fatal accident inquiry. It is defined and limited by statute. It is to (a) establish the circumstances of the death, and (b) consider what steps (if any) might be taken to prevent other deaths in similar circumstances.⁶
- [23] An FAI is inquisitorial in nature, not adversarial.⁷
- [24] It is not the purpose of the Inquiry to establish civil or criminal liability.
- [25] It is not the purpose of the Inquiry to attribute fault to individuals or institutions.
- [26] It is not the purpose of the Inquiry to seek to hold any person or institution "to account" for the death.
- [27] That said, if the evidence presented at an Inquiry does establish that a death arose due to fault on the part of an individual or entity, then a Determination should say so. Although such a finding cannot amount to a finding of civil or criminal liability, an Inquiry is not to be inhibited in the discharge of its functions by any sensitivity about liability being inferred from findings that it may reach or recommendations that it may make.
- [28] Lastly, this is not a public inquiry initiated (or converted) under the Inquiries Act 2005, where the terms of reference might have been more broadly stated.
- [29] So, the task of this Inquiry is, firstly, a fact-finding one, that is, to look back and determine why and how Shea died. Thereafter, it must attempt to look forward and consider whether anything can be learned from his death which might prevent other children from dying in similar circumstances.

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⁶ 2016 Act, sections 1(3) & 1(4)

⁷ 2017 Rules, Rule 2.2

- [30] The manner in which evidence is presented to an FAI is not restricted. Information may be presented in any manner, and the court is entitled to reach conclusions based on that information⁸. As noted above, I had the benefit of hearing extensive oral evidence, including evidence taken via live links, as well as receiving written evidence, such as witness statements, and numerous productions. I also had the benefit of two detailed joint minutes. While helpful in cutting down the length of the Inquiry and recording the agreed position of the participants, these joint minutes are not formally binding on me (in the sense that I am not bound to accept any or all of the facts contained within them, without qualification). An FAI which uncritically accepts a set of facts agreed by participants, some or all of whom may have an interest in avoiding judicial criticism in relation to a death, is likely to be no proper inquiry at all.
- [31] Having considered the evidence and submissions at an FAI, I am duty-bound⁹ to issue a Determination which contains findings on the following key issues:
 - (a) when and where the death occurred,
 - (b) when and where any accident resulting in the death occurred,
 - (c) the cause or causes of the death,
 - (d) the cause or causes of any accident resulting in the death,
 - (e) any precautions which (i) could reasonably have been taken, and (ii) had they been taken, might realistically have resulted in the death, or any accident resulting in the death, being avoided,

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⁸ 2017 Rules, Rule 4.1

⁹ 2016 Act, section 26

- (f) any defects in any system of working which contributed to the death or any accident resulting in the death,
- (g) any other facts which are relevant to the circumstances of the death.

 I am also obliged to include within my Determination such recommendations (if any) as I consider are appropriate in relation to the following matters:
 - (a) the taking of reasonable precautions,
 - (b) the making of improvements to any system of working,
 - (c) the introduction of a system of working,
 - (d) any other steps which might realistically prevent other deaths in similar circumstances.

Findings-in-fact

- [32] Having regard to the evidence presented to the Inquiry, I found the following facts to be admitted or proved:
 - (1) On 16 July 2020, Shea climbed part-way into, and then fell down, a large cylindrical concrete manhole (known as "MH 22") that was located on a construction site adjacent to Glenkirk Drive, Drumchapel, Glasgow.
 - (2) The manhole was incomplete at the date of Shea's death.

The two construction projects

(3) Two large construction projects were being undertaken in the vicinity of MH 22 around the time of Shea's death.

- (4) The first project was being undertaken by Scottish Water. It involved the upgrading of the sewer system, including the construction of sewer overflow chambers and manholes, with a view to alleviating the risk of flooding in the Drumchapel area.
- (5) In July 2019, Scottish Water appointed Amey Black & Veatch (referred to here as "ABV") as its principal contractor on the project.
- ABV is an unincorporated joint venture formed between Byzak Ltd (part of the Amey group of companies) and Binnies UK Ltd (formerly part of the Black & Veatch group of companies). The joint venture was formed specifically to deliver a portfolio of construction projects for its client, Scottish Water. ABV's head office is at ABV Pavilion 2/2, Buchanan Gate Business Park, Stepps, Glasgow G33 6FB. The joint venture is now known as "Amey.Binnies".
- (7) ASG Tunnelling and Engineering Services Ltd ("ASG") carries out heavy civil and tunnelling work. ASG was engaged by ABV as a sub-contractor in connection with the Scottish Water project.
- (8) Prime Secure Systems Ltd ("Prime") provides security services to the construction industry, including CCTV, security guards, mobile patrols, and alarm responses. Prime was engaged by ABV as a sub-contractor to provide security services as part of the Scottish Water project.
- (9) The second project was being undertaken by Glasgow City Council. It involved the construction of two flood storage areas, a flood storage basin and connecting pipework.

- (10) The Glasgow City Council project was located on a large area of open ground above a culverted section of the Garscadden Burn in Drumchapel, Glasgow, bounded to the north by the Scottish Water project, beyond which was Southdeen Avenue; bounded to the east by Kinfauns Drive; bounded to the south by Cloan Avenue; and bounded to the west by woodland, beyond which was Glenkirk Drive.
- (11) In February 2020, Glasgow City Council appointed RJ McLeod (Contractors) Ltd,2411 London Road, Glasgow G32 8XT ("RJM") as its principal contractor on the project.
- (12) The two projects were part of a wider programme of works (known as "The Metropolitan Glasgow Strategic Drainage Partnership City Deal"), which was aimed at reducing flood risk around the Garscadden Burn watercourse and on the sewer network in the Drumchapel area.
- (13) The projects proceeded largely independently, albeit at times with adjacent boundaries. But, on occasion, the two projects overlapped.
- (14) Shea's death on 16 July 2020 occurred at a point in time when the two projects happened to overlap.

The manhole ("MH 22")

- (15) The manhole known as "MH 22" was constructed as part of the Scottish Water project between 30 November 2019 and 19 December 2019. It was built by ASG, in its capacity as sub-contractor to ABV.
- (16) At the time of its construction, and up until 3 July 2020, MH 22 was located within the boundary of the ABV construction site.

- (17) By 19 December 2019, MH 22 was at an advanced stage of construction, but it was not yet complete.
- (18) As at 16 July 2020, MH 22 remained in an incomplete condition.
- (19) In that condition, MH 22 was comprised of three basic component elements, namely: (i) a vertical cylindrical concrete pipe, which stood about one meter above the surrounding ground; (ii) a horizontal concrete cover (known as the "biscuit"), which sat on top of the vertical cylindrical pipe; and (iii) a cast-iron lid (comprised of a metal frame incorporating a detachable metal grille within the frame), which sat on top of the concrete "biscuit" cover.
- (20) Image 1 (in Appendix C) is a photograph of MH 22 taken by Police Scotland on 17 July 2020, the day after Shea's death. It depicts each of the three component elements of the manhole.
- (21) The concrete "biscuit" cover of MH 22 had a square access hole in it, located off-centre. The square access hole was approximately 680 mm x 680 mm. This hole allowed access into the vertical cylindrical pipe (sometimes referred to as the "inspection chamber").
- (22) Inside the inspection chamber there is a yellow integrated ladder, attached to the inner wall of the pipe. The ladder descended to a concrete ledge. Below the concrete ledge there was another opening, which entered into a connecting horizontal pipe designed to carry flowing water.
- (23) The inspection chamber within MH 22 was approximately 5.5 metres deep, when measured from the access hole in the concrete biscuit to the concrete ledge below; and it

was approximately 6.5 metres deep, when measured from the access hole in the concrete biscuit to the flowing water within the connecting horizontal pipe.

- (24) The cast-iron lid (comprising the metal frame and detachable grille within it) is designed to be positioned directly over the square access hole in the concrete biscuit cover so as to fully cover that access hole and thereby prevent access to the inspection chamber.
- (25) The cast-iron lid has a total weight of between 74.8 kg and 82.5 kg.
- (26) The cast-iron lid is not capable of being moved manually by a child of ordinary strength, whether acting alone or in concert with other children.
- (27) However, it is capable of being moved manually by two adults of ordinary strength, by being pushed or slid across the surface of the concrete biscuit of an incomplete manhole.
- Image 2 (in Appendix C) is a photograph of MH 22 taken by Police Scotland on 17 July 2020, the day after Shea's death. The Image depicts the square access hole (now fully open) in the biscuit of MH 22, the yellow integrated ladder within the inspection chamber, the concrete ledge at the bottom of the ladder, and (beneath the ledge) a further opening to the connecting horizontal pipe, with water flowing through that horizontal pipe.
- (29) In order to complete the construction of a manhole, the cast-iron lid would require to be secured in place, usually by bolting it to the concrete biscuit. Thereafter, a layer (or layers) of bricks would be laid around the outside of the cast-iron lid; liquid concrete would be poured on and around the brick layer(s); the liquid concrete would

then be smoothed and sloped off, creating a "dome-like" finish, so that the smoothed, sloped concrete layer would be flush (level) with the top of the cast-iron lid. Once the concrete sets, the cast-iron lid cannot be moved or lifted.

(30) In that complete condition, the inspection chamber of the manhole is accessible only by lifting the detachable metal grille from within the frame of the cast-iron lid. This can be done manually, but only by means of a special lifting tool. This tool operates like a key: when inserted into the grille, it is turned to unlock the grille, and allows the grille to be lifted up and out of the frame.

The ABV site

- (31) ABV commenced work on the Scottish Water project in October 2019.
- (32) The initial boundary of the ABV work area was extended in October 2019, and again in February 2020, as work on the Scottish Water project progressed.

The RJM sites

- (33) RJM commenced work on the Glasgow City Council project in March 2020.
- (34) In contrast with the single ABV site under the Scottish Water project, the Glasgow City Council project, as it progressed, initially involved work by RJM on three distinct sites (in addition to the separate RJM site compound), all of which were spread across a large geographical area. These three RJM sites were known as (i) Bund A, (ii) Bund B, and (iii) Kinfauns Basin.

The temporary transfer of the Garscadden site (& MH 22) to RJM

- (35) On 3 July 2020, a fourth RJM site was created as part of the Glasgow City Council project.
- (36) This fourth RJM site was known as the Garscadden Burn Outfall area (and is referred to herein as "the Garscadden site"). It was created in order to allow RJM to install a 1,500 mm pipe on the area.
- (37) The boundaries of the ABV site and the four RJM work areas (now including the newly-formed Garscadden site), as well as the RJM site compound, as at 3 July 2020, are shown on Image 3 (in Appendix C). The boundaries of the four RJM sites (Bund A, Bund B, and Kinfauns Basin) and the RJM site compound are all delineated in green; the boundary of the new RJM Garscadden site is delineated in green and yellow. The Garscadden site is identified on this Image as "RJM-Garscadden Burn Outfall work area (Locus)".
- (38) All of the RJM work areas were located a considerable distance away from the RJM site compound.
- (39) Three points of significance should be noted about the Garscadden site.
- (40) In the first place, the Garscadden site had originally formed part of the ABV site. It was created on 3 July 2020 by ABV withdrawing its original perimeter fence line a short distance back (from the adjacent play park and public footpath) to create a new perimeter fence line (shown in yellow on Image 3) within its existing work area, in effect, thereby ceding part of its original site to RJM. In this way, the Garscadden site was transferred by ABV *temporarily* into the legal possession and control of RJM. The

intention of both ABV and RJM was that the Garscadden site would be returned to the possession and control of ABV as soon as RJM had completed its work in that area.

- (41) In the second place, the Garscadden site (as transferred temporarily to RJM on 3 July 2020) included within its boundary the incomplete manhole known as MH 22. MH 22 did not form part of the Glasgow City Council project; it did not form part of the work to be carried out by RJM in the site; it merely happened to be located within the area of ground ceded temporarily to RJM to create the Garscadden site.
- (42) In the third place, a children's play park was located directly adjacent to the outer perimeter fence of the Garscadden site and a public footpath; the outer perimeter fence of the Garscadden site ran alongside that public footpath; and the footpath connected to Glenkirk Drive. The play park consisted of three swings (within a blue metal frame) and a green metal slide. The swings in the play park, when extended, were so close to the perimeter fence that children were able to leap from them and kick the fence.
- (43) The location of this play park, and its proximity to the perimeter fence of the Garscadden site (and to MH 22), are depicted on Image 4 (in Appendix C). This Image was taken by Police Scotland on 18 July 2020, two days after Shea's death. On Image 4, an orange line indicates the distance between the play park and MH 22, being a distance of approximately 60 metres. The orange arrow on the right-hand side of the Image points to MH 22; the orange arrow on the left-hand side of the Image points to the play park.

- (44) While it remained open and functional, the play park attracted children and youths to meet and play there, unsupervised by adults.
- (45) Glasgow City Council, which maintained the play park, had expressly instructed that the play park should remain open throughout the construction works being carried out by RJM.
- out by or on behalf of Glasgow City Council of the risks presented to children by the proximity of the play park to the construction site; or of the risks associated with keeping the play park open and functional during the construction works; or of the feasibility or desirability of alternative options, such as the temporary dismantling, disabling, or relocation of the play park during the construction works
- (47) It was at this play park on the evening of 16 July 2020 that Shea gained access to the adjoining Garscadden site, through a breach in the perimeter fence there.

Security Measures: Fencing & CCTV

- (48) In relation to the Scottish Water project, between October 2019 and November 2019, ABV established its site compound adjacent to Kinfauns Drive, Drumchapel.
- (49) It erected a site perimeter fence around the ABV site compound, and its adjacent work area, using 2 metre high, round-topped "Heras" fence panels, double-clipped together, with rubber-weighted base blocks and warning signs.

- (50) In some areas, the perimeter fencing was fortified by clipping the fencing panels into a triangulated structure. Such a triangulated fencing arrangement has the effect of increasing the stability of a fence line at those points.
- (51) In October 2019, ABV engaged Prime Security Systems Ltd ("Prime") as a subcontractor to provide security services for the Scottish Water project.
- (52) Initially, Prime proposed to provide four static cameras at the ABV work area, but this was reduced to two static cameras due to difficulties with cabling routes.
- (53) On ABV's instructions, Prime erected a single CCTV tower at the ABV site compound. The CCTV was motion-activated and was monitored remotely by a subcontractor (Remote Watch), engaged by Prime to carry out that role. The CCTV monitoring included loudspeakers which could issue audible warnings to intruders that video-recording was ongoing and that the police would be contacted.
- (54) In deploying CCTV coverage at its site compound, ABV's primary objective was to protect the valuable plant, materials and cabins which were located there.
- (55) In the construction sector, it is common for CCTV coverage, as a security measure, to be confined to site compounds where valuable plant and equipment is stored.
- (56) Later, ABV instructed Prime to provide additional security services comprising mobile patrols and a static guard at the ABV site.
- (57) In relation to the Glasgow City Council project, on 2 March 2020, RJM established its site compound next to Drummore Primary School, Drumchapel. RJM employed a security guard and set up a CCTV tower at the compound.

- (58) Prior to commencing works at each of its four sites, RJM established a site perimeter fence around each site using industry-standard 2 metre high "Heras" fence panels which were double-clipped together.
- (59) From time to time, the perimeter fencing around the four sites was fortified, at certain points, by clipping the fencing panels into a triangulated structure.
- (60) Prior to Shea's death, no security guards were engaged, and no CCTV facilities were installed, by RJM at any of its four sites.
- (61) On 26 February 2020, prior to commencing any work, RJM had prepared a Construction Phase Plan. It also prepared risk assessments on 5 March 2020, 29 April 2020, 30 April 2020 and 23 June 2020. Each of the risk assessments identified certain hazards on RJM's sites including: (i) risks presented by manholes and excavations; and (ii) the risk of unauthorised access by members of the public. Each of these risk assessments identified fencing as a "control measure" to address the hazards.
- (62) On 6 July 2020, an additional risk assessment and method statement was prepared by RJM relating specifically to the Garscadden site. This latter risk assessment identified the proximity of the play park as a risk, and identified the use of Heras fencing as a suitable measure to segregate the play park from the work area.

Safety Measures: Incomplete Manholes

(63) On 24 March 2020, all work on the two construction projects ceased due to the UK-wide Covid-19 pandemic lockdown.

- (64) On this date, ABV produced a checklist of precautionary items to be implemented (by ASG) on the ABV site prior to ceasing work. The ABV checklist was entitled "Site shutdown to-do list". It included the following instructions to ASG: (i) to strengthen the Heras fence panels at various points around the ABV site (including by double-clipping panels, replacing broken or missing rubber feet, and triangulating the fencing panels at more locations); and (ii) to "weigh down lids" on incomplete manholes on the ABV site, including specifically MH 22.
- (65) On 24 March 2020, in compliance with ABV's instruction, ASG "weighed down" the metal lids on all incomplete manholes, including MH 22, within the ABV site. ASG did so by placing a large ballast bag¹¹¹ full of construction material (known as "Grano") on top of the (unbolted and unsecured) cast-iron lid on every incomplete manhole within the ABV site, including MH 22.
- (66) The (unbolted and unsecured) cast-iron lids, on which each ballast bag sat, were positioned fully over the access holes in the concrete biscuit lids on each manhole.
- (67) When full of material, the ballast bags could not be moved or lifted manually. Such ballast bags, when full, could only be moved or lifted with the aid of machinery.
- (68) By this device, as at 24 March 2020, unauthorised access to the incomplete manholes on the ABV site (including MH 22) was prevented.
- (69) The ballast bag full of construction material remained in position on top of the cast-iron lid on MH 22 from 24 March 2020 until 2 July 2020 (that is, until shortly prior to

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¹⁰ Such bags are also commonly referred to as "ton bags".

the transfer of the Garscadden site to RJM), when it was removed by ASG on ABV's instructions.

- (70) Prior to the lockdown of the ABV site on 24 March 2020, the weighing down of (unbolted and unsecured) cast-iron lids on incomplete manholes was not a standard precautionary measure adopted on the ABV site.
- (71) Within the construction industry, the weighing down of (unbolted and unsecured) cast-iron lids on incomplete manholes is not (and, at the date of Shea's death, was not) an unfamiliar or unusual or uncommon practice; but it is not (and, at the date of Shea's death, was not) a standard practice.
- (72) Within the construction industry, it is (and, at the date of Shea's death, was) widespread practice for the access hole in an incomplete manhole to be covered merely by positioning a cast-iron lid fully over the access hole, but without bolting, or "weighing down", or otherwise securing the lid to the concrete biscuit.
- (73) This widespread practice is predicated upon the logic that the cast-iron lid, though unsecured, is of sufficient weight, by itself, reasonably to prevent unauthorised access to the manhole chamber, except by the deliberate removal of the lid, either manually (an act which would ordinarily require conscious intervention by at least two adults of ordinary strength) or mechanically.
- (74) It was the usual practice of RJM, in advance of commencing large construction projects of this nature, to visit local schools and alert children to the dangers of trespassing upon construction sites and to discourage them from doing so.

(75) However, as a consequence of the dislocation caused by the COVID lockdown in April 2020, and the disruption to school attendance in the months thereafter, RJM was unable to make its usual arrangements to visit local schools to alert children to the dangers of trespassing upon construction sites and to discourage them from doing so.

The temporary transfer of the Garscadden Burn Outfall area to RJM

- (76) On 1 June 2020, following the easing of certain lockdown restrictions, RJM site managers returned to the Drumchapel construction sites in order to put in place controls to allow work to re-commence.
- (77) On 15 June 2020, RJM resumed work on the Glasgow City Council project.
- (78) On 22 June 2020, ABV resumed work on the Scottish Water project.
- (79) On 29 June 2020 RJM began to establish the Garscadden site.
- (80) On 2 July 2020, in preparation for the temporary handover of the Garscadden site to RJM, ABV instructed ASG to remove certain building materials from the area to be handed over, including the blue ballast positioned on top of MH 22.
- (81) On 2 July 2020, in compliance with ABV's instruction, ASG removed the blue ballast bag from the top of MH 22, leaving the (unbolted and unsecured) cast iron lid fully in place over the access hole to MH 22.
- (82) The blue ballast bag was removed because the construction material within it was believed to be required by ASG for work elsewhere on the ABV site.

- (83) On 3 July 2020, by agreement with ABV, and as confirmed in emails between RJM and ABV prior to 3 July 2020, RJM took temporary possession and control of the Garscadden site.
- (84) This transfer of control was achieved by ABV withdrawing its perimeter fencing to a line further within the ABV site.
- (85) MH 22 was located within the boundary of the Garscadden site, as transferred temporarily to RJM on 3 July 2020.
- (86) ABV did not notify RJM in advance of its intention to remove the ballast bag from the top of MH 22.
- (87) Nevertheless, shortly after taking possession of the site, RJM would have been aware of the fact that the ballast bag had been removed from the top of MH 22 and that the cast-iron lid was unbolted and unsecured to the concrete biscuit.
- (88) Between 3 and 16 July 2020, RJM did not replace the ballast bag on MH 22.
- (89) Between 3 and 16 July 2020, RJM did not take any other step to "weigh down", fasten, or secure the (unbolted and unsecured) cast-iron lid on top of MH 22.

Police Scotland's knowledge of perimeter fence breaches

- (90) From around May 2020, Police Scotland was aware of incidents of unauthorised access to the ABV and RJM construction sites.
- (91) Between 20 May 2020 and 13 July 2020, Police Scotland received several calls from concerned members of the public reporting incidents of unauthorised access to the construction sites.

- (92) Prior to 16 July 2020, Police Constable Bryan Courtney had attended at the sites on a number of occasions; he had caught children (including Shea) playing on the construction sites; he had warned the children (including Shea) of the dangers of the construction sites; and he had taken some children (including Shea) home to their families.
- (93) On other occasions, having received reports of intruders on the construction sites, officers of Police Scotland had attended but found that the suspected intruders had left. On such occasions, no further action was taken by Police Scotland.
- (94) The construction sites were included in daily briefings to police officers based in Drumchapel.
- (95) The construction sites were located on the daily patrol route of officers from the local police station.
- (96) Prior to Shea's death, Police Scotland had designated the ABV and RJM construction sites as requiring "extra attention". This categorisation involves a relatively low level of monitoring, whereby police officers are not specifically tasked to check the sites but, if an officer happens to be in the area of the sites, and is not otherwise engaged on other duties, the officer has a standing instruction (and would be expected) to stop and check the designated "extra attention" area. Such checks do not require to be recorded by the officer.
- (97) Other areas in the vicinity of the construction sites had also been categorised for "extra attention", including a nearby derelict building which attracted a lot of anti-social and criminal attention.

- (98) On 18 June 2020, Prime, in its capacity as ABV's security sub-contractor, emailed Police Scotland to advise that it was experiencing problems with intruders at the ABV site. Prime requested support from Police Scotland to address the problems.
- (99) No response was received by Prime from Police Scotland to that email request, though Police Scotland continued to monitor the sites as a designated "extra attention" area.

ABV's knowledge of vandalism to, and breaches of, the perimeter fencing

- (100) From an early stage of the Scottish Water project, ABV was also aware of damage being inflicted to, and of suspected breaches of, the perimeter fencing around the ABV site by groups of children.
- (101) Specifically, from May 2020 onwards ABV was aware that the outer perimeter fence line of the ABV work area (being the perimeter fence that ran alongside the play park and public footpath connecting to Glenkirk Drive) was the subject of repeated vandalism.
- (102) The vandalism, and the steps taken by ABV to fix and secure the fence line there and in other locations, were recorded in (a) the site diary of ABV's site manager, (b) emails by ABV's works manager reporting on weekly site inspections while the site was closed due to the Covid-19 lockdown, and (c) weekly internal reports (referred to as project safety health, environment and quality inspection reports).

- (103) On 21 May 2020, a mobile security guard employed by Prime visited the ABV site on three occasions due to reported incidents of breaches of the perimeter fence at the ABV site.
- (104) From 22 May 2020, Prime supplied a guard to the ABV site, from 11am to 11pm, seven days per week. This arrangement for the provision of a security guard remained in place until 29 June 2020.
- (105) Between 9 May 2020 and 16 June 2020, Prime alerted ABV to five separate incidents of unauthorised access at the ABV site. Several of the incidents were recorded on camera and monitored remotely. Each incident was timeously reported by Prime to ABV in contemporaneous written reports dated 9, 20 & 29 May 2020, and on 13 & 16 June 2020.
- (106) As regards the incident on 9 May 2020, at 9.02pm, four intruders, aged between 6 and 16 years, accessed the ABV site; they were monitored remotely by Prime staff; and Prime reported the incident to the police.
- (107) As regards the incident on 20 May 2020, at 8.04pm, a group of youths accessed the ABV site; they were monitored remotely by Prime staff; an audio warning was activated remotely; and the youths were observed to run off the site. On Prime's instruction, a mobile guard attended to check the site perimeter; the mobile guard reported that 10 Heras fence panels were "down at the swing park side" of the ABV site; the guard was unable to lift them back into place alone; and no further escalation was instructed.

- (108) As regards the incident on 29 May 2020, at 10.23pm, a Prime mobile guard was instructed to attend the ABV site following receipt of a report of a fire close to the site. On attending, the Prime guard discovered that children had set fire to a plastic drum about six feet outside the ABV perimeter fence. The children were still "hanging around" when the guard arrived, but were encouraged to leave.
- (109) As regards the incident on 13 June 2020, at 8.08pm, three young children accessed the ABV site; further children were standing outside the perimeter fence; the three intruders were monitored remotely by Prime staff; the children climbed onto diggers parked on the site; one child struck the ground with a piece of wood; an audio warning was activated remotely; the children left the site; and Prime reported the incident to the police.
- children (aged between 5 and 13 years), comprised of both boys and girls, attacked the Prime security guard at the ABV site, threw stones at him, called him "monkey", and tried to set fire to his jacket with lighters. The guard was unhurt but felt shaken. In response to this incident, Prime sent an email dated 18 June 2020 to Police Scotland advising that problems were being experienced with intruders at the ABV site and requesting that Police Scotland provide extra attention to the site to help prevent further unauthorised trespasses there. No response was received by Prime to that email.
- (111) On 11 July 2020 (that is, after the Garscadden site had been transferred to RJM), at 8.55pm, Prime received a report from a member of the public that children had accessed the Garscadden site, that there was damage to the fencing panels "next to the

swings", and that water was leaking from pipes causing pools to form around the area. Prime instructed a guard to carry out a perimeter check. Prime duly reported the incident to ABV. On 13 July 2020, ABV's Project Manager, Mark Macdonald, replied by email to Prime, observing that the incident had not occurred on ABV's site, but had instead occurred on the adjacent Garscadden site then controlled by RJM. No further action was taken by ABV.

- (112) Prior to Shea's death, none of the foregoing information was communicated by ABV to RJM.
- (113) If RJM had been aware of these multiple incidents of unauthorised access, RJM would have taken additional measures to secure the perimeter fencing of the Garscadden site, including the installation of triangulated fencing, double-fencing, and the use of metal stays to secure panels.

RJM's knowledge of breaches of its perimeter fencing

- (114) From April/May 2020, RJM was aware of repeated breaches of, and damage to, its perimeter fencing at Bund A and Bund B.
- (115) RJM experienced a particular difficulty at Bund A because the perimeter fence there had blocked a popular public pathway. Incidents of damage to the fence, incidents of deliberate movement of the fence panels, and incidents of unauthorised access to this site, were frequent, as members of the public sought to evade the blockage of the pathway.

- (116) RJM responded to repeated incidents of damage and trespass at Bund A and Bund B by implementing additional security measures in those areas, including (i) the use of triangulated fencing at points along the perimeter lines of Bunds A & B, and (ii) inserting metal or timber "stays" into the ground to make it more difficult for the fence panels there to be pushed over.
- (117) At the Garscadden site, from 3 July 2020 onwards, damage to the perimeter fencing was frequently discovered, often on a daily basis. Sometimes the damage comprised loose, broken or missing clips (which were used to attach fence panels together); sometimes, the damage comprised burst panel mesh, bent or broken piping connected to the rubber feet, or displaced panels; sometimes, entire sections of the fence panels were found to have been pushed or blown flat onto the ground.
- (118) A squad of RJM labourers was assigned to inspect, every day, the entire perimeter fence line at each of the four RJM sites, to identify damaged or breached fencing, and to repair or replace it, as appropriate.
- (119) In addition, each individual squad of labourers at each RJM site was assigned, each morning, at the commencement of their shift, to check the perimeter fence at that particular site, to identify damaged or breached fencing, and to repair or replace it, if possible.
- (120) On 25 June 2020, the topic of site security was discussed during a daily briefing delivered by the site foreman to RJM workers and contractors.
- (121) On 7 July 2020, a Volvo excavator was vandalised by an unknown third party who had gained access to the Garscadden site. The windows of the excavator were

smashed, a camera was stolen, and the driver's gloves were stolen. RJM's foreman, Kevin Keast, became aware of this particular incident and made a contemporaneous note of it in his site diary.

- (122) On 10 July 2020, the topic of fencing repairs was discussed during a "tool box talk" delivered by the site foreman to RJM workers and contractors.
- (123) Prior to 16 July 2020, triangulated fencing was erected by RJM at certain points along the perimeter fence line of the Garscadden site (namely, on part of the perimeter fence line running alongside the public footpath leading towards the play park, when approaching the play park from the east); but no such triangulated fencing was erected at, or in the vicinity of, the play park itself.
- (124) Prior to 16 July 2020, no formal system of recording, reporting or monitoring such incidents of damage to or breach of the perimeter fencing (or of repairs or replacements thereto) was maintained by RJM.
- (125) The RJM site foreman, Kevin Keast, occasionally noted instances of perimeter fence damage in his site diary, if he became aware of them.

The knowledge of Scottish Water and Glasgow City Council

- (126) Between October 2019 and 15 July 2020, Scottish Water was not advised by ABV of the repeated incidents of damage to, or breaches of, the perimeter fencing around the ABV site or compound.
- (127) On 15 July 2020 (the day before Shea's death), during a health & safety visit to the ABV site by representatives of Scottish Water, Scottish Water's Health & Safety

Advisor was informed by ABV that there had been issues with children trespassing on the ABV work site and compound during the Covid-19 lockdown, but that these issues had been addressed by ABV engaging a security guard at the site during lockdown. No ongoing issues had been reported by ABV to Scottish Water.

- (128) Glasgow City Council was also unaware of the repeated incidents of damage to, and breaches of, the perimeter fencing around the RJM sites.
- (129) In order to monitor the progress of the works (including arrangements in place for managing health and safety risks on site), Glasgow City Council obtained progress reports from RJM and held progress meetings with representatives of RJM and others.

 (130) On 3 April 2020, RJM sent Glasgow City Council a progress report covering the period from 2 March 2020 to 30 March 2020; the first progress meeting took place on 8 April 2020 at which the report was discussed; it was noted within the minutes of the progress meeting that RJM had secured the site and maintained security of the site while it was closed due to the pandemic lockdown; and the progress report did not identify any instances of unauthorised site access at the RJM sites during the period covered by
- (131) On 1 May 2020, RJM sent to Glasgow City Council a second progress report covering the period from 30 March 2020 to 1 May 2020; a second progress meeting took place on 6 May 2020 attended by representatives of the Council, RJM and others at which the second report was discussed; the minutes of the progress meeting record that RJM had secured the site and were maintaining security at them while they were closed, and were undertaking safety reviews of the closed sites; and the progress report, again,

the report.

did not identify any instances of unauthorised site access at the RJM sites during the period covered by the second progress report.

- (132) On 29 May 2020, RJM sent to Glasgow City Council a third progress report covering the period from 1 May 2020 to 29 May 2020; a third progress meeting took place on 3 June 2020 attended by representatives of the Council, RJM and others at which the third progress report was discussed; and the progress report, again, did not identify any instances of unauthorised site access at the RJM sites during the period covered by the third progress report.
- (133) On 29 June 2020, RJM sent to Glasgow City Council a fourth progress report covering the period from 1 June 2020 to 26 June 2020; a fourth progress meeting was held on 1 July 2020 attended by representatives of the Council, RJM and others at which the fourth progress report was discussed; and the progress report, again, did not identify any instances of unauthorised site access at the RJM sites during the period covered by the progress report.

RJM's involvement with the manhole

- (134) On 3 July 2020, RJM took possession and control of the Garscadden site (which included MH 22).
- (135) On or about 6 July 2020, RJM authorised its labourers to commence excavation works at the Garscadden site.
- (136) About a week before Shea's death, RJM's foreman (Kevin Keast) and the site ganger (Darren Kay) attended at MH 22.

- (137) Mr Keast and Mr Kay manually moved the cast-iron lid on MH 22 that had, until then, been fully covering the access hole to the inspection chamber of MH 22.
- (138) By so moving the cast-iron lid, Mr Keast and Mr Kay exposed the access hole to the inspection chamber of MH 22.
- (139) They moved the cast-iron lid in this manner: Mr Keast pushed one side of the lid, and Mr Kay pulled at the opposite end, and, working together, they slid the cast-iron lid over the surface of the concrete biscuit so that the access hole was uncovered, and the inspection chamber was exposed and accessible.
- (140) Mr Keast and Mr Kay moved the cast-iron lid in order that Mr Keast could look into the manhole (i) to gauge its depth and the general direction of the existing horizontal pipe at the bottom of the manhole (as constructed by ABV), and (ii) to determine whether that existing ABV horizontal pipe was liable to interfere (or "conflict") with the proposed RJM excavation and the line of pipework to be installed by RJM.
- (141) The action of Mr Keast and Mr Kay in looking into MH 22 to carry out a general visual check of the depth and direction of the existing pipework was common practice, prior to commencing the proposed RJM excavation.
- (142) RJM's surveyed plans for its proposed excavation and new pipework indicated that the proposed line of the RJM pipework crossed directly over the line of the existing ABV pipework connected to MH 22, but at a significantly different (shallower) depth to that of the existing ABV infrastructure.

- (143) Having carried out that visual inspection, Mr Keast satisfied himself that there would be no "conflict" or interference between RJM's proposed excavation and the existing ABV infrastructure connected to MH 22.
- (144) However, Mr Keast and Mr Kay failed fully to restore the cast-iron lid back to its original position covering the access hole on MH 22.
- (145) As a result of this failure, the access hole to the inspection chamber of MH 22 remained partially uncovered (being more open than not) for about one week, until 16 July 2020.
- (146) Throughout the period from 3 July 2020 to 16 July 2020, the cast-iron lid on MH 22 was not weighed down with any other object, such as a ballast bag or steel plate.
- (147) Throughout the period from 3 July 2020 to 16 July 2020, no regular or sufficient checks were carried out by RJM to ascertain whether the access hole on MH 22 was fully covered by the cast-iron lid; and, in particular, no such checks were carried out by RJM at the end of each working day prior to the closure of the site.
- (148) Throughout the period from 3 July 2020 to 16 July 2020, the Garscadden site (including MH 22) was under the exclusive management and control of RJM.

The accident

(149) On the night of 16 July 2020, Shea and four other children were playing at the play park adjacent to the Garscadden site. ¹¹

¹¹ The following findings (including some of the cited dialogue) derive in large part from the compelling statements of the children who accompanied Shea onto the site: Leah McCafferty, Rennagh Ryan & Alfie McCafferty (Crown Productions 68, 69 & 70)

- (150) The four other children were Shea's big sister (Rennagh Ryan, who was then 12 years old), Shea's little brother (Kyle Paterson, who was then 7 years old), and their friends, Leah McCafferty (who was then 12 years old) and Leah's little brother, Alfie McCafferty.
- (151) At approximately 9pm, the children gained access to the Garscadden site through a breach in the perimeter fencing adjacent to the play park there. ¹²
- (152) Initially, the children played in the sand within the construction site. Shea then approached MH 22, which was located a distance of approximately 60 metres from the play park. The other children followed him.
- (153) As Shea approached MH 22, the cast-iron lid that was sitting on top of the concrete biscuit was so positioned that it only partially covered the access hole to the inspection chamber of MH 22.
- (154) As a result, the inspection chamber of MH 22 was exposed and readily accessible.
- (155) For a short time, the children threw stones into the open access hole.
- (156) Shea then sat on the edge of the open access hole. He said that he wanted to climb down inside the manhole. His friend, Alfie, wanted to follow Shea into the manhole.
- (157) The two older girls, Rennagh and Leah, remonstrated with Shea and Alfie. They warned the boys not to go into the manhole.

¹² Leah McCafferty described it as a "big hole" that had been "ripped" in the fence. Later that night, after the accident, Leah led Shea's mother into the site through the same breach in the perimeter fence.

- (158) Leah took Alfie's hand to stop him going into the manhole.
- (159) Shea then said to Leah:
 - "Leah, you'll need to stop shouting at Alfie because Alfie's a boy, right, and he can do what he wants. Boys are boys."
- (160) The two girls continued to protest. They kept telling Shea not to go down the manhole.
- (161) Shea rejected their concerns. He said to Leah:"Leah, just fuck up, because you're not letting Alfie be a wee boy."
- (162) Shea then climbed down through the access hole of MH 22. He began to descend into the inspection chamber using the integrated ladder. The other children watched him.
- (163) When his head was still just visible at the top of the ladder, he slipped, lost his grip, and fell into the manhole, striking his head as he fell, and disappearing out of sight into the darkness of the chamber. The children heard a splash of water.
- (164) For a few moments after he fell, the other children shouted down into the inspection chamber for Shea, but there was no response. Then they ran from the construction site to raise the alarm and seek assistance.
- (165) Sometime later, alerted and directed by the other children, Graeme Paterson, Shea's stepfather, arrived on foot at MH 22. He was joined there shortly afterwards by a neighbour called Jamie Adams.
- (166) Mr Paterson was distressed. He stood on top of the concrete biscuit of MH 22 shouting: "My boy. My boy".

- (167) In an effort to find Shea, Mr Paterson climbed through the open access hole of MH 22 and descended into the inspection chamber, followed by Mr Adams. At the foot of the integrated ladder, they both stood on the concrete ledge located at the bottom of the inspection chamber within the manhole. The chamber was in darkness. Mr Adams used a torch on his mobile phone to provide some light. There was no sign of Shea within the inspection chamber.
- (168) Mr Paterson then stepped off the concrete ledge into the flowing water in the connecting horizontal pipe at the bottom of the manhole.
- (169) He knelt down, lay on his stomach, and manoeuvred himself into the horizontal pipe.
- (170) Now lying prostrate within the horizontal pipe, partly submerged by the flowing water, with Mr Adams holding tightly onto Mr Paterson's ankles to prevent him being carried away by the current, Mr Paterson stretched his arms along the horizontal pipe in an effort to locate Shea.
- (171) In this way, Mr Paterson managed to find Shea lying a short distance along the horizontal pipe, partly submerged by the water.
- (172) With Mr Adams' assistance, Mr Paterson pulled Shea out of the horizontal pipe.

 The two men laid him on the concrete ledge at the bottom of the inspection chamber.
- (173) Shea was unconscious and unresponsive.
- (174) The men attempted to resuscitate him, but without success.
- (175) At around 9.57pm, Police Constable Bryan Courtney and Police Constable Holly McConnachie, along with other police officers, were instructed to attend the

construction site following the broadcast of an emergency police call that a boy was "in the burn".

- (176) A short time later, Constables Courtney and McConnachie arrived at MH 22, directed there by concerned members of the public.
- (177) With the assistance of a torch, the police officers looked down inside the manhole. They saw Shea lying on his back on the concrete ledge at the bottom of the chamber. Mr Paterson and Mr Adams were beside him. The men shouted up for help.
- (178) Constable Courtney descended the ladder into MH 22.
- (179) At the bottom of the manhole, Constable Courtney observed that Shea had a severe injury to his forehead, was cold to touch, and was not breathing.
- (180) Constable Courtney then picked Shea up, placed him on his shoulder, and carried him up the ladder to the surface of the manhole, where he laid him down on the concrete biscuit cover.
- (181) There, Constable Courtney and Constable McConnachie (latterly, with assistance from Constable Nigel McDonald) attempted, in rotation, to resuscitate Shea, but to no avail.
- (182) The Scottish Fire & Rescue Service arrived, followed by the Scottish Ambulance Service. They had breached the fence line of the Garscadden site in order to provide emergency medical support. They took over attempts to resuscitate Shea using specialist equipment, including oxygen and debrillator pads, but to no avail.

(183) By this stage, Shea's mother, Joanne Ferguson, had arrived at the construction site, having been alerted by others to the unfolding tragedy there. She called to Constable McConnachie, whom she knew:

"My boy. Please save my boy. Promise me you're going to save my boy."

- (184) Constable McConnachie sought to comfort Ms Ferguson by embracing her, and turning her to face away from the direction of the manhole on which her child was now lying, attended by emergency personnel.
- (185) Distraught and in shock, Ms Ferguson collapsed onto a heap of soil, and vomited.
- (186) Shea was then conveyed by ambulance to the Royal Hospital for Sick Children, Glasgow. There, Dr Gillian Campbell, a paediatric registrar, attempted resuscitation, but to no avail.
- (187) At 11.07pm on 16 July 2020, Dr Gillian Campbell pronounced Shea's life to be extinct.
- (188) A post-mortem examination was carried out.
- (189) In the post-mortem report dated 23 July 2020, the cause of Shea's death was formally recorded as a head injury with drowning.

Action taken by RJM and ABV following Shea's death

(190) On the instruction of the Health and Safety Executive ("HSE"), the following measures were taken by RJM after the accident on 16 July 2020:

- a. New risk assessments were carried out by RJM at each of the four RJM sites and site compound;
- b. Double-lined fencing, and increased triangulated fencing, was erected at each of the RJM sites;
- A system of formal written reporting was introduced of daily and weekend perimeter fence checks, with all damage being logged and reported for review;
- d. CCTV was installed to cover the entire perimeter fence line across all four
 RJM sites;
- e. Motion sensors were installed to cover the entire perimeter fence line across all four RJM sites; and
- f. The cast-iron lids on all incomplete manholes on the sites were weighed down by ballast bags filled with building material, and subjected to regular checks.

These enhanced measures were implemented to take account of the risk presented by RJM's construction works in the vicinity of areas where children (and other members of the public) were likely to congregate.

- (191) On the instruction of the HSE, the following measures were taken by ABV after the accident on 16 July 2020:
 - a. On 17 July 2022, an ABV work squad was instructed to carry out remedial work to the perimeter fence around the ABV site;

- b. Prime was instructed to conduct two mobile controls each day of the ABV perimeter fence line and to submit reports to ABV;
- A review was instructed to determine how regular fence line inspections were recorded;
- d. Following the re-opening of the ABV construction site on 3 August 2020, Prime was instructed to provide a security guard at the ABV site, outside of normal site working hours, to ensure unauthorised access was recorded and reported.
- (192) In addition, after the accident, ABV introduced a new system of working whereby, in circumstances where the whole or any part of an ABV site was to be transferred to a third party principal contractor ("the transferee"), ABV would collate information in its possession pertaining *inter alia* to site security, and communicate that information to the transferee. This new system of working was identified by ABV as a "Temporary Handover Access Safety Plan" (or, by its abbreviation, "THASP").

The HSE investigation

- (193) The HSE appointed a specialist Inspector of Health & Safety to investigate and report on the circumstances of Shea's death.
- (194) Following its investigation, the HSE reached the following conclusions (regarding RJM):
 - a. That RJM had failed to undertake a suitable and sufficient assessment of the Garscadden site, specifically, by failing to consider its proximity to the

nearby play park and the associated risk of children being attracted to the construction site;

- b. That RJM had failed to identify measures required to prevent such unauthorised access;
- c. That the measures taken by RJM to control the risk of unauthorised access by children to the construction site there (given the proximity of the play park) were inadequate; and
- d. That RJM had failed adequately to keep existing control measures under review.
- (195) The HSE also reached the following conclusions (regarding ABV):
 - a. That, whilst there were good communications between ABV and RJM about the temporary transfer of the Garscadden site to RJM, inadequate information was provided by ABV to RJM about the perimeter fence security breaches that ABV had experienced prior to the temporary transfer on 3 July 2020; and
 - b. That the further incident of unauthorised access at the ABV construction site on 11 July 2020 (as described in the Prime report to ABV of the same date) was directly relevant to the performance of RJM's statutory duties at the Garscadden site, and should have been communicated to RJM.
- (196) On 4 May 2021, the HSE issued a statutory letter to ABV (known as a "Notice of Contravention") in relation to ABV's failure to provide the foregoing information to RJM, noting in the body of the Notice that "sharing the above information was relevant

to assist [RJM] identify suitable measures to secure their site... [and] so fulfil their function under Regulation 13(b) of [the Construction (Design and Management) Regulations 2015]".

- (197) RJM admits that its risk assessment dated 6 July 2020 (in respect of the Garscadden site) was inadequate, in that it did not identify all of the control measures necessary to manage the risk of unauthorised access to the Garscadden site, in particular the risk of unauthorised access by children in the vicinity of the play park adjacent to the site.
- (198) RJM admits that, prior to Shea's death, it did not take sufficient action to monitor, reduce or eliminate the risk of its construction work in the vicinity of the play park adjacent to the Garscadden site.

The criminal prosecution

- (199) In April 2023, at Glasgow Sheriff Court, RJM was prosecuted on indictment at the instance of the Lord Advocate in connection with Shea's death.
- (200) On 12 April 2023, at the earliest opportunity (pursuant to section 76 of the Criminal Procedure (Scotland) Act 1995), RJM tendered a plea of guilty to the following charge on indictment:

"Between 3 July 2020 and 16 July 2020, at the construction site at Southdeen Avenue, Glenkirk Drive, Cloan Avenue, Kinfauns Drive and Drummore Road, all Drumchapel, Glasgow [RJM] being an employer within the meaning of the aftermentioned Act, did fail to conduct [its] undertaking in such a way as to ensure, so far as was reasonably practicable, that persons not in [its] employment who may have been affected thereby were not

thereby exposed to risks to their health or safety, in that [it] did fail to carry out a suitable and sufficient assessment of the risks of unauthorised persons gaining access to the construction site running adjacent to Glenkirk Drive as a result of which [it] did fail to adequately inspect and maintain suitable perimeter fencing and other site security measures to prevent such unauthorised access; and in consequence thereof on 16 July 2020 children, including Shea Ryan, born 22 February 2010, gained access to the said construction site whereupon Shea Ryan accessed a manhole inspection chamber where he fell from height and sustained injuries from which he died;

CONTRARY to the Health and Safety at Work etc., Act 1974, Sections 3(1) & 33(1)(a)".

- (201) On 14 April 2023, following conviction, RJM was fined the sum of £800,000 (reduced from £1.2 million, having regard to the early timing of the plea, in terms of section 196 of the Criminal Procedure (Scotland) Act 1995). A victim surcharge of £60,000 was also imposed upon RJM.
- (202) No other person has been prosecuted in respect of Shea's death.

The submissions of the parties

- [33] I had the benefit detailed written submissions from all parties at the Inquiry. I am grateful to counsel and agents who invested such time and effort in preparing them.
- [34] All parties proposed similar formal findings regarding the time and place of the death, the cause of death, and the cause of the accident, under sections 26(2)(a) to (d) of the 2016 Act. Specifically, all parties proposed that the sole cause of the accident was the action of Shea in entering the manhole, climbing down the ladder, slipping, and falling into the chamber.

[35] However, significant differences arose between the parties as to: (i) the proposed findings about reasonable precautions, if any, which, if taken, might realistically have avoided the accident; (ii) the proposed findings about defects, if any, in systems of working which contributed to the accident; and (iii) the proposed recommendations, if any, to be made by the court.

The Crown's submissions

[36] For the Crown, I was invited to find that the following precautions could reasonably have been taken, and, had they been taken, they might realistically have resulted in the accident (and Shea's death) being avoided: (i) a full and proper risk assessment could have been carried out of the Garscadden site and the risks present there; (ii) information could have been passed to RJM by ABV regarding the incursions at the site, both when ABV had control of the site and after RJM had taken it over; (iii) RJM could have hired "human security" along with CCTV and motion sensors at the site; (iv) the lid over the access hole to MH 22 could have been bolted or weighed down in some way that would have made it "impossible for it to be moved". ¹³

[37] I was also invited to find that the following defects in RJM's system of working contributed to the accident and the death, namely: (i) the lack of a suitable and sufficient risk assessment by RJM, and (ii) RJM's "inappropriate use of fencing" and its lack of care and

maintenance of it.

¹³ Written Submission for the Crown, para 4

On the specific issue of the cast-iron lid, I was invited to conclude, by "inference", that a person or persons (other than Shea and his friend) had accessed the manhole and "left it open".

[39] As for recommendations, the Crown invited me to make the following recommendations: (i) a recommendation as to the manner of securing the cover over the access opening to the chamber of an incomplete manhole (specifically, that such covers should be secured by bolts and/or some other form of heavy weight on top of the cover); (ii) a recommendation that, when a principal contractor is working in an area frequented by children, standard Heras fencing is not used (and, instead, that other options. not otherwise specified, but including security guards and CCTV, should be deployed); (iii) a recommendation for better communication between principal contractors who are involved in site transfers (specifically, the formalisation of a requirement that a transferring principal contractor should disclose to the transferee contractor "all security incidents" which have occurred on the transferred site).

Submissions for Shea's mother

- [40] For Shea's mother, I was also invited to find that RJM failed to take sufficient steps to monitor, reduce and eliminate risks arising from their construction site, and failed adequately to inspect and maintain suitable perimeter fencing and other security measures to prevent unauthorised access to the site and the manhole. I was also invited to find that ABV had failed to share relevant safety information with RJM relating to site security issues.
- [41] I was invited to find that all or a combination of the following enhanced security measures could have been taken by RJM and, if taken, might realistically have avoided Shea's

death: (i) the installation of enhanced fencing at the Garscadden site (such as double-line Heras fencing, with triangulated supports, reinforced with timber stays); (ii) the implementation of all of the post-accident measures that were taken by RJM (including CCTV coverage; recording and reporting of perimeter fence damage, etc.); and (iii) the provision of a security guard at the Garscadden site.

- [42] As for MH 22, I was invited to conclude that the precise circumstances in which it came to be exposed were "unknown", but that it "must have come to be uncovered on the night of Shea's death as a result of having been moved by workers working at the [Garscadden site]". I was submitted that the weighing down of an unsecured metal lid on an incomplete manhole would have "proved a deterrent" to the moving of the lid and "would likely have avoided Shea's death"¹⁴
- [43] Two formal recommendations were proposed by Shea's mother: (i) the introduction of a system of formal written communication between contractors, when transferring construction sites (temporarily or otherwise), to convey to the transferee contractor any problems with site security and unauthorised access which had been experienced by the transferring contractor; and (ii) where any construction site contains a "potentially fatal drop" (such as into a manhole), and the drop is situated in close proximity to a play park or other area frequented by children, then any unsecured cover over the drop should be weighed down, or bolted down, or surrounded by fencing, in order to restrict access during periods when work is not taking place on the site.

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¹⁴ Written submission for Ms Ferguson, paras 5(viii), 5(xlvii), 11 & 12

Submissions for RJM

[44] For RJM, only formal findings were proposed. It was said that no precautions could reasonably have been taken which might realistically have avoided the death; no defects in any system of working contributed to the accident; and no recommendations were proposed.

[45] Relying on the opinion of Mr McMinn of the HSE, it was submitted that it was "impossible" to eliminate the risk of injury to unauthorised persons entering a construction site. The duty of a principal contractor to third parties was to keep unauthorised third parties off a construction site, by erecting suitable perimeter fencing around it. The principal contractor's duty was not to make the site itself safe for third parties who might chose to enter it; within the site, the contractor's duty was only to keep the workers safe. It was submitted that it would be unreasonable to impose on principal contractors a more onerous duty (beyond erecting sufficient perimeter fencing) to make construction sites safe for unauthorised trespassers. To do so would go far beyond standard industry practice, and far beyond the existing legal duties incumbent upon a principal contractor.¹⁵

[46] Besides, according to RJM, further measures would not realistically have avoided the accident. By way of illustration, even after additional measures were introduced after 16 July 2020, incidents of trespass and damage to the perimeter fence continued. Therefore, it was argued, the absence of such precautions was of no causal significance to the accident. ¹⁶

¹⁵ Written submissions for RJM, para 4.7

¹⁶ Written submissions for RJM, paras 4.6 & 4.9

- [47] While RJM acknowledged that it had not carried out a suitable and sufficient risk assessment (of unauthorised persons accessing the site), and that it had failed adequately to inspect and maintain suitable perimeter fencing and other security measures to prevent unauthorised access to the site, RJM highlighted that appropriate changes, sanctioned by the HSE, had since been made to its systems of working.
- [48] RJM opposed any finding-in-fact that MH 22 was "uncovered" when Shea and his friends approached in on the night of the accident.¹⁷ RJM submitted that there was no evidence to allow the court to make any finding in relation to how, when, or by whom the metal lid on MH 22 was moved.
- [49] The recommendations proposed by the Crown and Shea's mother were opposed. No recommendations were proposed by RJM.

Submissions for Prime

[50] For Prime, I was invited to find that the following reasonable precautions might realistically have resulted in the death being avoided: (i) the fixation of manhole covers (by bolting) prior to site handovers, or (ii) the additional weighting of the manhole cover by use of an object which is considered unlikely to be removed by a single adult (e.g. a "ballast bag" or "road plate"). Prime emphasised that these measures were not required by the current law, but that they could have been an effective deterrent against children and/or thieves.

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¹⁷ Supplementary submissions for RJM, page 9; (c.f. 1st Joint Minute of Admissions)

- [51] Of the various theories surrounding the opening of the manhole, it was submitted for Prime that it was improbable that it was left open by Mr Keast and Mr Kay, given their seniority and experience.
- [52] It was submitted that many of the alternative fencing and security measures (such as CCTV, triangulation, double-line fencing, etc), while they could theoretically have been taken, were not properly characterised as "reasonable precautions" because a contractor could not be expected to deploy all available precautions immediately, and because "determined intruders" may still have found a way to circumvent them and to access the site. Besides, these other measures (such as alternative fencing arrangements) were "preliminary" to the securing of the manhole itself, and therefore of no causal significance to the accident.
- [53] While criticism could be levelled at the lack of communication between ABV and RJM as principal contractors, it was submitted that no finding should be made of any "defect" in a system of working because, again, there was no clear causal connection between any such alleged defect and the occurrence of the accident.
- [54] Prime proposed one recommendation: that there be a requirement to "weigh down" an incomplete manhole with a weighted ballast bag, road plate or similar object, such that a significant effort (manual or mechanical) is required to remove the obstacle.

Submissions for Scottish Water

[55] For Scottish Water, I was invited to conclude that no reasonable precautions could have been taken that might realistically have avoided the death, and that no defects in any system of working contributed to the accident.

- I was urged to accept Mr McMinn's testimony: (i) that there is, and was, no standard or common practice within the construction industry to weigh down an unsecured metal lid on an incomplete manhole with a heavy object; (ii) that a principal contractor's duty extends merely to preventing workers from inadvertently falling into an open manhole; (iii) that there is, and was, no duty on a principal contractor to prevent a worker (or third party), by a "conscious" act, from deliberately removing an unsecured lid, and entering a manhole; and (iv) that a construction site, being inherently dangerous, could never be made safe for children. I was invited to conclude that the covering of an incomplete manhole with an unsecured cast-iron lid was sufficient to discharge a principal contractor's legal duties (to workers and third parties alike).
- [57] There was said to be no evidenced causal connection between any failure to weigh down the cast-iron lid and the occurrence of the accident. It was submitted that a ballast bag could equally readily have been removed by a deliberate intervention.
- [58] No recommendations were proposed.

Submissions for ASG Tunnelling

- [59] For ASG Tunnelling purely formal findings were proposed. It was said that no precautions could reasonably have been taken which might realistically have avoided the death; no defects in any system of working contributed to the accident; no recommendations were proposed.
- [60] Again, I was urged to accept the testimony of the HSE's Mr McMinn that building sites were inherently unsafe; that the precautions to be taken within the site were limited; and that

the principal contractor's primary duty was to keep unauthorised persons out of the site (hence the focus on the sufficiency of the perimeter fencing). If third parties were determined to gain access, they would, and nothing could reasonably be done to prevent it.

Submissions for Byzak Ltd and Binnies UK Ltd (for ABV)

- [61] For Byzak Ltd and Binnies UK Ltd, it was submitted that there was no evidence that any reasonable precaution might have been taken by ABV which might realistically have avoided the death. In particular, there was said to be no adequate evidence to conclude that the sharing of information with RJM about site security (either generally, or specifically in relation to the trespass on 11 July 2020) might realistically have avoided Shea's death. RJM was adequately aware of the security risks in any event. Accordingly, there was said to be no causal connection between any failure in information-sharing and the occurrence of the accident.
- [62] It was also submitted that no defect in any ABV system of working contributed to the death. The placing of an unsecured cast-iron lid on an incomplete manhole was sufficient to discharge a principal contractor's legal duty. The placing of a ballast bag or the like on such a lid was an additional precaution; but it went above and beyond any legal requirement. While that precaution was indeed taken by ABV in the present case, it was so taken in the extraordinary context of the national Covid-19 lockdown, recognising that the site might be unattended for a prolonged and indefinite period.
- [63] Adopting Mr McMinn's testimony, ABV submitted that a principal contractor's duty was merely to prevent workers falling *inadvertently* into open manholes, not to prevent workers

(still less, third party trespassers), by "conscious effort", from deliberately removing a metal lid and deliberately climbing down an incomplete manhole.

[64] The recommendation proposed by the Crown and Prime (concerning the weighing down of unsecured cover lids on incomplete manholes) was opposed by ABV as "inadvisable" and "contrary to the ethos of health and safety law". 18 It was submitted that the approach of health and safety law was to prescribe the "outcome" to be achieved, not the measures required to achieve it. This approach provided flexibility, allowing duty-holders to find the correct balance of risk and precautionary measures on a case-by-case, site-specific basis. ABV submitted that the proposed recommendation would interfere with that balanced approach. [65] Similarly, ABV opposed the Crown's proposed recommendation concerning the sharing of security information between contractors working in areas frequented by children. ABV argued that it would again involve too prescriptive an approach. Flexibility should be preserved for duty-holders to find the correct balance between risk and precaution on a case-bycase basis. Besides, there was said to be insufficient evidence of a causal link with the death to support such a recommendation. In the present case, the sharing of the information would have made no difference. RJM was already aware of the risks. ABV's "admitted failure" to share information about site security was "too far removed" from the circumstances of the accident to have any causal significance to the death.¹⁹

[66] No recommendations were proposed by ABV.

¹⁸ Supplementary written submission by Byzak Ltd & Binnies UK Ltd, para 2.4

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¹⁹ *supra*, para 4.6

Submissions for the Health & Safety Executive

- [67] The HSE proposed purely formal findings.
- [68] Specifically, it was submitted for the HSE that the current legislative framework under the Health & Safety at Work Act 1974 and the Construction (Design and Management)

 Regulations 2015, together with published HSE Guidance, were adequate and did not require reform. The existing legal framework adequately identified the need for duty-holders to exclude children from construction sites. Nothing further was required.
- [69] In the present case, when the initial fencing measures put in place by RJM to exclude children were found to be ineffective for the site, a re-assessment should have been carried out and more robust fencing measures should have been introduced. Critically, the principal contractors' (qualified) duty was to keep unauthorised persons (including children) out of the site; the duty was not to make the site itself safe for them.
- [70] I was urged to accept Mr McMinn's testimony that construction sites are inherently dangerous places; that it would not be possible to make them completely safe for unauthorised persons, including children; that to seek to do so would be unworkable in practice; and that there was no evidence before the court as to how any change in the law (or the Guidance) could achieve such a standard.
- [71] No recommendations were proposed by the HSE.

Submissions for Glasgow City Council

- [72] For Glasgow City Council, only formal findings were proposed.
- [73] No recommendations were proposed.

Discussion and Determination

The purpose of the inquiry

- [74] Shea Ryan was 10 years old when he died within a manhole on a construction site in Drumchapel, Glasgow. His death generated much public concern, and an outpouring of emotion, both within the local Drumchapel community and beyond. In the proper exercise of his discretion, the Procurator Fiscal convened this inquiry in the wider public interest.
- [75] A number of issues were considered to merit scrutiny, including (but not limited to)

 (i) how the child managed to enter the construction site in the first place; (ii) how he came to fall into the manhole; and (iii) what reasonable precautions could have been taken to avoid the tragic accident.
- [76] I reiterate that the purpose of the inquiry is not to attribute blame. Nor is it designed to establish civil or criminal liability.
- [77] The purpose of the inquiry is to examine the circumstances of the death in an open, transparent and inquisitorial manner, and to consider what reasonable steps, if any, might be taken to prevent other deaths in similar circumstances.

How and when did the access opening on MH 22 come to be uncovered?

- [78] A central question at the Inquiry was this: how did the access hole to the inspection chamber of MH 22 come to be uncovered on the night of the accident?
- [79] On this specific issue, in several closing submissions at the Inquiry, I was urged to conclude that the cast-iron lid was fully in place over MH 22 when work finished at the site on

16 July 2020. It was said that what happened thereafter was "one of the most asked but unanswered questions" of the Inquiry. I was reminded that, despite extensive investigation, Police Scotland and the HSE had been unable to establish how Shea had gained access to the manhole. I was invited to conclude that there was no evidence that would allow the court to make a finding as to how or when the cast-iron lid was moved.

- [80] On the evidence available to me at this Inquiry, I reach a different conclusion.
- [81] On the balance of probabilities, I conclude that the access hole on MH 22 was already partially uncovered, and the inspection chamber was accessible, on the night of 16 July 2020 when Shea first approached it; and that the access hole was so uncovered, and the chamber so accessible, for the simple reason that it had been left in that condition by RJM's employees, Mr Keast and Mr Kay, when they moved the cast-iron lid off the access hole, and exposed the inspection chamber, just seven days or so earlier.
- [82] I explain my reasoning as follows.
- [83] In the first place, it is a matter of agreement that when Shea and the other children approached MH 22 on the night of 16 July 2020, at about 9pm, the access hole to the inspection chamber of MH 22 was already partially uncovered and open.²⁰ It can be inferred that it was sufficiently uncovered that Shea (and later, during the attempted rescue, three grown men) were able to climb down into the manhole. The testimony of Jamie Adams was particularly detailed and compelling. He was one of the first adults on the scene after the accident. He described seeing the lid covering only about one third of the access hole to the manhole, leaving

²⁰ 1st Joint Minute of Agreement

a two thirds gap. He makes no reference to the lid having been moved (by him or Shea's stepfather, Mr Paterson, who was also on the scene by that stage).

[84] In the second place, the evidence of the children, as contained within the transcripts of their interviews, is illuminating. Shea's sister, Rennagh Ryan (who was then 12 years old) spoke of seeing a gap²¹. Shea's friend, Alfie McCafferty, spoke of the "square thing"²² being open. Alfie's big sister, Leah McCafferty (who was then 12 years old) said the manhole was not covered when they entered the site on the night of the accident.²³

Interestingly, Leah appears to refer in the transcript to an attempt having been made by her to move the metal lid on MH 22, but that she could not do so because it was too heavy. However, it is a fairly vague and fleeting reference. It is also not clear from the transcript precisely when this attempt was allegedly made, specifically whether it was before or after Shea fell, or indeed on a previous night entirely. For those reasons, I attach no particular significance to that fleeting reference in her interview. If anything was to be made of that passing reference (to an attempt to move the lid), I would have inferred that it was an attempt made *after* Shea had already fallen, in that short period when the children were shouting down the manhole for Shea, prior to summoning adult assistance. I would have reached that conclusion because (i) Leah was otherwise crystal-clear in her interview that she had not previously been to MH 22 and (ii) any attempt to move the lid before Shea fell would have been flatly inconsistent with the clear thrust of her evidence that she and Rennagh were vehemently opposed to Alfie or Shea going down the manhole at all. If anything, read in context, the fleeting reference by Leah

²¹ Crown Production 69

²² Crown Production 70. It is reasonable to infer that "the square thing" is the access hole in the biscuit.

²³ Crown Production 68

to a failed attempt (at some point) to move the lid merely highlighted the overwhelming consensus of testimony that the cast-iron lid was just too heavy to be moved by a child. What is clear is that when Jamie Adams arrived on the scene shortly after the accident, he observed that the cast-iron lid was two thirds off the access hole, with the exposed gap being large enough for a man to climb down.

- There was much speculation, during the Inquiry and in submission, that the cast-iron lid might have been moved by some third party intruder (perhaps a would-be thief) in the three hour window between the closure of the site (at 6pm) and Shea arriving with his friends (at around 9pm). I attached no weight to that conjecture. It is not a satisfactory footing on which to make a finding-in-fact. There was also speculation that the lid may have been moved by two or more children acting in concert. Again, there was no reliable evidence of any such thing having happened. Besides, it sits uncomfortably with the consensus of testimony that two grown men were needed to move such a lid. I attached no weight to that hypothesis. So, how and when did the inspection chamber come to be uncovered?
- [87] In the third place, there is clear, unchallenged evidence that the cast-iron lid was, in fact, moved off the access hole and that the inspection chamber was, in fact, exposed by RJM a relatively short time prior to the accident.
- [88] RJM's employees, Kevin Keast (the site foreman) and Darren Kay (the ganger) admitted in their testimony that they slid the cast-iron lid across the concrete biscuit and off the access opening of MH 22. They were at odds on the precise timing. Mr Keast thought that it had occurred around one week prior to the accident; Mr Kay thought it was around two weeks prior to the accident. Although RJM took notional possession of the site on Friday 3 July 2020, RJM's

works there did not commence there until Monday 6 July 2020. Therefore, it seems likely that, on the issue of timing, Mr Keast's recollection is closer to the truth, in that the metal lid was moved by them at some point around seven days (at most about ten days) prior to Shea's death. On any view, the lid was moved by these workers just a short time prior to the accident. [89] According to their own evidence, it took a significant combined effort from both men to move the metal lid, with Mr Kay pushing it and Mr Keast pulling it (though they concede that Mr Kay, the younger man, contributed most to the effort). Having slid the cast-iron lid over the concrete biscuit, exposing the access hole, Mr Keast looked into the chamber of the manhole. He could not recall if Mr Kay also looked in. The purpose of this exercise was to check the depth and direction of the existing connecting pipe at the bottom of the manhole. They wanted to check that the underground pipeline they were about to lay was not going to conflict with the existing ABV pipe which ran between MH 22 and another partially-constructed manhole named MH 21 (which was located outwith the Garscadden site). The line of the planned RJM excavation crossed directly over the line of the existing ABV pipe. However, the existing ABV pipe was located around 2 metres in depth lower than the intended path of the proposed RJM pipe. By means of this visual inspection inside MH 22, Mr Keast satisfied himself that the proposed RJM excavation would not conflict with the existing ABV infrastructure. In fairness to Mr Keast and Mr Kay, this visual inspection, no more than a precautionary double-check prior to commencing their excavation, was a common practice.

[90] We then come to the nub of the issue.

- [91] In their testimony, Mr Keast and Mr Kay insisted that, having looked inside the manhole, they then restored the cast-iron lid back into place *fully* covering the access hole on MH 22.
- [92] A critical question arises: should I accept that *particular* part of their testimony as both credible and reliable?
- [93] In my judgment, this *particular* part of the testimony of Mr Keast and Mr Kay falls to be rejected as unreliable for the following reasons.
- [94] First, Mr Keast's testimony was unimpressive in material respects. At the outset of his testimony, when he was shown photographs of the cast-iron lid on MH 22, he vehemently and repeatedly denied that it was the same lid that he and Mr Kay had moved. He was insistent that the photographs depicted a different lid, specifically, that the lid moved by him and Mr Kay had been much larger, and much heavier, than that depicted in the photographs. This denial persisted for some time. Eventually, he grudgingly conceded that he may have been mistaken, and that the photographs shown to him may indeed have depicted the lid on MH 22. This exchange conveyed to me an impression of undue defensiveness on the part of Mr Keast, of a lack of attention to detail, and of a certain degree of impulsiveness. My confidence in the reliability of his account was undermined as a result.
- [95] Secondly, in his testimony, he displayed a remarkably dismissive and indifferent attitude towards MH 22 and the risks presented by it. In fairness to him, he was not alone in this mind-set. Many of the RJM employees displayed a similarly casual attitude. Significantly though, Mr Keast was the foreman of the site. To explain, despite acknowledging that MH 22 fell within RJM's legal responsibility, he acknowledged that no regular "formal check" of the

manhole was carried out by RJM to assess if it presented any safety risks. He said there was "no need" for any such inspection. Instead, he testified that "just a glance is enough, just a glance as you go by." He did not check the manhole personally; he assumed "probably everyone did". He insisted that if the cast-iron lid was visible on top of the concrete biscuit, there was "nothing to check".

[96] His lax attitude towards MH 22 was striking. The clear impression was that Mr Keast did not consider that MH 22 fell within his (or RJM's) actual day-to-day responsibility. Repeatedly he stated that MH 22 "wasn't our manhole", it "wasn't one of ours".

[97] Matters came to a head during cross-examination (by ASG Tunnelling). Mr Keast testified that he would normally have put "an immoveable object" on an incomplete manhole that was being built by RJM, such as a ballast bag or a steel plate or even the bucket of a digger. He testified that "normally" he would not leave an incomplete manhole with just an insecure lid because the lid itself could be moved. Instead, he testified that he would "put something heavy on it". When confronted with the apparent inconsistency in his methodology, and asked why he did not follow his own avowed practice with MH 22, he replied:

"It wisnae our manhole...When it wisnae our manhole, it became irrelevant to me. It wisnae part of our works".

This attitude of unashamed indifference towards MH 22, and of the risks that it might present to others, undermined my confidence in the reliability of Mr Keast's testimony that he had indeed made any real effort, or taken any real care, to re-position and restore the metal lid *fully* over the access opening to the inspection chamber. Indeed, by the end of re-examination,

Mr Keast appeared thoroughly confused as to which precautionary measures he would normally adopt to cover an incomplete manhole.

[98] Third, Mr Kay, though also adamant he had slid the metal lid "fully" back over the access hole, was likewise strikingly apathetic in his attitude towards MH 22 and RJM's responsibility for it. He also testified that, in his own practice, he would insist on bolting or weighing down an insecure cast-iron lid on an incomplete manhole because, if left unsecured, the incomplete manhole represented a "hazard". But when he too was asked to explain why no such precaution had been taken by him with MH 22, he replied: "It's not my manhole". To his credit at least, he acknowledged, with the benefit of hindsight, that this patently contradictory approach did not "make sense"; he acknowledged that his attitude towards MH 22 was "flawed thinking"; he acknowledged that others on the site thought the same way; he acknowledged he should have been "more careful"; and he candidly conceded:

"That manhole [MH 22] was never thought about really. We just got on with our daily routines."

[99] Again, this dismissive attitude towards MH 22 – and to RJM's responsibility for its safety - undermined my confidence in the reliability of his recollection as to the care and effort actually taken (by him and Mr Keast) to fully restore the cast-iron lid to its original position over the access hole to MH 22.

[100] In this respect, I acknowledge that Mr Keast and Mr Kay are both experienced construction workers. I also acknowledge that they insisted that they would never leave an open manhole uncovered due to the risk it could present of a worker *inadvertently* falling in. However, aside from their casually dismissive attitude towards MH 22, it is of relevance to

observe that MH 22 stood well clear of the surrounding ground by around one metre; that none of the construction work that was to be carried on by RJM at that point in time was on, or even close to, MH 22; and that, therefore, there was no realistic risk of any RJM worker falling *inadvertently* into MH 22, even if the access hole on the biscuit were to have been left partially open.

[101] Fourth, there is no other reliable testimony that, in the period of seven days or so prior to Shea's accident (that is, in the period from the significant intervention of Mr Keast and Mr Kay with MH 22), the access hole on the manhole was *fully* covered by the cast-iron lid. According to Mr Keast himself, there were no regular or formal checks of MH 22. Nor was there any other reliable evidence that any RJM employee ever inspected MH 22 to assess the risk(s) presented by it; or, specifically, to ascertain if it was in a safe condition (to workers on site, or others); or, specifically, to check whether the access hole to the inspection chamber was fully covered. By all accounts, no one took any interest in it. No RJM employee or contractor had any reason to work on or near MH 22 prior to Shea's death, still less to view or move the cast-iron lid. Prior to Shea's death, the work that was being undertaken by RJM was concentrated at an entirely different end of the Garscadden site. One labourer (an independent contractor) travelled up and down the site regularly each day in his excavator, and he would pass by MH 22; but he did so at a distance, while moving in his vehicle; and it was never part of his duties to examine, inspect, or risk-assess MH 22. It is true that a number of the RJM labourers testified that they had observed the metal lid on top of MH 22. Indeed, one labourer (John Docherty) testified that he had seen the lid on the concrete biscuit at about 5pm on 16 July 2020, shortly prior to the site closing at 6 pm. I have no doubt that these labourers correctly

observed that the cast-iron lid was sitting on the concrete biscuit of MH 22. That much is uncontroversial. However, in my judgment, their testimony is simply not reliable on the more relevant, more specific, and more critical issue – namely, whether the cast-iron lid was so positioned on the concrete biscuit as to be *fully* covering the square access hole to the manhole chamber. Their testimony was not sufficiently informed or detailed to address that critical issue. Instead, their observations were all fleeting, casual, and *ad hoc* in nature. These were also observations made from a distance, with no clarity as to the perspective afforded to the observers.²⁴ That lax approach among the labourers is entirely consistent with the avowed prevailing culture of indifference on the site towards MH 22, articulated most clearly by the foreman and ganger themselves, being the senior personnel on the site, that the manhole was not really RJM's concern. It was an irrelevance to them. In a similar vein, Michael Ferrier, an RJM labourer with over 30 years' experience, who worked at Garscadden site, testified that an incomplete manhole would normally have "a lid and a sandbag" on top of it. He was aware that MH 22 had only a lid, with no further ballast on top. When asked why this omission did not concern him, he testified: "It wasn't us that built it. So we didn't pay any attention to it." Likewise, John Docherty, another labourer at the Garscadden site, testified that he "didn't think it [MH 22] was anything to do with us"; it was "not our manhole". For these reasons, I concluded that there was no other reliable evidence that, in the critical period from the

²⁴ The same criticism can be made of the photograph taken on behalf of Scottish Water during a visit to the ABV site on 15 July 2020. While MH 22 (on the adjoining RJM site) happens to be visible, the quality and perspective of the image are not sufficient to conclude reliably that the cast-iron lid on MH 22 was fully covering the access hole.

significant intervention of Mr Keast and Mr Kay with MH 22, the access hole on the manhole was ever *fully* covered by the cast-iron lid.

[102] Fifth, no other satisfactory explanation exists, founded upon credible and reliable evidence, to indicate how or when the inspection chamber of MH 22 came to be exposed on the evening of 16 July 2020. If the testimony of Mr Keast and Mr Kay were to be accepted on this particular issue, it follows that someone else, at some other time, has moved the lid out of position, prior to Shea arriving at 9pm on 16 July 2020. However, all that was presented to me was speculation. It was speculated that the lid may have been moved by other trespassers on the site (perhaps a would-be thief), who had come and gone in the three hour window between the site closing (at 6pm) and Shea's arrival (at 9pm). It was speculated that the lid may have been moved by children (perhaps including Shea), acting in concert, who had mustered the strength to push it across the concrete biscuit. There was no reliable and credible evidence to justify the adoption of any of these alternative hypotheses.

[103] In my judgment, standing the quality of the evidence presented to me, the more plausible conclusion is that the inspection chamber of MH 22 was exposed and accessible on the night of 16 July 2020 because Mr Keast and Mr Kay had previously hauled the cast-iron lid out of its original position over the access hole, and had exposed the chamber, just seven days or so prior to the accident; there is no credible and reliable evidence (from Mr Keast, Mr Kay, or others) that they then restored and re-positioned that lid so as to fully cover the access hole to the chamber; therefore, logically, it can be concluded that they failed to do so.

[104] This inferential conclusion emerges, not from the adoption of a speculation, but from a conventional assessment of the quality of the evidence before me, specifically by rejecting as

unreliable (for the reasons explained above) the particular testimony of Mr Keast and Mr Kay that they fully restored the cast-iron metal lid to its position over the access hole.

In the evidence in this Inquiry attracts the application of the maxim *res ipsa loquitur*. In other words, the thing speaks for itself. The maxim is not a legal principle or a presumption of law. It is simply a presumption of fact that can arise in civil proceedings from the state of the evidence. The presumption applies where (i) a thing that has caused the damage (a locus, or an article) is under the exclusive management or control of one party, and (ii) the accident that has occurred is such as, in the ordinary course of events, does not happen, if those having such management or control use proper care. In those circumstances, the occurrence of the accident may itself afford reasonable *prima facie* evidence that it arose due to want of care by the controlling party, in the absence of a satisfactory explanation to displace that inference.²⁵ When the maxim applies, it is not enough for the party in control merely to proffer a possible alternative nonnegligent explanation. Rather, that party must establish facts from which it is no longer possible to draw the *prima facie* inference of negligence.²⁶

[106] In this Inquiry, the evidence is eloquent of negligence by RJM's employees. In ordinary circumstances, children do not fall into open manholes on construction sites, if the principal contractor, with exclusive management and control of the site, has exercised proper care. The

²⁵ Scott v London & St Katherine's Dock Co (1865) 3 H&C 596; Ballard v North British Railway Co 1923 SC (HL) 43; Devine v Colvilles Ltd 1969 SC (HL) 67

²⁶ David T. Morrison & Co Ltd v ICL Plastic Ltd 2014 SC (UKSC) 222; Woodhouse v Lochs & Glens (Transport) Ltd 2020 SLT 1203

occurrence of the accident itself affords *prima facie* evidence that it arose due to want of care by RJM, as the party in exclusive control of the site.

Standing the state of the evidence as presented, a provisional (or evidential) burden shifted to RJM to displace the *prima facie* inference of negligence. It was not enough for RJM to proffer a possible alternative non-negligent explanation. Facts had to be established from which it was no longer possible to draw the inference of negligence. But no such facts were established. The testimony of Mr Keast and Mr Kay (that they fully restored the cast-iron lid to its original position over the access hole) was unreliable, for the reasons discussed above. There was no other credible and reliable evidence (for example, from reliable observation by another; or from evidence of a system of regular checks) that the lid was ever fully restored thereafter to its position over the access hole. There was no credible and reliable evidence that any other person had reason, or opportunity, or (as regards the children) the sheer physical strength, to shift the cast-iron lid out of its position in the relatively short period between the significant intervention by Mr Keast and Mr Kay, and Shea's fateful arrival on site about a week later. Therefore, by this alternative mechanism, I reach the same inferential conclusion as to a cause of the accident, namely that the inspection chamber of MH 22 was open and accessible on the night of 16 July 2020 because Mr Keast and Mr Kay, having recently moved the cast-iron lid out of its original position, neglected to restore and re-position the lid so as to fully cover the exposed access hole to the chamber.

Frequency and nature of damage to the perimeter fencing

[109] Much time was spent at the Inquiry exploring the frequency of damage to the perimeter fencing both generally (around the multiple RJM and ABV sites) and specifically (at the Garscadden site). In the event, there was little dispute on this issue.

[110] It is clear from the evidence that the perimeter external fencing of the Garscadden site, which ran alongside the playpark and public footpath adjacent to Glenkirk Drive, was the subject of regular and repeated damage between 3 July 2020 and 16 July 2020. John Docherty, an RJM labourer at the Garscadden site, testified that damage to the fencing there was "a regular occurrence", happening "every day". ²⁷ Darren Kay also acknowledged that the perimeter fencing in the vicinity of the playpark was a "hotspot" for damage.

[111] The "uprights" (that is, the upright pole frames) of the Heras fence panels which formed the perimeter external fencing, were clipped together using metal fence clips. Each upright had two metal fence clips which held the adjacent fence panels together. The evidence was clear from RJM employees that those metal clips were regularly damaged or broken to the extent they often no longer held the adjacent fence panels together, at least not securely. That would have allowed the fence panels to be pulled apart, thereby facilitating unauthorised access to the Garscadden site.

[112] The metal wiring of the fence panels of the perimeter external fencing was also regularly pulled away from the uprights of the fence panels. That created gaps through which unauthorised access could be obtained to site.

²⁷ According to Mr Docherty, Darren Kay told him, on his first day, that damage to the fencing was "an ongoing thing".

[113] In his investigation after the accident, Mr McMinn of the HSE concluded that RJM's perimeter fencing running alongside the footpath (and in the vicinity of the playpark) at the Garscadden site was poor.

The system of inspection and maintenance of the perimeter fencing

- [114] Labourers at the Garscadden site (usually John Docherty and Adam Kay) would check the external perimeter fencing at the Garscadden site first thing each work day morning, around 7.30am to 7.45am. They would try to repair any damage which could be repaired (such as by replacing unsecured panels or damaged metal clips). Spare fence panels and clips were to be found either at the Garscadden site or at the RJM compound. Later each work day, a dedicated fencing repair squad (led by Michael Docherty) would attend to conduct further inspection and repair.
- [115] However, there was no formal written system in place to record the nature and extent of the damage, repairs or replacements to the external perimeter fencing.
- [116] The labourers did not inform their ganger, Darren Kay, of details of damage observed, or of repairs and replacements undertaken by them; Darren Kay, in turn, did not inform the foreman, Kevin Keast, of damage, repairs or replacements of which he had become aware; and Mr Keast did not inform his superiors (such as the sub-agent, Stuart Laurence; the site agent, lain Midgely; or the contracts manager, Robert Van Beek) of damage, repairs or replacements of which he had become aware.

[117] Therefore, RJM had no record of the frequency with which the perimeter fencing was being damaged, or of the type of damage which was being sustained, or of the location (for example, of "hotspots"), or of the nature of the repairs or replacements.

[118] Following Shea's death, albeit while subject to investigation by the HSE, RJM introduced and maintained a formal written record of their daily and weekend perimeter fence checks, logging the location and nature of the damage, and reporting it to line superiors for review. This was done by way of a fence "check sheet". This created a formal written record of the frequency with which the external perimeter fencing was being damaged, the type of damage which was being sustained, its location, and the repair or replacement carried out.

[119] In this way, a more informed risk assessment could be carried out of the adequacy of perimeter fence control measures.

Security measures

[120] Decisions regarding the nature and extent of the security measures to be put in place around the external perimeter of the Garscadden site were taken collectively by Robert Van Beek, Ian Midgely, Stuart Laurence and Kevin Keast. Robert Van Beek and Ian Midgely had the final say, given their level of seniority. Prior to taking control of the Garscadden site on 3rd July 2020, Mr Midgely and Mr Van Beek had discussed the type of the security measures required to prevent unauthorised access to the site. They chose to erect single-line Heras fencing around the site, including at the play park, with no additional support to prevent them being pushed or blown over. That measure remained in place until Shea's death. (Further support by way of

triangulated fencing was installed at points further along the public footpath, but not in the vicinity of the play park itself.)

- [121] According to the evidence, various other boundary options were available to seek to prevent unauthorised access to a construction site. These included:
 - (1) Double line Heras fencing. This is two lines of Heras fencing, one behind the other.
 - (2) Triangulated Heras fencing. This involves the use of three fence panels to form a triangle. It provides additional support, making it more difficult to push down or climb through or under. Triangulated fencing was installed at Bunds A & B prior to Shea's death. It was also present at the fence line along the public footpath leading to the play park, when approaching from the east.
 - (3) Heras fencing with timber stays, whereby pieces of timber are placed at an angle behind a fence panel and drilled into the ground. This provides resistance to prevent the fence panel being pushed over.
 - (4) Heras fencing with ropes attached to the front and back of the fence panel to prevent it being pushed over.
 - (5) Timber hoarding. This comprises consecutive large timber panels with no gaps to form a continuous timber boundary to the site. These are often found around sites in areas of frequent pedestrian footfall, such as city centres.
 - (6) CCTV cameras and motion sensors. Such cameras and sensors can be operated by a diesel generator, battery, or by solar power.
 - (7) Static or mobile security guards.

[122] RJM assumed control of the Garscadden site on 3 July 2020. The only risk assessment prepared by RJM in respect of the Garscadden site was Risk Assessment (RA number 021). It was prepared by Stuart Laurence and checked and signed off by Ian Midgley. It was dated 6 July 2020. Despite the date, Stuart Laurence was unclear precisely when it was prepared, as he felt it would have been prior to taking control of the Garscadden site on 3 July 2020. In any event, the risk assessment did not identify unauthorised access to the Garscadden site as a hazard. Instead, the risk of unauthorised access and site security was addressed within the accompanying Method Statement (MS number 021), also dated 6 July 2020, which stipulated only that Heras fencing should be erected to segregate the pedestrian footpath from the Garscadden site. Neither the risk assessment nor method statement were updated prior to the date of Shea's death (on 16 July 2020).

[123] In my judgment, as a result of the absence of a full written record of the frequency, nature and location of damage, repairs and replacements to the external perimeter fencing at the Garscadden site (specifically, in the vicinity of the play park), neither Mr Midgely nor Mr Van Beek had an accurate understanding of (i) the heightened risk of unauthorised access to the Garscadden site (via the play park) in the period 3 July 2020 to 16 July 2020 or (ii) the nature and extent of the security measures required to prevent or reduce any such unauthorised access during that period.

[124] Interestingly, around 7 July 2020, Mr Midgely had been in discussion with Martin Heneaghan of Corporate Service Management Ltd ("CSM") about the feasibility and cost of CSM supplying battery-powered motion-detecting cameras and a tower camera at the Garscadden site. In the event, for various reasons, at that point in time Mr Midgely decided not

to proceed with the supply of those cameras. This point is of significance because it illustrates that Mr Midgely's mind was not closed to the issue of further security measures prior to Shea's death. It remained susceptible to review. But one of the (several) difficulties facing him at that time was that he did not have full knowledge of the frequency and extent of the recurring damage being inflicted upon the perimeter fencing around the Garscadden site, especially at the "hotspot" close to the play park.

[125] Within days of Shea's death, RJM installed CCTV covering the entire perimeter fence line of the RJM sites, including the Garscadden site, as well as introducing motion sensors. In fairness to RJM, by this stage it was subject to investigation by both the police and the HSE, and to intense media and public scrutiny. Therefore, it cannot necessarily be inferred that this particular measure (i.e. CCTV) ought reasonably to have been adopted prior to the death, merely because it was put in place shortly afterwards, in different and exceptional circumstances. The total perimeter of the RJM sites was enormous. Cost considerations and limited energy sources were legitimate concerns. But other boundary options might reasonably have been considered.

Unauthorised access to the Garscadden site

[126] The evidence at the Inquiry was clear that, throughout the course of the two constructions projects, local children were regularly and repeatedly entering the ABV and RJM construction sites, at the evenings and the weekends, when the sites were closed.

[127] Specifically, between 3 July 2020 and 16 July 2020, local children regularly and repeatedly gained access to the Garscadden site, particularly via breaches in the external

perimeter fencing in the vicinity of the play park (located on the footpath connecting to Glenkirk Drive). In the interview of Leah McCafferty, she disclosed that she and her friends had been on the Garscadden and ABV sites many times prior to Shea's death. Her evidence disclosed a striking familiarity with the construction sites. She was alert to the discrete work areas, to recent changes in the perimeter boundaries, and even to the fact that separate businesses operated the adjoining sites.

[128] On 29 April 2020, while the Garscadden site formed part of the ABV work area, the external perimeter fencing in the vicinity of the playpark was damaged. A fence panel had been pushed and the upright pole had been bent out of shape. There was a large gap allowing access from the play park into the construction site. That information was not conveyed to RJM prior to Shea's death.

[129] On 9 May 2020, 20 May 2020, 29 May 2020, 13 June 2020 and 16 June 2020 further incidents of unauthorised access occurred at the adjoining ABV site.²⁸ These incidents are captured on camera. They occurred close to the ABV compound, which was within 200 to 250 metres of the play park.²⁹ Again, none of this information was disclosed to RJM prior to Shea's death.

[130] On 7 July 2020, a Volvo excavator was vandalised by someone who had gained access to the Garscadden site; the windows of the excavator were smashed; a camera was stolen; and the driver's gloves were stolen. RJM's foreman, Kevin Keast, noted the incident in a

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²⁸ First Joint Minute of Agreement; Crown Productions 54-58

²⁹ RJM Production 3

contemporaneous entry in his site diary. On 11 July 2020, Prime reported (to ABV) a further incident of unauthorised access by children, this time to the adjoining ABV site.

[131] It is plain from the evidence that unauthorised access was frequently being gained to the Garscadden site (both when it formed part of, and was adjacent to, the ABV site).

Additional perimeter fencing precautions

[132] From the evidence, I am satisfied that if, prior to Shea's death on 16 July 2020, any or all of the senior RJM employees responsible for deciding upon security measures at the site (including perimeter fencing) had been aware of the true extent of the frequency, extent and location of the damage to the perimeter fencing, and of the extent of incidents of unauthorised access to the Garscadden and adjoining ABV site, they would have taken the decision to implement further security measures at the site. Those measures may well have involved all, or a combination of, the following: (i) enhanced fencing comprising double-line fencing, triangulated fencing, and/or fencing with timber stays; (ii) the provision of a security guard at the Garscadden site, and/or (iii) the installation of CCTV monitoring. I reach those conclusions for the following reasons.

[133] The use of triangulated fencing had already been put in place in the perimeter fencing running alongside the Garscadden site boundary, but not in the vicinity of the play park.

Triangulated fencing and timber stays, both being recognised measures to reinforce the Heras fence panels, had previously been deployed by RJM at Bunds A & B in response to increasing instances of damage there. RJM had faced pronounced difficulties at both Bunds. At those separate sites, members of the public had persistently been breaking down RJM's perimeter

fencing in order to use long-established footpaths that ran through those sites. Youths from the nearby football parks were known to have breached the perimeter fencing to retrieve footballs that had been kicked onto the sites. There were even reported instances of people on quad bikes driving deliberately at the fence panels there and wrecking them. Some of these incidents had occurred during working hours, when site personnel were present, who would receive "mouthfuls of swear words" if they sought to challenge the trespassers. But, to their credit, RJM did not give up. In response to these evidenced incidents of damage and intrusion, RJM escalated the security measures at Bunds A & B. They introduced additional triangulation of fencing. They also installed "props" or "stays" to provide further lateral support to strengthen the perimeter line and prevent the fencing being pushed or pulled down in these afflicted areas. Ian Midgely indicated that CCTV was the next escalation under consideration there, although there were practical difficulties that needed to be overcome. In this way, RJM (in particular, Mr Midgely) had already shown themselves to be willing and able to escalate the perimeter security measures at other work areas, as the need arose. These enhanced fencing measures would not have been difficult to introduce at the Garscadden site as well, if the risks there had been fully known to senior RJM personnel, notably Mr Midgely. Indeed, by around 7 July 2020, Mr Midgely was actively studying CCTV security arrangements at the Garscadden site. In his testimony, he confirmed that the expense of doing so would not have been a significant or prohibitive issue on this project.³⁰ The key difficulty with the installation of CCTV cameras was to identify a suitably reliable power source at that relatively remote location, but it would not

³⁰ Mr Clarke confirmed likewise in his testimony.

have been an insurmountable practical hurdle. (As previously mentioned, immediately after Shea's death, CCTV cameras were supplied to RJM by CSM to cover all four RJM sites at the Drumchapel project. They remained in place until 20 August 2020.)

[134] Mr Midgely, struck me as a thoughtful, conscientious, and fair-minded individual, who took seriously his responsibilities as site agent. I am satisfied that he would have escalated the security measures in the vicinity of the play park bordering the Garscadden site, as he had done elsewhere, and as he had already contemplated doing, if he had been in possession of the full facts to allow him properly to assess the risk.

[135] Of course, no such fencing is impregnable. It is also correct that Shea, his sister, their cousins, and friends were persistent trespassers on these construction sites, including the Garscadden site.

[136] According to Constable Courtney's statement, he had attended the construction sites on "a number of occasions" and had previously caught children (including Shea) playing there; he had warned them of the dangers; and he had even taken the children home to their parents.

Shea's mother, Joanne Ferguson, confirmed this in her own written testimony. 31

[137] Therefore, it cannot be said that escalated security measures at the Garscadden site would *necessarily* have prevented Shea from breaching the perimeter fence and gaining access to the manhole.

[138] But it is also unarguable that the foregoing additional measures, which were well-recognised and widely-deployed in the industry, would have increased and improved the

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³¹ 1st Joint Minute; Statement of PC Courtney (Crown Witness Statement 5); Affidavit of Joanne Ferguson dated 23 August 2024, para 4

security provision at the Garscadden site; they would have made it more difficult and more daunting for unauthorised persons (including children) to gain and enjoy unrestrained access to the site; and, therefore, I am satisfied that it can properly be concluded that these reasonable precautions "might realistically" have avoided the accident.

Preventing access to the inspection chamber of MH 22

- [139] According to the evidence, it would have been obvious on a cursory inspection that MH 22 was incomplete.
- [140] A complete or finished manhole would sit flush with the surrounding ground, the metal lid would be bolted securely into position over the access hole, a layer of brick and mortar would be laid around the metal lid, and the brick and lid would be cemented into place, with a smooth concrete finish on the surface of the biscuit cover. In that condition, the access hole would be accessible only by removing the grille within the frame by use of a special key.
- [141] In contrast, on MH 22, the cast-iron lid that sat on top of the concrete biscuit cover was not secured in place. The lid had also not been bricked up around the sides and cemented into position, and the surface of the manhole had not been smoothed off so that the surface of the concrete on the concrete biscuit was flush with the surface of the metal lid. In addition, of course, the surface of the manhole itself was not flush with the surrounding ground.
- [142] The unsecured cast-iron lid was itself capable of being moved (or, less likely, lifted) without mechanical assistance. With some effort, the lid was capable of being slid across the surface of the concrete biscuit, though the combined strength of two grown adults would ordinarily have been required.

- [143] There was conflicting evidence as to whether, prior to Shea's death, the weighing down of an unsecured lid on an incomplete manhole was a common or, at least, a familiar or recognised, practice. Several witnesses (including Steven Stirling, Ian Midgely and Scott Reid) testified that it was not common practice for any extra weighting to be placed on (otherwise unsecured) metal lids over incomplete manholes.
- [144] Mr McMinn of the HSE agreed. He was adamant that the mere placing of a metal lid over the access opening of an incomplete manhole was a sufficient precaution against the risk. (Interestingly though, he defined "the risk" as being the risk of a worker on site *inadvertently* falling into the manhole.) He insisted that, prior to completion, there was no need for a principal contractor to secure or weigh down a metal lid by placing some other heavy object on top of it. Indeed, Mr McMinn testified that he would not be "overly concerned" if a contractor left a gap of a few inches in the access opening, because the risk to be addressed by the principal contractor was the risk of an *inadvertent* fall by worker into the manhole, not the risk of a conscious decision by a third party intruder to move the lid and enter the manhole.
- [145] Andres Symington, ABV's foreman, also considered that it was "standard practice", prior to Shea's death, to place only an unsecured metal lid on an incomplete manhole.

 However, he qualified this by volunteering that "in highly trafficked areas", where there was a risk of machinery nudging or moving an unsecured lid, the lid may be weighed down with a steel road plate. He conceded that the risk of a third party intruder coming onto the site and moving the lid had not occurred to him.
- [146] In contrast, Raymond Quinn, an experienced civil engineer employed by AECOM, the designer on the Glasgow City Council project, testified that it would not be usual practice for an

incomplete manhole to be covered only by an unsecured metal lid on the biscuit. In his experience, the usual method would be for the unsecured metal lid itself to be weighed down with another object, in a manner that would require "quite a significant intervention to access it". Michael Ferrier, a labourer of 30 years' experience, testified that an incomplete manhole would normally have a metal lid "and a sandbag" on top. Darren Kay, also an experienced labourer, testified that it was his personal practice at various RJM sites to weigh down an unsecured metal lid on an incomplete manhole with a heavy item, such as a filled ballast bag or steel road plate, though he conceded he had not done so at the Garscadden site. On some sites there was said to be a practice of putting Heras fencing around an incomplete manhole. He said these measures were designed to prevent or restrict access to the manhole, rather than to prevent theft of the lid.

[147] A further adminicle of evidence is of relevance. On 24 March 2020, in preparation for the nation-wide Covid-19 lockdown, ABV (specifically, Mr Symington and his colleague, Mark McDonald) instructed ASG Tunnelling to weigh down the metal lids on all incomplete manholes on the Scottish Water site (that is, on MH 21, MH 22 & MH 26) by placing ballast bags full of building material on top of the unsecured lids. This was said to have been a site-specific precaution, not dictated by higher management. It seems unlikely that this measure was a novel one, devised through the unique ingenuity of Mr Symington and Mr McDonald. More likely, they were familiar with the practice elsewhere within the construction industry.

Mr Symington explained at the Inquiry that this precaution was motivated by a desire to "stop anyone stealing or moving the lids" while the site was unattended for a prolonged period.

However, even when work recommenced at the ABV site, the ballast bag remained in position

on MH 22 until shortly prior to the temporary handover of the site to RJM, apparently because no one required to work on the manhole.

Iain Chisolm, an experienced Health & Safety Advisor, was engaged by Scottish Water to carry out compliance checks. He visited Scottish Water projects ordinarily on a monthly basis. He inspected the ABV site on 15 July 2020 and completed a Report to his client.³² He inspected MH 21 on the ABV site; he noted that the access opening to that incomplete manhole was covered with a metal lid weighed down with a ballast bag of material; and he observed that this was good practice for the protection of workers and to prevent unauthorised access.³³ [149] When the site was transferred to RJM (which had no need to do any work on MH 22), the ballast bag was not replaced by RJM. Nor was any Heras fencing erected around the incomplete manhole. It was conceded that ballast bags, steel road plates, and Heras fencing were all readily available to RJM had they thought to utilise them to secure the metal lid. [150] In summary, the best that can be said, perhaps, is that there was a conflict and lack of clarity as to the standard or common practice within the construction industry on the precautions normally taken to secure incomplete manholes. That said, the preponderance of evidence presented at the Inquiry favoured the conclusion that the lighter touch (spoken to by Mr McMinn) was the more widespread practice. But there was informed and circumstantial evidence to support the conclusion that the taking of a further precautionary measure (namely, weighing down an unsecured metal lid on an incomplete manhole with another heavy item, such as a sandbag, steel plate, filled ballast bag, or the like) was a practice on construction sites

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³² Crown Production 47

³³ MH 22, which was not similarly secured, did not form part of the ABV site at that time, so it did not part of Mr Chisholm's audit.

that was, at least, familiar and recognised, albeit not attaining the level of being standard or widespread.

- [151] In my judgment, the lighter touch, even if it were to represent standard practice within the construction industry, is deficient. It fails to attach due weight to two particular factors:

 (i) the abnormally heightened risks presented by incomplete manholes on construction sites (namely, the risks of falling, drowning, and asphyxiation from gas), and (ii) the further peculiarly heightened risk of third party intrusion upon incomplete manholes, especially by children, who are particularly attracted by the inherently dangerous features of such structures. Those peculiarly heightened risks merit an enhanced and discriminating security response to incomplete manholes.
- [152] On the information available to me, I conclude that a weighted ballast bag, steel road plate, or similar heavy object placed on the metal lid on MH 22, or Heras fencing erected around and over it, would have acted as a simple and significant, if not impregnable, obstacle to the movement of the metal lid by children (and others), absent mechanical assistance; and, were such a simple precaution to have been put in place, it would likely have avoided Shea's death. In my respectful judgment, this proposition is virtually self-evident.
- [153] For completeness, I observe that there was no serious dispute that the cast-iron lid on MH 22 could, in theory, have been bolted down relatively easily and inexpensively. This would also have fastened it securely to the concrete biscuit. However, the evidence also indicated that this particular proposed method of securing the lid was liable to damage the concrete biscuit (if

it was intended merely as a temporary reversible measure).³⁴ Besides, one can understand that RJM might reasonably have been reluctant to take measures that were liable to damage the concrete biscuit of the manhole, since the structure did not belong to RJM. For that reason, I conclude that the temporary "bolting" of the lid would not have been a reasonable precaution.

Cooperation between principal contractors

[154] A recurring theme in the evidence at the Inquiry concerned a perceived lack of cooperation between ABV and RJM as principal contractors on adjacent sites. Regulation 8(4) of the Construction (Design and Management) Regulations 2015 imposes a duty on principal contractors as follows:

"A person with a duty or functions under these Regulations must cooperate with any other person working on or in relation to a project, at the same or an adjoining construction site, to the extent necessary to enable any person with a duty or function to fulfil that duty or function."

[155] The HSE issued a statutory "Notice of Contravention" letter to ABV on 4 May 2020 in relation to ABV's failure to provide to RJM information in its possession regarding the security breach on 11 July 2020 at the ABV site. The HSE concluded that:

"...sharing the above information was relevant to assist [RJM] identify suitable measures to secure their site... [and] so fulfil their function under Regulation 13(b) of CDM 2015".

[156] In commenting upon ABV's failure to share information with RJM about security issues on the ABV site, the Notice of Contravention goes on to state:

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³⁴ Per Mr McMinn's testimony. He had never seen lids being bolted, as a precautionary measure, prior to completion.

³⁵ Crown Production 90

"If there had been no other issues with site security identified on the RJM site, then this omission would have been very significant".

In his oral testimony, when asked to clarify what was meant by this passage in the Notice, Mr McMinn explained that ABV's failure to share security information was significant but was not very significant in light of the failures of RJM.

[157] In my judgment, this evidence sufficiently supports the conclusion that a causal connection exists between ABV's failure to share information and the occurrence of the accident. True, other causes were operating concurrently, but the failure of the principal contractors to cooperate better between themselves was still a relevant "cause" for the purpose of the statutory findings in this Inquiry.

[158] I also observe that, subsequent to Shea's death, ABV introduced a form known as a Temporary Handover/Access Safety Plan ("THASP")³⁶ the purpose of which, *inter alia*, was for ABV to provide information to other contractors about instances of unauthorised access to any part of a site controlled by ABV prior to that part being temporarily handed over to the other contractor. It was utilised in August 2021 when ABV handed over another part of their site to RJM. It provides a commendable, practical illustration of cooperation between contractors, in implement of their statutory duties, involving the sharing of safety-related information about a construction site.

[159] Interestingly, Mr Midgeley observed in his testimony that it was "simpler" to hand over the Garscadden site temporarily to RJM rather than have to go through the more laborious process of "induction" of the RJM personnel as temporary workers on the ABV site. While the

³⁶ ABV Production 4

temporary transfer approach may have been "simpler", I infer that it compromised the safety of members of the public by placing RJM in control of the site without the benefit of ABV's accrued knowledge of the risks associated with the site and of the measures (such as the weighing down of unsecured lids) that had been put in place to control them. The supposedly "simpler" temporary transfer of the site also left RJM in a position of having no real sense of "ownership" of the site. A common theme was that MH 22 was "irrelevant" to the RJM employees, that it was not "their" manhole, that they had no responsibility for it. As a result, the hazards presented by it were neither identified nor prioritised.

[160] In light of the foregoing, I have made recommendations to encourage better cooperation between principal contractors in connection with the transfer of constructions sites, temporary or otherwise.

Miscellaneous issues

[161] For completeness, I make the following further comments on certain miscellaneous issues.

CCTV as a security measure

[162] First, much focus was placed upon the absence of CCTV footage at the Garscadden site.

Mr McMinn accepted that CCTV could have been installed at the play park. After Shea's death,

CCTV was installed along the entire length of the RJM perimeter.

[163] However, I make no particular criticism of RJM in choosing not to have CCTV at the Garscadden site prior to Shea's death. There were understandable evidenced and reasons for

not doing so. First, Mr Midgely did not have full information available to him to allow him properly to assess the risk of perimeter fence breaches at that location, specifically due to the lack of internal reporting within RJM and the failure of ABV to share relevant information with RJM. Second, it should be borne in mind that the site was very large. The perimeter extended to around 3.5 miles. It would have been a substantial undertaking. Third, there were technical difficulties, though not insurmountable, in installing CCTV cameras around the RJM perimeter, namely the absence of a reliable power source. (By way of illustration, one option was to power the cameras with a diesel generator, but it was explained in evidence that such generators create significant noise, which may have caused a disturbance to the public peace in the surrounding residential area.) Lastly, there was evidence that Shea and his siblings and friends would often ignore cameras (and audio warning speakers) around the ABV site. In summary, the absence of CCTV around the Garscadden site prior to 16 July 2020 was by no means a wholly culpable or inexplicable omission, though with hindsight I conclude it was a reasonable precaution that might realistically have avoided the accident.

[164] That said, the same indulgence cannot be extended to RJM for the absence of other more effective and escalating security arrangements at the Garscadden site prior to Shea's death.

What duty is owed to trespassers?

[165] A recurring theme of Mr McMinn's evidence was that the legal duty of the principal contractor to third parties was to keep unauthorised third parties off the construction site. That was to be achieved by way of suitable and efficient fencing.

- [166] The legal duty, he said, was not for the principal contractor to make the site itself, or features within it, safe to trespassers.
- [167] This was because construction sites were inherently dangerous places. It would be impossible to make them safe for unauthorised third parties.
- [168] With specific reference to manholes, Mr McMinn considered that the legal duty was no more than to prevent workers *inadvertently* falling down open manholes. The duty was not to prevent a worker (still less, a trespasser), by a "conscious act", from deliberately uncovering and/or climbing into an incomplete manhole. This was summed up in Mr McMinn's contention that "if persons wish to access the site, they will".
- [169] For the purposes of this Inquiry, I do not require to make any finding, or reach any conclusion, as to the precise ambit of the statutory duty. Instead, I simply make the following observations.
- [170] Firstly, I am not persuaded that the ambit of the legal duty to third parties is quite as binary as Mr McMinn contends. The Health & Safety at Work Act 1974 imposes an obligation upon employers to protect members of the public affected by, as well as workers on, the construction site. Section 3(4) states:

"It shall be the duty of every employer to conduct his undertaking in such a way as to ensure, so far as reasonably practicable, that persons not in his employment who may be affected thereby are not exposed to risks to their health and safety."

It is not an absolute duty. It is a qualified duty. But it is onerous. I acknowledge that the fencing of a site may well be the primary mechanism to discharge the duty to third parties in many (perhaps even most) cases, but I am not persuaded that, in all circumstances, the duty to third parties ends at the perimeter fence.

[171] Secondly, again without reaching any definitive view on the precise ambit of the duty, I conclude that Mr McMinn's analysis (which excludes liability for "conscious acts") fails to attach due weight to the fact that affected members of the public, to whom the statutory duty is owed, may well include children. By reason of their immaturity, children have a reduced understanding of risk. Indeed, they are often drawn to and attracted by the thrill of danger. Their "conscious acts" my well place them in real jeopardy but, due to their immaturity, they fail to appreciate the risks. A principal contractor's precautions should take due account of the fact that children comprise a category of particularly vulnerable third party to whom the statutory duty is owed; and that a risk assessment and control measures must take account of that heightened risk of serious injury.

[172] That does not mean that every construction site must be made safe for children. That is unworkable. Rather it means that, depending upon the particular circumstances, it may not be enough for a principal contractor to focus attention merely on building a fence. As a matter of fact, fencing can never be impregnable; and as matter of law, it need not be so. Instead, in my judgment, depending upon the circumstances, additional precautions may have to be taken to control the foreseeable risk of serious harm presented to (trespassing) children by a particularly dangerous feature within a site.

[173] Third, I would suggest that Mr McMinn's analysis fails to attach due significance to the fact that incomplete manholes on a construction site present just such a unique heightened risk of serious harm to children. Incomplete manholes present a peculiarly enhanced risk of death or serious injury by falling, by drowning, or by asphyxiation by gassing. For children, the

danger is heightened by the fact that these structures are abnormally attractive to them as enticing and thrilling places in which to play and explore.

[174] Fortunately, on the evidence, a very simple and effective precaution is available to control that risk.

[175] Accordingly, I have made a recommendation to this effect.

The determined intruder

[176] It was also observed by some parties that, despite enhanced security measures being put in place after the accident, incidents of damage to the fencing and unauthorised access continued to occur.

[177] For these reasons, it was submitted that no sufficient causal connection existed between the allegedly deficient security measures (such as systems of recording and monitoring incidents of fence damage and intrusion; enhanced perimeter fence measures, etc.) and Shea's death. Put bluntly, it was argued that none of the proposed additional security measures would have prevented the death anyway, because the children were determined intruders who would have ignored or circumvented them.

- [178] I do not share that jaded view.
- [179] Firstly, and equally bluntly, even if there have been incidents of post-accident incursions, none of them has resulted in the death or injury of a child by falling into an open manhole. So, if any causal significance is to be inferred to post-accident events, the proper inference may be that the post-accident measures have, at least, contributed to preventing further child deaths.

[180] Secondly, merely because some determined intruder chooses deliberately to circumvent enhanced security or fencing measures does not mean that the measures are not worthwhile or efficacious in preventing other incidents of trespass. I acknowledge that a principal contractor's obligation is not absolute. It is merely to take such measures as are reasonably practicable. But even in that context, the causal potency of a precautionary measure is not diminished by the occurrence of an exceptional, or less common, incident of intrusion. In colloquial terms, the baby should not be thrown out with the bathwater.

[181] Thirdly, on the evidence, while it is correct that trespassing children did sometimes ignore the deterrent control measures, they did not always do so. On occasions, other deterrent measures did have some beneficial effect. For example, on 20 May 2020 and 13 June 2020 children trespassing on the ABV site were observed to have left the sites of their own volition when audio warnings were activated remotely.

Alleged "de-watering" into MH 22

- [182] Finally, a surprising chapter of evidence arose towards the end of the Inquiry from Andres Symington. He testified that he had seen RJM workers in and around MH 22 and believed that they were discharging ground water from the site into MH 22.
- [183] I am satisfied that he is mistaken in his recollection on this particular issue.
- [184] His recollection had not previously been articulated by him in his statement to the police after the accident. It was not mentioned by him in the course of the HSE investigation. It was not mentioned by any other witness to the Inquiry. There was no other adminicle of evidence to support this line of testimony. Besides, in cross-examination (for Shea's mother and RJM),

his initial recollection began to falter. He conceded that he could not be certain when he actually saw the supposed de-watering process into MH 22. He conceded that it could have been prior to or after the accident. He conceded, quite properly, that if he had indeed seen it prior to the accident, he would probably have mentioned it to the police when he gave a statement to them on 4 September 2020. He was also unable fully to describe the de-watering process that he claimed to have seen.

[185] Moreover, a supplementary written statement provided by Stuart Laurence³⁷, which was lodged to address Mr Symington's belated recollection, provides a full and convincing explanation of the de-watering process actually used by RJM on site. In that statement, Mr Laurence clarified that RJM did not, and could not, have discharged ground-water into MH 22 for multiple reasons, not least (i) because it would have been an egregious breach of environmental legislation to have done so, absent a licence from the regulatory body (SEPA); and (ii) there was no need to do so, because RJM had already identified, set up, and was utilising a separate area of the site for that purpose. This rebuttal evidence from Mr Laurence was vouched by accompanying contemporaneous photographs (taken by him in July 2020) showing de-watering equipment and silt fencing, none of which interacted with MH 22. ³⁸
[186] Accordingly, I am satisfied that the only evidenced interaction of RJM employees with MH 22 was the brief inspection conducted by Darren Kay and Kevin Keast about seven days or so prior to the accident.

³⁷ This was admitted in evidence by virtue of the 2nd Joint Minute.

³⁸ RJM Productions 6-14

Conclusions

[187] In summary, as stated at the outset of this Determination, having regard to the foregoing findings-in-fact and reasoning, I made the following statutory findings and recommendations.

The time, place and cause of the death (2016 Act, sections 26(2)(a), (b) & (c))

[188] On the evidence, the formal findings to be made in relation to the time, place and direct cause of Shea's death were uncontroversial.

[189] In terms of sections 26(2)(a), (b) & (c) of the 2016 Act, I made the following findings:

- (1) Shea John Ryan (born on 22 February 2010) ("Shea") died as a result of an accident on Thursday 16 July 2020 between approximately 9pm and 10pm within an incomplete manhole (known as "MH 22") on a construction site (known as "the Garscadden Burn Outfall area" but referred to herein as "the Garscadden site") then in the possession and control of RJ McLeod (Contractors) Limited ("RJM"), which construction site was located close to the Garscadden Burn and was bounded in part by Kinfauns Drive, and in part by a footpath connected to Glenkirk Drive, all in Drumchapel, Glasgow; and
- (2) Shea's life was formally pronounced extinct at 23.07pm on that date.
- (3) The cause of Shea's death was a head injury with drowning.

The causes of the accident resulting in the death (2016 Act, section 26(2)(d))

[190] Shea's death was as a result of an accident.

- [191] On the evidence, I identify five causes of that accident. It must be borne in mind that the identification of a cause of an accident is not the same as the attribution of blame. I also make no qualitative apportionment as between these identified causes.
- [192] In terms of section 26(2)(d) of the 2016 Act, I made the following findings concerning the causes of the accident resulting in Shea's death:
 - (1) A cause of the accident resulting in Shea's death was the action of Amey Black & Veatch ("ABV") on or about 2 July 2020 in removing a heavy ballast bag full of building material (known as "Grano") from the top of MH 22, shortly prior to the temporary transfer of the Garscadden site to RJM on 3 July 2020.
 - (2) A cause of the accident resulting in Shea's death was the failure of ABV to cooperate better with RJM before and after the transfer of the Garscadden site to RJM, specifically:
 - (a) ABV's failure to disclose and communicate to RJM, prior to the temporary transfer of the site on 3 July 2020, ABV's accumulated knowledge of the general and specific risks associated with that construction site and its features, and of the precautionary measures identified by ABV to control those risks (specifically, ABV's knowledge of (i) the risk presented to children by MH 22 in its incomplete condition, and (ii) the precaution taken by ABV to control that risk (namely, the placing of a heavy ballast bag full of building material over the access hole to MH 22);
 - (b) ABV's failure to disclose and communicate to RJM, prior to the temporary transfer of the site on 30 July 2020, ABV's accumulated knowledge

of multiple incidents of vandalism to the ABV perimeter fencing in the vicinity of the play park and public footpath alongside the Garscadden site;

- (c) ABV's failure to disclose and communicate to RJM, prior to the temporary transfer of the site on 3 July 2020, ABV's accumulated knowledge of multiple incidents of unauthorised access (by children and others) onto the ABV construction site (of which the Garscadden site then formed part);
- (d) ABV's failure to disclose and communicate to RJM, after the temporary transfer of the site on 3 July 2020, ABV's knowledge of a further reported incident on 11 July 2020 of unauthorised access (by children) onto the ABV construction site (then located adjacent to the Garscadden site).
- (3) A cause of the accident resulting in Shea's death was the failure of RJM to take reasonable and sufficient measures to prevent unauthorised access, outwith operational hours at the construction site, to the inspection chamber of MH 22 either (a) by placing a heavy object (being not merely an unsecured metal lid) over the access hole to the inspection chamber of MH 22, so that the access hole was fully covered and the object itself was of sufficient weight that it could not be moved other than with mechanical assistance; or, alternatively, (b) by erecting fully enclosed fencing around (and over) MH 22.
- (4) A cause of the accident resulting in Shea's death was the failure of RJM to take reasonable and sufficient measures:
 - (a) to assess the risk of unauthorised persons (especially children) gaining access to the Garscadden site;

- (b) to inspect and maintain suitable perimeter fencing around the site to prevent unauthorised access thereto (in particular, unauthorised access by children); and
- (c) to inspect MH 22 at the end of each working day, prior to the closure of the site, to check that the access hole to the inspection chamber of MH 22 was fully covered and was not accessible to children.
- (5) A cause of the accident resulting in Shea's death was the action of Shea in climbing into the open access hole to the inspection chamber of MH 22, seeking to descend the integrated ladder therein, slipping, losing his grip on the ladder, and falling a distance of approximately 5 to 6 metres into the chamber and onto a concrete platform and connecting water pipe beneath.

Precautions that might reasonably have been taken (2016 Act, section 26(2)(e))

- [193] Under section 26(2)(e) of the 2016 Act, the court must decide whether there were any precautions which "could reasonably have been taken" and which, "had they been taken, might realistically have resulted in the death… being avoided".
- [194] This requires not only an exercise in fact-finding, but also a judicial assessment of, in effect, a conditional counter-factual: if X had been done, might Y not have occurred?
- [195] In this context, a precaution "might realistically" have avoided a death if there is a real possibility, rather than a remote chance, that it might have done so.
- [196] It bears repeating that an FAI is very much an exercise in applying the wisdom of hindsight. This distinguishes an FAI from civil litigation. The court proceeds on the basis of the

evidence and information adduced as to what is *now* known, not the state of knowledge at the time of the death. The 2016 Act is concerned with the precautions which could reasonably have been taken at the time of the death, and not with whether they were, or ought to have been, recognised and acted upon. It does not matter whether it was, or was not, reasonably foreseeable at the time that, if the identified precautions were not taken, death would result. The word "reasonably" in section 26(2)(e) relates to the reasonableness of taking the precautions rather than to the foreseeability of the death or accident. Reasonable foreseeability is a concept relevant to a fault-finding exercise, not to an FAI.

[197] However, for a finding to be justified under section 26(2)(e), the precaution must be one which arises from and is supported by the evidence adduced at the inquiry and reasonable inferences drawn therefrom, not from the use of speculation or creative imagination on the part of the sheriff. Second, it must be a precaution that could reasonably have been taken (that is, it must have been available, suitable and practicable, even if it was not one that was required or indicated by guidance or practice at the time). Third, the precaution must be one which, if taken, "might realistically" have resulted in the death or accident being avoided. Accordingly, the court does not require to be satisfied that the precaution would necessarily have had this result, or even that it would probably have done so. Rather, what is required is a realistic possibility that the death might have been avoided; what is required is an actual (rather than a fanciful) possibility, a real (rather than a remote) chance. In the context of the predecessor

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³⁹ Determination in the Inquiry into the death of George Bartlett, 11 April 2022, Aberdeen Sheriff Court.

legislation, Sheriff Kearney used the expression "a lively possibility" ⁴⁰ to describe this concept. It signifies something less than a probability, but more than a fanciful possibility. In his seminal Determination in the Inquiry into the deaths of Katie Allan and William Brown, Sheriff Simon Collins KC thought the expression "realistic possibility" was more in keeping with the language of section 26(2)(e) of the 2016 Act, but he doubted if there was any real difference with Sheriff Kearney's oft-quoted formulation. 41 Fourth, if otherwise justified, a finding under section 26(2)(e) should still be made even if the evidence indicates that had the deceased not died when and how he did, that he would or might well have died in another way in any event. For example, if an employee dies because of a fault in a factory machine, a finding under section 26(2)(e) (that the fixing of the fault might realistically have avoided the death) is still appropriate even though there may be another separate fault in the machine which would have been fatal to the employee anyway. To hold otherwise would mean, in effect, that no finding would be made in relation to an actually lethal fault simply because another potentially lethal fault existed. So, the court should not ignore a failure to take one reasonable precaution merely because there is evidence of a failure to take another reasonable precaution. [198] Accordingly, in terms of section 26(2)(e) of the 2016 Act, I conclude that the following

precautions could reasonably have been taken, and, had they been taken, they might realistically have resulted in the accident (and Shea's death) being avoided:

(1) ABV could reasonably have prevented unauthorised access to the inspection chamber of MH 22 by not removing, on or about 2 July 2020, a heavy ballast bag full

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⁴⁰ Determination into the death of James McAlpine, 17 January 1986, Glasgow Sheriff Court; and approved in *Sutherland v Lord Advocate* 2017 SLT 333.

⁴¹ Determination, 13 January 2025, [28]

of building material (known as "Grano") from the top of MH 22, shortly prior to the temporary transfer of the Garscadden site to RJM on 3 July 2020; and, had ABV done so, the accident resulting in Shea's death might realistically have been avoided.

- (2) ABV could reasonably have cooperated better with RJM:
 - (a) by disclosing to RJM, prior to the temporary transfer of the Garscadden site to RJM on 3 July 2020, ABV's accumulated knowledge of the general and specific risks associated with the construction site and its features, and of the precautionary measures identified by ABV to control those risks (specifically, ABV's knowledge of (i) the risk presented to children by MH 22 in its incomplete condition, and (ii) the precaution taken by ABV to control that risk (namely, the placing of a heavy ballast bag full of building material over the access hole to MH 22);
 - (b) by disclosing to RJM, prior to the temporary transfer of the Garscadden site to RJM on 3 July 2020, ABV's accumulated knowledge of multiple incidents of vandalism to the ABV perimeter fencing in the vicinity of the play park and public footpath alongside the Garscadden site;
 - (c) by disclosing to RJM, prior to the temporary transfer of the Garscadden site to RJM on 3 July 2020, ABV's accumulated knowledge of multiple incidents of unauthorised access by children onto the ABV construction site (of which the Garscadden site then formed part);
 - (d) by disclosing to RJM, after the temporary transfer of the site to RJM on 3 July 2020, ABV's knowledge of a further reported incident on 11 July 2020 of

unauthorised access (by children) onto the ABV construction site (then located adjacent to the Garscadden site).

and, had ABV done so, the accident resulting in Shea's death might realistically have been avoided.

- (3) RJM could reasonably have prevented unauthorised access to the inspection chamber of MH 22, outwith operational hours at the construction site, either (a) by placing a heavy object (being not merely an unsecured metal lid) over the access hole to the inspection chamber of MH 22, in such a way that the access hole was fully covered and the object itself was of sufficient weight that it could not be moved other than with mechanical assistance; or, alternatively, (b) by erecting fully enclosed fencing around (and over) MH 22; and, had RJM done so, the accident resulting in Shea's death might realistically have been avoided.
- (4) RJM could reasonably have prevented unauthorised access to the inspection chamber of MH 22, outwith operational hours at the construction site, by inspecting MH 22 at the end of each working day, prior to the closure of the site, to check that the access hole to the inspection chamber of MH 22 was fully covered and was not accessible to children; and, had RJM done so, the accident resulting in Shea's death might realistically have been avoided.
- (5) RJM could reasonably have made the perimeter fencing around the Garscadden site more secure:-

- (a) by carrying out a proper assessment of the risk of unauthorised persons (especially children) gaining access to the Garscadden site, particularly in the vicinity of the adjacent playpark;
- (b) by erecting triangulated fencing along the perimeter fence line in the vicinity of the adjacent play park, to strengthen the perimeter fence line at that location;
- (c) by introducing recorded daily checks (including at the end of each working day, prior to closing the site) of the adequacy of the perimeter fencing in the vicinity of the adjacent play park, to ascertain (i) whether any fencing panels there were damaged or weakened; (ii) whether the fencing panels were tightly double-clipped together; (iii) whether any damaged or weakened fencing panels required to be replaced; and (iv) whether there were any breaches in the fence line that might afford the opportunity for unauthorised access to the construction site (especially by children);
- (d) by recording and monitoring instances of damage to, and breaches of, the perimeter fence line (especially by children, and especially in the vicinity of the play park adjacent to the Garscadden site), and of the repairs and replacements effected thereto, in order to better inform RJM's assessment of the risk of unauthorised access to the construction site;

and, had RJM done so, the accident resulting in Shea's death might realistically have been avoided.

Defects in a system of working (2016 Act, section 26(2)(f))

[199] In relation to section 26(2)(f) of the 2016 Act, the question of whether any defects in any system of working contributed to the death is again a question of fact. The evidence relating to this issue requires to be assessed, and findings made, on a balance of probabilities.

[200] A defect may consist in the absence of a proper system of working, or it may comprise a defect in an existing system. It does not matter whether it was foreseeable before the death or accident that the death or accident might occur as a result of the defect.

[201] The use of the word "contributed" points toward a causal relationship between an identified defect and the death. However, a defect may "contribute" to a death without being the only, or even the main, cause of it. Nor is it necessary to conclude that "but for" the defect the death would not have occurred. It is sufficient that it was at least a significant or material cause, whether alone or in combination with other factors; but it must not be so remote from the death as to have played no real part in it

[202] Accordingly, in terms of section 26(2)(f) of the 2016 Act, I conclude that the following "defects" in a "system of working" contributed to the accident resulting in Shea's death:

- (1) There was no system of working in place within RJM for employees to record, document, report, and monitor (i) incidents of damage to the perimeter fencing around its construction sites (including the Garscadden site) or (ii) incidents of suspected unauthorised access to the construction sites (especially by children).
- (2) There was no system of working in place within RJM whereby, outwith operational hours on its construction sites, unauthorised access to the inspection chamber of any incomplete manhole thereon was prevented either: (a) by placing an

object (being not merely an unsecured metal lid) over the access hole to the inspection chamber of the manhole, so that the access hole was fully covered and the object itself was of sufficient weight that it could not be moved other than with mechanical assistance; or, alternatively (b) by erecting fully enclosed fencing around (and over) the incomplete manhole.

- (3) There was no system of working within RJM whereby documented daily checks were carried out (specifically at the end of each working day, prior to closing the site) of the adequacy of the perimeter fencing, specifically to ascertain (i) whether any fencing panels were damaged or weakened; (ii) whether the fencing panels were tightly double-clipped together; (iii) whether any damaged or weakened fencing panels or clips required to be replaced; and (iv) whether there were any breaches in the fence line that might afford the opportunity for unauthorised access to the construction site (especially by children).
- (4) There was no system of working within RJM whereby documented daily checks were carried out (specifically at the end of each working day, prior to closing the construction site) to check that any incomplete manhole on the site was fully covered and was not accessible to children.
- (5) There was no system of working in place within ABV whereby, in advance of the transfer (temporary or otherwise) of any part of its construction site to a proximate principal contractor ("the transferee"), ABV was prompted and compelled to cooperate with the transferee:

- (a) by disclosing to the transferee ABV's knowledge of the general and specific risks associated with that construction site and its features, and of the precautionary measures identified by ABV to control those risks (especially, ABV's knowledge of (i) any risk presented to children by the site, and (ii) any precaution identified by ABV to control that risk);
- (b) by disclosing to the transferee ABV's knowledge of any incident of damage to, or breach of, ABV's perimeter fencing (especially by children) in the vicinity of the site to be transferred.
- (6) There was no system of working in place within ABV whereby, after the transfer (temporary or otherwise) of any part of its construction site to a proximate principal contractor ("the transferee"), ABV was prompted and compelled to further cooperate with the transferee by disclosing timeously to the transferee ABV's knowledge of any further incident of damage to, or breach of, ABV's perimeter fencing (especially by children) in the vicinity of the transferred site.

"Other facts" relevant to the circumstances of the death

[203] Under section 26(2)(g) of the 2016 Act, the court is required to record "any other facts which are relevant to the circumstances of the death."

[204] This invites the formal recording of matters which have been shown to be relevant to the death in relation to reasonable precautions, or defective systems of work, but where the necessary causative connection for a finding under sections 26(2)(e) or (f) is absent.

[205] In other words, it enables the court to highlight, for example, a precaution which it would have been reasonable to take, even it has not been established that there was a realistic possibility that the death might have been avoided if it had been taken. Similarly, it enables the court to identify a defect in a system of work, even if it has not been established that this defect contributed to the death. In this way, section 26(2)(g) provides another way in which the Inquiry can enable lessons for the future to be learned from the circumstances of a death.

[206] I record here certain "other facts" that I consider relevant to the circumstances of the death. To be clear, the necessary causal connection is not present between these facts and the occurrence of the death, but I am satisfied that they are sufficiently relevant to the circumstances of the death to justify making the findings in the wider public interest.

[207] Therefore, under section 26(2)(g) of the 2016 Act, I make the following findings of "other facts" which are relevant to the circumstances of the death:

The proximity of the play park to the site

- (1) Prior to construction work commencing at the ABV and RJM construction sites at Drumchapel, Glasgow City Council had expressly directed that the small play park located on the footpath (connecting to Glenkirk Drive) which ran alongside the perimeter fence line of the ABV construction site (latterly, the Garscadden site), must remain open and accessible to children throughout the construction works.
- (2) There was no evidence at the Inquiry of any risk assessment having been carried out by or on behalf of Glasgow City Council of the risks presented to children by the proximity of the play park to the construction site; or of the risks associated with keeping the play park open and functional during the construction works; or of

the feasibility or desirability of alternative options, such as the temporary dismantling, disabling, or relocation of the play park during the construction works.

COVID lockdown, school closures, and safety awareness visits

- (3) Prior to the national COVID lockdown in April 2020, it was the usual practice of RJM, in advance of commencing large construction projects of this nature, to visit local schools to educate and alert children to the dangers of trespassing upon construction sites, and to discourage them from doing so.
- (4) However, as a consequence of the dislocation caused by the COVID lockdown in April 2020 (specifically, the closure of schools and subsequent disruption to school attendance), RJM was unable to implement this usual practice.

Recommendations

[208] Lastly, sections 26(1)(b) & 26(4) of the 2016 Act empower the court to make forward-facing recommendations concerning issues such as reasonable precautions; improvements to, or the introduction of, a system of work; or the taking of any other steps. Such recommendations can be made if the sheriff considers them "appropriate".

[209] What is called for here is an exercise of judicial discretion and judgment.

Recommendations under section 26(4) can be made even when no findings are made under section 26(2)(e) or (f). That said, any recommendations must be reasonable, grounded in the evidence, and made on the basis that they might realistically prevent other deaths occurring in the future in similar circumstances to the death under consideration in the Inquiry.

- [210] A recommendation under subsection (1)(b) may, but need not, be addressed to a participant in the inquiry, or a body or office-holder appearing to the sheriff to have an interest in the prevention of deaths in similar circumstances.
- [211] In terms of section 26(1)(b) of the 2016 Act, I have made the following recommendations:

 Promoting the objective of protecting children
 - (1) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction (including HSG 150 "Health and Safety in Construction"; HSG 151 "Protecting the Public Your Next Move"; and HSG L153 "Managing Health and Safety in Construction") generally to emphasise and to promote the objective of protecting children from the risks arising from construction sites; and specifically, without prejudice to the foregoing generality, to promote the taking of precautionary measures (i) to reduce the risk of children trespassing on a construction site, and (ii) to protect trespassing children from the particular risks presented to them by any incomplete manhole thereon.

Recording incidents of perimeter breaches (especially involving children)

(2) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction to include express provision for principal contractors to establish systems of working formally to record, document, report (both internally to suitable duty-holders, and to the employer/client), and monitor (i) all incidents of damage to perimeter fencing

around the construction site, and the action taken to repair or replace such damaged fencing, and (ii) all incidents of suspected unauthorised access to the construction site (especially by children), and the action taken to prevent a recurrence thereof.

Preventing unauthorised access to incomplete manholes

(3) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction to include express provision that, outwith operational hours on construction sites, effective measures should be taken by principal contactors to prevent unauthorised access to the inspection chamber of any incomplete manhole thereon, either: (a) by placing an object (being not merely an unsecured metal lid) over the access hole to the inspection chamber of the manhole, so that the access hole is fully covered and the object itself is of sufficient weight that it cannot be moved other than with mechanical assistance; or, alternatively (b) by erecting fully enclosed fencing around (and over) the incomplete manhole.

Promoting the duty of cooperation between principal contractors

(4) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction generally to further promote the statutory duty upon proximate principal contractors to cooperate with each other to enable the fulfilment of their respective statutory duties under Regulation 8(4) of the Construction (Design and Management)

Regulations 2015; and, specifically, with a view to promoting the protection of children from the risks arising from construction sites.

Duty to share information

(5) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction to include express provision for cooperation between proximate principal contractors by promoting the establishment of systems of working to facilitate the routine and timely disclosure of information between such contractors concerning incidents (especially involving children) of (i) unauthorised access to construction sites or compounds, (ii) vandalism or damage to perimeter fencing, equipment, materials, or buildings on construction sites or compounds, (iii) theft from construction sites or compounds, or (iv) abusive or disorderly conduct by a member of the public towards any worker at such sites or compounds.

Transfer of construction sites: duty to share information

(6) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction to include express provision for greater cooperation between principal contractors in circumstances where possession and control of a construction site (or part thereof) is to be transferred (temporarily or otherwise) from one principal contractor ("the transferred"); and, specifically, without prejudice to the

foregoing generality, in the context of such site transfers, to include express provision for the timeous disclosure by the transferor to the transferee of the following information, so far as within the transferor's possession: (i) any identified risk of injury or death (to workers or to members of the public who may access the site, including children) arising from the construction site, or any feature thereof, or operation thereon; (ii) the precautionary measure(s) identified by the transferor to control that risk; (iii) any incident of unauthorised access (especially by children) to the site to be transferred or adjacent sites; (iv) any incident of vandalism or damage (especially by children) to perimeter fencing, equipment, materials, or buildings on the site to be transferred or adjacent sites; (v) any incident of theft from the site to be transferred adjacent sites; or (vi) any incident of abusive or disorderly conduct towards any worker by a member of the public at the site to be transferred or adjacent sites.

Children's play parks: increased risks

(7) The Health and Safety Executive should review and consider revising its published guidance on the management of health and safety in construction to include express provision highlighting to principal contractors (i) the increased risk of damage to and breach of perimeter fencing at construction sites in the vicinity of children's play parks; (ii) the resulting increased risk of children seeking to gain unauthorised access to such sites at such locations; (iii) the necessity to consider these increased risks in any risk assessment undertaken by the principal contractors in

relation to the site; and (iv) the necessity, in the context of any such risk assessment, to consider taking enhanced precautionary measures, both around and within such sites, to control those increased risks.

Children's play parks: risk assessment by local authorities

- (8) Glasgow City Council, and other Scottish local authorities, should review and consider revising their practices, procedures and policies to ensure that, in respect of any children's play park for which they have management responsibility and which is located in the vicinity of a construction site, a risk assessment is carried out by or on behalf of the local authority to determine the nature and extent of the risks, if any, presented to children by the nearby construction site; and specifically, without prejudice to the foregoing generality, to determine (i) whether suitable precautionary measures can be put in place and maintained (by the local authority or others) effectively to control those risks; (ii) whether the play park should remain open and functional during the construction works on the nearby site; or (iii) whether the play park should temporarily be dismantled, disabled, or relocated, pending completion of the construction works on the nearby site.
- [212] In concluding, I express my gratitude to all parties, agents, counsel and witnesses who assisted this Inquiry in the discharge of its functions. I also wish to acknowledge the particular courage and kindness of Mr Graeme Paterson, Mr Jamie Adams, and Constables Bryan Courtney, Holly McConnachie and Nigel McDonald, who, being among the first adults at the scene of the accident, tried so valiantly to save Shea's life.

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[213] Lastly, may I express my sincere condolences to Shea's mother, Joanne Ferguson, and to

his step-father and family, for their loss. Some small solace may perhaps be drawn from the

outcome of this Inquiry, and the protections from which other children may hopefully benefit.

SHERIFF S. REID

Sheriff of Glasgow and Strathkelvin

GLASGOW, 30th July 2025

APPENDIX A

List of Participants at the Inquiry

- 1. The Crown (represented by Ms N Gillespie, Procurator Fiscal Depute, Glasgow)
- 2. Joanne Ferguson (Shea's mother) (represented by Mr D Swanney, Advocate, instructed by Digby Brown, Glasgow)
- Prime Secure Systems Ltd ("Prime") (represented by Mr C Shaw, Solicitor, Levy & McRae, Glasgow);
- 4. ASG Tunnelling & Engineering Services Ltd ("ASG Tunnelling") (represented by Mr J Barrie, DWF LLP, Edinburgh);
- The Health & Safety Executive ("HSE) (represented by Ms McDonald, Solicitor,
 Anderson Strathern LLP, Edinburgh);
- Glasgow City Council ("GCC") (represented by Ms L Macneill, BTO Solicitors LLP, Glasgow);
- 7. Scottish Water (represented by Ms K Railton, DAC Beachcroft Scotland LLP, Glasgow);
- 8. Byzak Ltd and Binnies UK Ltd (formerly Black and Veitch Ltd) (represented by Ms K Metcalfe, Pinsent Masons LLP, Glasgow);
- 9. R J McLeod (Contractors) Ltd ("RJM") (represented by Ms Bone, Solicitor, Brodies LLP, Glasgow).

APPENDIX B

List of Witnesses at the Inquiry (from whom oral evidence was heard)

	1
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- 2. Robert Van Beek
- 3. Stuart Laurence
- 4. Scott Reid
- 5. Kevin Keast
- 6. Raymond Innes
- 7. Ian Midgeley (by WebEx video conference call)
- 8. Sam Allan
- 9. Mick Docherty
- 10. Adam Kay
- 11. John Docherty
- 12. Jamie Adams
- 13. Raymond Quinn
- 14. Sergeant Nigel McDonald
- 15. Constable Andrew Leishman
- 16. Darren Kay
- 17. John Montgomery
- 18. Aidan Millburn
- 19. Andres Symington
- 20. Martin Heneaghan
- 21. Jamal Adam
- 22. Kevin McDaid
- 23. Hishima Saidi
- 24. Steven Stirling
- 25. Mark McDonald (by WebEx video conference call)
- 26. Graeme McMinn, HSE

APPENDIX C

Images referred to in Findings-in-Fact

Image 1



Image 2



Image 3

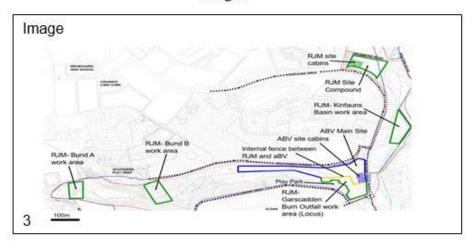


Image 4

