# Coal Mining, Ground Conditions and Contamination Planning Statement

**CMGCCPS-001**

**Land at The Old Vicarage, Frizington, Cumbria, CA26 3SU**

**Proposed Detached Dwelling & Associated Infrastructure**

**Full Planning Application**

**09/10/2026 – Rev A**

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**Coal Mining, Ground Conditions and Contamination Planning Statement**

**The Old Vicarage Meadowcroft Road Frizington Cumbria CA26 3SU**
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## 1. Purpose and principal findings

This statement provides a desktop review of coal mining, ground conditions and potential contamination to support the proposed five-bedroom detached self-build dwelling within the grounds of The Old Vicarage. It considers ground stability, potential land contamination, controlled waters, radon and the coal mining legacy. The current application form identifies one dwelling; the 2023 pre-application material considered one or two. [S1-S4]

The available evidence identifies an existing domestic garden setting, Flood Zone 1 at the supplied reference location and a low address-based radon probability. Public environmental mapping also identifies three historic landfill polygons within 1 km. The nearest mapped landfill boundary is approximately 745 m from the reference point. [S3-S6; R9-R11]

The reported separations are approximately 308 m from the Development High Risk Area and 373.70 m between selected points in the supplied mine-entry measurement. These support preliminary screening, but have not been surveyed or measured from the final application boundary. Mine entry 303517-008 is reported as having a treatment record. This does not certify its present condition or rule out other workings. [S7-S8; R2-R4]

**No overriding ground-related constraint has been established by this review. Equally, the evidence is insufficient to certify the site as uncontaminated or fully safe and stable. Complete the plot-specific records checks and a competent site walkover, then use the updated risk model to decide whether targeted investigation is necessary.**

## 2. Assessment status

This is a preliminary desktop ground-risk assessment, supplemented by the applicant's report of a local trial hole encountering heavy clay in which water did not soak away.

That trial-hole account is drainage evidence. It is not represented as a completed contamination investigation, geotechnical investigation or competent site walkover for this assessment.

No laboratory testing, groundwater monitoring or ground-gas monitoring is reported. The statement is not a foundation design, a completed field-verified preliminary risk assessment or a specialist Coal Mining Risk Assessment.

The evidence status and remaining assessment requirements are identified within the report.

## 3. Scope and evidence

The assessment applies to the proposed residential plot, including gardens, parking, services, foundations and any retaining structures. It considers neighbouring activities where a credible pathway could affect the site. Public searches use the Environment Agency flood-map location E303116 N516786, equivalent to NY03116 16786. This is a reference point, not a surveyed plot centroid or legal boundary. [S5]

## 4. Method and confidence

The approach follows the risk-based sequence in Environment Agency Land Contamination Risk Management guidance: identify the proposed use, gather evidence, construct an initial source-pathway-receptor model and decide what further work is justified. That guidance includes a site walkover within a preliminary risk assessment; the desktop work here therefore needs a walkover before being treated as complete. [R1]

| Evidence | Status | Use in this statement |
|---|---|---|
| Current application form | Reviewed | One five-bedroom dwelling; domestic plot; mains foul drainage and SuDS selections |
| 2023 plan DAS and advice | Reviewed | Historical proposal and garden context; protected tree constraints |
| EA flood and radon reports | Reviewed | Location-specific screening subject to their stated limitations |
| MRA map screenshots | Reviewed | Regional coal mining context; enabled layers and supplied legends |
| BGS 50K WMS | Queried | Reference-location geology and nearby features; mapping rather than ground proof |
| EA landfill and SPZ data | Queried | 1 km reference-point screening; polygon-boundary distances calculated |
| Historic map sequence and full environmental search | Outstanding | Earlier land uses and additional potential sources not comprehensively resolved |
| Applicant-reported drainage trial hole | Reported observation | Heavy clay and unsuccessful soakage; no quantified infiltration rate or wider ground-risk clearance established. |
| Assessment walkover | Not completed for this assessment | Outstanding, as identified in Sections 4, 44 and 64. |
| Geotechnical and contamination investigation | No completed investigation reported | The drainage trial-hole observation does not establish bearing capacity, contamination concentrations or mining-risk clearance. |

Verified evidence, reported information and professional interpretation are distinguished throughout. A negative map search means no feature was returned by that particular search; it does not prove absence of a hazard. Public dataset currency and scale also limit the conclusions.

## 5. Site setting and development

## 6. Present site use and surroundings

The 2023 DAS describes the land as an extended garden to the Old Vicarage. The submitted application form describes a domestic plot. Drawing BM-PPA-001 shows the Vicarage within a red-line enclosure north of Meadowcroft Road, with access between neighbouring lodge properties. The supplied aerial image shows housing, established vegetation, open land and Lingla Beck in the wider setting. These are documentary and image observations, not findings from a site inspection. [S1-S3; S7]

The 2023 Council advice identifies a 1992 group Tree Preservation Order along the western and northern boundary. Trees can affect excavation access, root protection, moisture conditions and foundation design. Root protection areas must be coordinated with the ground investigation and

drainage proposals. No tree species survey, current root protection plan or precise foundation-to-tree distances are established here. [S4]

### 7. Proposed works

The current proposal comprises one five-bedroom self-build dwelling, a minimum of three parking spaces and timber boundary fencing. Foul and surface-water drainage are described in Section 23 and FSWDR-001. The final dwelling position, footprint, formation levels, earthworks quantities and SuDS arrangement must be taken from the current drawings. The two indicative dwellings on the 2023 sketch must not be treated as the final approved layout. [S1-S2]

New excavation could expose previously undisturbed soils, old drainage, local fill, buried structures or mining features. Residential gardens introduce direct soil-contact and possible produce-consumption pathways; a future dwelling introduces potential gas and vapour accumulation pathways. Residential use is therefore treated as a sensitive end use in the risk model.

### 8. Planning context

The 31 March 2023 pre-application response supported the principle of residential development subject to layout, amenity and tree considerations. It is not planning permission, contamination clearance or a ground-stability certificate. [S4]

The Copeland Local Plan 2021-2039 was adopted on 5 November 2024 and replaced the earlier plans cited in the 2023 advice. The current online NPPF ground-conditions policy P2 requires suitable sites, adequate competent assessment and safe development responsibility to remain with the developer or landowner. The report addresses those ground-related matters; it does not assess the full planning merits. [R12-R13]

The Development High Risk Area combines recorded mining entries, shallow workings, hazards, mine-gas sites, fissures and previous surface mining. Its boundary is a screening designation that can change as records are updated. Planning Practice Guidance also recognises instability originating outside a site; an off-site feature requires assessment where a credible route of influence exists. [R19-R20]

**Distance Screening and Assessment Requirements**

Distance from a recorded feature is one consideration within the assessment. A 250 m screening distance is not treated as a universal exemption from contamination, ground-gas or mining-risk assessment.

The reported separation from mine entry 303517-008 and the mapped historic landfill sites supports the consideration of those off-site features on a proportionate basis. It does not, by itself, establish the absence of shallow workings, local fill or other relevant ground conditions within the development site.

The requirement for a specialist Coal Mining Risk Assessment depends on the current application boundary, the applicable mining-risk designation and relevant site-specific evidence.

### 9. Historical land use and records review

### 10. Documented history

| Date or period | Evidence | Interpretation |
|---|---|---|
| Before January 2023 | No complete historic map sequence reviewed | Earlier garden use, structures, filling and industrial encroachment remain unverified |

| Date or period | Evidence | Interpretation |
|---|---|---|
| January 2023 | BM-PPA-001 and DAS-001 | Domestic garden proposal for one or two dwellings |
| 31 March 2023 | Pre-application advice PAA/23/0007 | Two dwellings considered; TPO and residential context recorded |
| October 2026 | Current form and submitted screenshots | One dwelling now described; contemporary map screening supplied |

An established garden is a favourable indicator compared with a documented industrial site, but does not establish an uninterrupted benign history. Domestic land can contain ash disposal, demolition material, imported soil, old fuel tanks, buried septic systems and redundant outbuildings. None of these is confirmed on this plot.

**11. Public contaminated land register**

The Council webpage reviewed lists determined sites elsewhere in Cumberland and does not list the Old Vicarage or this Frizington address. This is a narrow finding about the displayed register, not a response to a plot-specific Environmental Information Request. Historic industrial activity can affect land without formal Part 2A determination. Request any relevant investigation, inspection, complaint, landfill, tipping or remediation records held for the plot and adjoining land. [R9]

**12. Regional legacy and non coal mining**

BGS regional accounts identify coal and iron-ore mining in west Cumbria, including Frizington. The geological memoir records Lonsdale and Millyeat iron mining in the wider Frizington area. Coal mapping alone cannot screen out metalliferous workings, old quarries or backfilled extraction. These regional records justify checking historical maps and non-coal mining information; they do not prove workings beneath the site. [R7-R8]

**13. Historical review still needed**

Review dated Ordnance Survey mapping from the earliest available edition through successive twentieth-century editions, available aerial imagery, the Council planning record and landowner information. Look for pits, quarries, spoil, shafts, adits, tanks, workshops, infilled depressions and altered watercourses. Record scale and date for each source. No claim that these historical features are absent is made in this statement.

**14. Property and immediate surroundings**

The supplied aerial images are arranged from the closest property view to the wider setting. They illustrate the existing house and garden, the neighbouring lodge properties, Meadowcroft Road, surrounding housing, vegetation and Lingla Beck. Google Maps uses a Holy Lodge label in these images; that place label is not a surveyed identification of the proposed plot or the final application boundary. [S9]




**Figure 1** - Close aerial view of the Old Vicarage setting and neighbouring lodges. Existing house and garden are visible towards the centre. No current red line is overlaid. [S9]




**Figure 2** - Neighbourhood context showing Meadowcroft Road housing and Lingla Beck. [S9]

### 15. Wider property setting




**Figure 3** - Wider locality including open land residential areas and the Frizington road network. The map pin is labelled Holy Lodge by Google Maps and is a place marker only. [S9]

The red-line enclosure in the original 2023 plan is reproduced in Appendix A. The aerial images provide orientation and visual context; they do not establish ownership, plot area, ground levels, contamination status or mining-risk classification.

### 16. Geological and geotechnical ground model

### 17. BGS geological mapping

The BGS detailed geology WMS was queried at the supplied reference location on 9 October 2026. The 1:50,000 superficial layer returned Till Devensian Diamicton. The bedrock feature-information request returned Whitehaven Sandstone Formation Sandstone and Brockram Breccia. The return of two bedrock polygons indicates that adjacent mapped units fall within the query neighbourhood; it does not establish a single uniform stratum beneath the proposed footprint. [R6; Appendix D]

No artificial-ground, mass-movement or linear-feature record was returned by the reference-location WMS requests. This is a scale- and search-dependent result. Local garden fill, unmapped changes in rockhead, small slips, faults and buried structures can still exist. The nominal map source is Whitehaven Sheet 28; the returned geology release field is 31 March 2025.

### 18. Working ground model

| Horizon | Preliminary model | Design implication |
|---|---|---|
| Surface | Garden topsoil and possible local fill | Remove unsuitable organic material from load-bearing formations; inspect soil quality |
| Superficial ground | Mapped Devensian till, with heavy clay reported in a local trial hole. Thickness and variability across the development area are unverified. | No infiltration disposal is proposed. Bearing conditions, volume-change behaviour, groundwater and tree-related foundation effects remain separate engineering considerations. |
| Weathered rock and bedrock | Whitehaven Sandstone and Brockram in query neighbourhood | Rockhead and weathering may vary; confirm unit and continuity at foundation positions |

| Horizon | Preliminary model | Design implication |
|---|---|---|
| Deeper strata and workings | Unresolved beneath the plot | Surface geology does not exclude deeper coal or other mineral workings |

The descriptions above are an interpreted ground model rather than borehole findings. No allowable bearing pressure, foundation depth, settlement estimate, permeability, groundwater level or concrete exposure class can be assigned from this evidence.

**19. Principal engineering checks**

A competent geotechnical investigation should establish topsoil and fill thickness, natural-ground strength, rockhead where relevant, seasonal water conditions and chemical aggressivity to buried concrete. Confirm foundation response to trees and any clay-rich till, differential settlement across strata or fill, and stability of retaining structures and excavations.

The proposed drainage system uses impermeably lined attenuation and lined permeable-pavement storage with controlled discharge. It takes no credit for infiltration following the reported unsuccessful soakage trial in heavy clay. The ground investigation for construction design shall address foundations, excavations, tank support, pavement formation and groundwater effects.

**20. Water environment flooding and radon**

**21. Flood screening**

The Environment Agency Flood Map for Planning report generated on 9 October 2026 identifies E303116 N516786 as Flood Zone 1. Its map covers river and sea flooding and explicitly excludes other sources. The finding is low mapped river/sea flood probability at the selected location, not absence of all flood risk. [S5]

Lingla Beck is shown in the supplied mapping and aerial context. Its measured separation from the final plot, any tributary ditches, local low points and drainage routes should be confirmed by the current topographical survey. Review surface-water flood mapping, groundwater emergence and sewer exceedance when developing levels and drainage. The 2023 DAS statement of no flood risk should not be relied on as a current comprehensive assessment. [S3; S7]

**22. Groundwater and source protection**

The Environment Agency Source Protection Zones Merged layer returned no polygons intersecting a 1 km radius around the reference point. This is a dataset screening result, not confirmation of no groundwater abstraction or private supply. The service metadata shows a data edit date of 15 April 2024. Aquifer designation, groundwater vulnerability, groundwater body status and local abstractions were not established by this search. [R10-R11; Appendix D]

A till cover could restrict some vertical flow but may contain permeable lenses. Weathered or fractured bedrock and service trenches could provide preferential pathways. Groundwater gradient, hydraulic continuity with landfill sources and connection to Lingla Beck are unknown; groundwater receptors therefore remain in the conceptual model.

**23. Drainage**

The drainage proposal is defined in FSWDR-001 and Drawing TOV-BM-007.

The applicant reports heavy clay and unsuccessful soakage within the trial hole. Infiltration disposal is excluded from the proposed design.

Roof water is proposed to pass through impermeably lined attenuation tank AT1 and flow-control chamber FC1 before joining the existing private combined sewer through F2 and F1. The proposed maximum surface-water discharge is 5.0 litres per second.

Driveway drainage uses lined permeable-pavement storage PP1, with its outlet included upstream of the surface-water control. Foul drainage bypasses AT1 and FC1.

This ground statement does not certify drainage capacity or receiving-sewer acceptance. Those conclusions belong to the coordinated drainage assessment.

Drainage excavation and construction shall protect foundations, retained-tree rooting areas and existing services and shall avoid creating preferential pathways through any suspect material.

**24. Radon**

The UKHSA/BGS address report dated 9 October 2026 identifies the property as outside a radon Affected Area, with an estimated 0-1% probability of exceeding the Action Level and no indicated radon-protection requirement for new buildings or extensions at that location. The report notes additional basement/cellar risk, possible limitations for buildings larger than 25 m and the need for a BGS GeoReport for redevelopment. Apply those qualifications to the final dwelling. Radon screening does not assess methane, carbon dioxide or mine gas. [S6]

**25. Preliminary coal mining statement**

**26. Evidence and distances**

The supplied Mining Remediation Authority screenshots show the Development High Risk Area layer enabled in the later images, together with mine-entry and shallow-workings layers. Other images show the legends. The postcode search marker helps orientation but is not the final application boundary. Overlapping colours and hatching should be interpreted against the legends rather than assigned to a hazard by colour alone. [S7]

| Feature | Reported information | Evidence qualification |
|---|---|---|
| Development High Risk Area | Approximately 308 m from the site | Distance supplied by the client; no corresponding boundary measurement shown |
| Closest reported mine entry | 303517-008; approximately 373 m | Closest status supplied by client; no exhaustive entry search or final boundary distance established |
| Google measurement | 373.70 m | Visible straight-line distance between selected points; entry reference not displayed on that image |
| Treatment attribute | Treated TRUE | Client-supplied mine-entry attribute; treatment details and present condition unverified |
| Adit bearing | 0 degrees | Attribute alone does not establish shaft/adit type or an underground route |

**27. Meaning of mine entry attributes**

The official mine-entry user guide defines the treated indicator as the existence of a treatment record. It does not warrant current stability. The same guide explains that an adit-direction field may default to zero for a shaft, so the supplied zero cannot establish that this entry is a north-facing adit. Recorded entry positions also have historical plotting uncertainty. An entry-specific positional departure has not been supplied for reference 303517-008; no numerical plotting allowance is assigned here. [R3]

**28. Planning assessment**

If the entire current application site is confirmed within the Development Low Risk Area, the MRA guidance states that a CMRA is not a statutory submission requirement under that designation. If the final boundary intersects the Development High Risk Area, a new dwelling will generally need a specialist CMRA unless the authority accepts a relevant exemption. A new self-build dwelling is not made exempt merely by being small or within an existing garden. [R2]

The supplied distances support an initial interpretation of separation from identified mapped features. They are not regulatory safety buffers and do not prove absence of workings beneath the plot. The low-risk planning route remains conditional on checking the current red line against current mapping and any contrary site-specific evidence.

**29. Mining hazards and interpretation**

**30. Shafts adits and zones of influence**

No mine entry has been demonstrated within the proposed plot by the material reviewed. This is an evidence finding, not proof that no entry exists. Without the final site overlay and the entry treatment/geometry records, no calculated zone of influence can be assigned. The reported entry separation appears substantial relative to an immediate entry footprint, but underground routes and interconnected workings are separate issues. The available evidence does not establish an entry-specific no-build zone within the plot. If a relevant connection emerges, obtain entry subtype, coordinates, geometry, treatment details and abandonment plans before deciding its influence.

**31. Shallow and deeper coal workings**

The official shallow-workings dataset generally represents recorded or interpolated workings at 30 m depth or less, with a 50 m threshold for thicker seams. Probable-workings mapping represents estimated areas where earlier workings may exist without definitive abandonment plans. Neither is a complete inventory of the ground beneath a property. [R4-R5]

Further mining records or specialist assessment shall be targeted to any relevant feature identified by the current boundary-specific mapping or other credible evidence. A blanket intrusive investigation programme is not recommended solely because recorded mine entries exist in the wider locality.

Where the complete application site is confirmed within the Development Low Risk Area and no contrary site-specific evidence identifies a credible mining hazard, the assessment may follow the applicable standing-advice approach. Any identified hazard capable of affecting the development requires assessment on its own merits.

**32. Outcrops surface extraction and disturbance**

The map series shows outcrops, probable workings and other mining overlays in the wider locality. No site-specific outcrop interception, former surface extraction or fissure is established here. Mine-plan catalogue outlines identify the extent of a record, not by themselves the exact limits of extracted coal.

Require feature-specific records before interpreting an outline as an on-site void or dismissing it as harmless. [S7; R14]

The outcrop guide identifies seams reaching rockhead; these may represent probable shallow workings or unworked coal. Include that layer in the dated final-boundary check. A relevant intersection requires focused review before a watching brief is accepted as the sole response. No seam name, dip, worked thickness or site-specific subsidence calculation is established here. [R21]

**33. Mine gas and non coal workings**

No plot-specific mine-gas record, ground-gas measurements or reliable migration model is available. Gas generation, connected voids, fractures and service trenches could create pathways if a source exists. Low radon probability does not screen these out. Non-coal mining requires a separate historical/geological check because coal records do not comprehensively cover iron-ore workings.

**34. Preliminary mining conclusion**

The evidence currently supports a proportionate records-led review rather than an assumed requirement for blanket drilling or grouting. It does not support certifying the site as mining-free. Escalate to a competent mining specialist if current mapping or reports identify an on-site feature, workings capable of influencing the plot, credible gas connectivity or unexplained ground disturbance. Intrusive works affecting coal or coal workings require the relevant MRA permissions before proceeding. [R15]

**35. Contamination sources and landfill screening**

**36. Potential on site sources**

No industrial use, waste-disposal operation, fuel storage or known contamination is identified within the plot by the reviewed site documents. Plausible but unconfirmed domestic sources include ash and coal residues, imported fill, demolition debris, old tank or pipe leaks, and former garden structures. Asbestos fragments are a possible issue where demolition material has been buried; their presence is not established.

Potential contaminants should be selected from confirmed or credible sources. Ash/spoil/fill may warrant metals and PAH testing; a fuel source may warrant petroleum hydrocarbon and volatile testing; suspected demolition fill may warrant an asbestos assessment. Natural mineralisation can also contribute to soil chemistry. No concentrations, threshold exceedances or need for remediation have been demonstrated.

**37. Historic landfill records within 1 km**

A spatial query of the EA Historic Landfill layer returned the following three polygons. Distances are calculated from E303116 N516786 to the nearest mapped polygon boundary in British National Grid and rounded to the nearest metre. They are not minimum distances from the final application boundary. [R10; Appendix D]

| Historic site and reference | Distance | Selected recorded attributes |
|---|---|---|
| Yeathouse Quarry<br>EAHLD07759 | 745 m | Inert industrial commercial and household waste flags; first input 31 Jan 1985; last input 31 Oct 1992; gas control flagged Yes |
| Yeathouse Quarry Stage 1<br>EAHLD07760 | 793 m | Inert industrial commercial and household waste flags; licence issue 16 Oct 1989; input dates and gas controls not populated |
| Parkside North<br>EAHLD07761 | 954 m | Inert waste flag; first input 31 Dec 1931; last input 6 Dec 1995; other waste/gas details not populated |

These are legacy database attributes, not verified waste inventories or statements of present site conditions. A blank field means information is not populated; it does not mean a negative finding. The service data edit date is 24 October 2024. No historic-landfill polygon lies within 250 m of the reference point in this search.

The separations reduce concern about immediate proximity but cannot establish the absence of gas or groundwater pathways. Review intervening geology, elevation, known gas/leachate controls and any regulator monitoring where records indicate a connection. The evidence does not justify automatic gas protection or a monitoring programme solely because these polygons were returned; neither does it justify closing the linkage on distance alone.

**38. Initial conceptual site model**

A contaminant linkage requires a source, a pathway and a receptor. The following model identifies plausible linkages for the proposed residential use. It is qualitative and records uncertainty rather than providing numerical health-risk estimates. S = source, P = pathway and R = receptor.

Low indicates limited evidence of a complete linkage; low to moderate indicates a credible conditional linkage or information gap needing resolution. These labels are not calculated probabilities. [R1]

| Linkage | Source pathway and receptor | Preliminary assessment and action |
|---|---|---|
| CL1<br>Garden soils | S Possible ash local fill or historic deposits<br>P Soil ingestion skin contact dust inhalation<br>R Residents children and gardeners | Low to moderate uncertainty. Domestic setting is favourable; soil quality and earlier history unverified. Walkover and history check; test plausible affected material if identified. |
| CL2<br>Produce uptake | S Possible metals or persistent organics in garden soil<br>P Plant uptake and ingestion<br>R Residents eating home-grown produce | Conditional low to moderate. Gardens make the receptor plausible. Resolve soil provenance and source evidence; use residential-with-produce criteria if quantitative assessment is needed. |
| CL3<br>Gas and vapour | S Possible mine gas off-site landfill gas or fuel vapour<br>P Connected ground fractures trenches and building ingress<br>R Future dwelling occupants | Unresolved conditional linkage. No measured source or connectivity. Review mining/landfill records and subsurface pathways; monitoring only if the updated model supports it. |
| CL4<br>Construction exposure | S Possible asbestos debris contaminated fill or unexpected fuel residues<br>P Dust inhalation direct contact<br>R Groundworkers and neighbouring occupiers | Low to moderate during disturbance. Inspect exposed formations; stop and assess unexpected materials; control dust and manage excavated soils appropriately. |

**39. Present evidence**

None of the four linkages above is confirmed by analytical or field evidence. Residential sensitivity means uncertain sources should be checked before being screened out. Clean-looking soil and a domestic land-use description cannot replace source-led testing where the history or walkover identifies a credible issue.

### 40. Model update

Update the model after the final boundary overlay, historical-map review, owner questionnaire and site walkover. Record the evidence used to retain or remove each linkage. The presence of a possible source does not automatically require every possible laboratory test; the investigation should resolve the specific pathway and receptor.

**41. Controlled waters property and geotechnical risk**

| Linkage | Source pathway and receptor | Preliminary assessment and action |
|---|---|---|
| CL5 Controlled waters | S Possible leachable fill fuel or off-site landfill leachate<br>P Infiltration permeable lenses fractured rock or drainage<br>R Groundwater Lingla Beck and aquatic ecology | Unresolved. No groundwater gradient chemistry or hydraulic connection established. Confirm hydrogeological receptors and avoid creating drainage pathways through suspect material. |
| CL6 Buried assets | S Possible hydrocarbons aggressive soil or water chemistry<br>P Contact permeation and chemical attack<br>R Water pipes concrete and underground services | Conditional low to moderate. No source chemistry available. Test relevant soils/water for design; confirm pipe material requirements with water undertaker. |
| CL7 Landscape and ecology | S Possible contaminant-bearing soil fill or runoff<br>P Root contact uptake or water transfer<br>R Protected trees landscaping and neighbouring habitats | Conditional low to moderate. Soil handling and SuDS must protect retained trees and prevent contaminated runoff. No ecological contamination has been demonstrated. |

**42. Ground stability is a separate hazard assessment**

| Hazard | Current assessment | Evidence needed |
|---|---|---|
| Fill bearing and settlement | Unresolved at design level | Trial pits or suitable investigation at footprint retaining-wall and drainage positions |
| Till moisture response and trees | Plausible design issue | Soil classification strength/plasticity where relevant and arboricultural coordination |
| Mining subsidence or voids | No on-site feature established; records incomplete | Boundary-specific coal and non-coal records; specialist review if influence is credible |
| Excavation or retaining stability | Geometry and ground parameters unknown | Levels wall details loading groundwater and competent design |
| Radon | Low address-based screening | Confirm redevelopment-specific requirements and any basement implications |

A pollutant-linkage matrix cannot establish bearing capacity or exclude mine collapse. Geotechnical design and contamination decisions require separate lines of evidence, coordinated so that a borehole, drainage feature or excavation does not create an avoidable pathway.

### 43. Proportionate further work

### 44. Evidence Required to Complete the Planning Ground-Risk Assessment

The assessment shall use the current application boundary and proposed development, including the dwelling, gardens, access, drainage structures and any retaining works.

Completion shall comprise a competent site walkover and recorded landowner information, a proportionate review of historical land use, and a current boundary-specific mining assessment. Relevant environmental records shall be reviewed where they could resolve an identified source, pathway or receptor.

The updated conceptual model shall identify which potential linkages can be discounted and which, if any, require targeted investigation.

A commercial environmental-search product, intrusive contamination investigation, ground-gas monitoring programme or specialist mining assessment shall not be prescribed automatically. Their need shall follow the evidence and the relevant planning requirements.

The assessment conclusion shall record the information reviewed, the remaining risks and the reasons supporting any recommendation for further investigation or for no additional contamination investigation.

### 45. Ground investigation for construction design

Scope a modest geotechnical investigation around the final building, retaining structures and AT1, FC1 and PP1 installation areas. Establish soil sequence, fill distribution, suitable bearing stratum, strength, moisture/volume-change behaviour where relevant and groundwater. Investigations must avoid unnecessary disturbance of protected roots. Verify ground conditions across the footprint rather than relying on a single convenient excavation.

Use laboratory testing where source evidence, suspicious material or structural durability requires it. An initial suite for confirmed ash/spoil/fill could include relevant metals, PAHs, pH and organic content, with hydrocarbons or asbestos added where justified. Select analytes, sampling density and assessment criteria through the competent risk assessor; do not treat this illustrative suite as a fixed specification.

### 46. Escalation triggers

Escalate if the red line intersects high-risk mapping; a report identifies influential workings or a mine entry; historical records show tipping industrial use or extraction; the walkover finds suspect fill/tanks; ground gas or water connectivity becomes credible; or excavation exposes voids unusual odour staining ash or debris. Investigate and manage the affected zone rather than automatically applying a blanket package to the whole property.

### 47. Construction verification and controls

### 48. Unexpected ground conditions procedure

The main contractor should brief all groundworkers before excavation. Keep a dated photographic and written formation log. If voids, possible shafts/adits, unusual subsidence, gas indications, strongly stained/odorous material, suspect asbestos, ash/spoil pockets or unexpected water are encountered, stop work in the affected area and prevent access or spread. Do not probe, enter, backfill or grout a suspected mining feature without specialist direction.

Notify the site manager and appoint the relevant competent environmental or geotechnical specialist. Inform the planning authority where the finding affects the agreed assessment or conditions. Any coal mining feature should be reported promptly to the Mining Remediation Authority; its published emergency hazard line is 0800 288 4242. A gas alarm or immediate danger requires evacuation and the appropriate emergency response. [R2; R16]

Record location levels photographs and material description, then agree sampling, treatment and verification before restarting affected works. Maintain soil segregation and prevent contaminated runoff. Any imported soil should have traceable provenance and evidence of suitability for its intended residential use. Excavated material must be classified and managed through the appropriate lawful reuse or disposal route.

### 49. Foundation verification and watching brief

Before ground disturbance, the responsible site supervisor and foundation designer shall review the ground-risk information and inspect the work area for visible evidence of unusual settlement, depressions, suspect materials, redundant structures and drainage features.

During excavation, the groundworks contractor shall maintain a dated written and photographic record of exposed ground, including excavation positions, depths, strata, local fill and water encountered.

The responsible foundation designer shall assess formation conditions and coordinate foundations, retained-tree influence, retaining structures, services and drainage. Building Control inspection shall be arranged before relevant work is concealed.

If suspect contamination, unusual fill, voids, possible mine entries, unexpected subsidence or other significant adverse ground conditions are encountered, work shall stop in the affected area and the procedure in Section 48 shall be followed.

The watching brief is a construction safeguard. It does not replace assessment of an identified credible hazard or establish the absence of deeper workings.

### 50. Mining permissions and design changes

Obtain the relevant MRA permit before entering, disturbing or altering coal or workings owned or managed by the Authority. Planning permission does not grant that consent. Where removal of coal is necessary for foundations, service trenches or earthworks, check and secure the required incidental coal agreement before removal. [R15; R23-R24]

Review the assessment before introducing a basement, deep piling or boreholes, or making material changes to excavation depths, earthworks, retaining structures, drainage installations or discharge arrangements. Mining and groundwater guidance describes drainage interactions with the mining legacy; its North East screening categories have not been assigned to this Cumbria site. [R22]

## 51. Submission checks and planning conclusion

### 52. Before submission

Retain dated mining mapping with the complete current red-line boundary, relevant layers, entry 303517-008, measurement endpoints, scale and north point. Include the building, access, walls, services and drainage in the check. Record the whole-site category and the shortest boundary-to-feature separations; amend the findings if these differ from the reported distances.

Coordinate the statement with the current one-dwelling drawings. Clearly identify the older two-dwelling DAS and block plan as historical pre-application material. The supplied application form contains dates of 18 October 2026, later than this statement date; verify or correct those entries before submission. [S1-S3]

### 53. Conclusion for the planning application

The reviewed evidence describes domestic garden land proposed for one self-build dwelling. BGS mapping indicates glacial till and adjacent sandstone/breccia bedrock units in the reference-location query neighbourhood. The selected location is in Flood Zone 1 and the address radon report provides a low screening result. Historic landfill sites are mapped in the wider area, with the nearest polygon approximately 745 m from the reference point. No plot-specific contaminant exceedance or influential mining feature is established by the evidence reviewed.

The client reports approximately 308 m separation from the Development High Risk Area and approximately 373 m from the closest recorded mine entry, identified as 303517-008 with a treatment record. The supplied measurement image shows 373.70 m between selected points. These findings support a preliminary position of separation from the identified features, subject to verification against the current application boundary.

A formal CMRA should not be presumed necessary solely because the site is in the coalfield. The MRA low-risk route can be relied on only after the current boundary and relevant records confirm its applicability. This statement neither establishes a high-risk on-site feature nor certifies that the ground is free of mining influence.

The reviewed evidence has not established an overriding ground-related constraint or a demonstrated need for a blanket intrusive contamination or mining investigation programme. Any additional investigation should be justified by a credible site-specific hazard or contaminant linkage.

The present conclusion remains a desktop screening conclusion because the report records outstanding boundary-specific checks, historical review and assessment walkover information. Those matters require resolution before a definitive recommendation of no further planning-stage investigation can be made.

Construction will incorporate formation inspection, a recorded watching brief and the unexpected-ground-conditions procedure. These measures supplement the assessment and do not substitute for resolving a known hazard.

### 54. Source register

Bracketed references identify evidence used in the text. Public sources were accessed on 9 October 2026. References to online guidance identify the version consulted and should be checked if the application is determined after a policy or dataset update.

### 55. Supplied project evidence

[S1] BM-PPA-001.pdf. January 2023 location and block plan. Two indicative three-bedroom dwellings. Original sheet A2; 1:2500 and 1:500. Used for historical context only.
[S2] Full 1(20261009-121934).pdf. Current supplied planning form. Proposal recorded as one detached five-bedroom self-build dwelling. Several identifying fields are incomplete; this review does not validate the application form.
[S3] Design and Access Statement Frizington.pdf. DAS-001 dated 29 January 2023. Describes extended domestic garden and preliminary proposal for one or two dwellings.
[S4] PAA-23-0007- Pre Application Advice Letter(1).pdf. Council advice dated 31 March 2023. Two-dwelling enquiry, protected-tree and layout considerations.
[S5] flood-map-planning-2026-10-09T11_52_35.454Z(1).pdf. Environment Agency report, reference Mr Bradley Macleod, E303116 N516786; created 9 October 2026 at 12:52 as printed.
[S6] report.php(2).pdf. UKHSA/BGS address-search radon report, Old Vicarage Frizington CA26 3SU, dated 9 October 2026.
[S7] Supplied images image(9).png, image(10).png and image(20261009-122733).png, image(20261009-122747).png, image(20261009-122758).png, image(20261009-122813).png. MRA regional maps, layer settings and legends. image(20261009-122500).png shows an aerial map and 373.70 m point-to-point measurement. Screenshot dates derive from submission, not verified capture metadata.
[S8] Client-supplied map attributes and distances in the instruction. Development High Risk Area approximately 308 m; nearest reported mine entry 303517-008 approximately 373 m; treated TRUE and adit bearing 0. No underlying treatment document or entry-specific influence calculation supplied.
[S9] Additional supplied aerial images image(20261009-124434).png, image(20261009-124448).png and image(20261009-124415).png. Arranged as close property view, neighbourhood context and wider locality. Google Maps labels the nearby pin Holy Lodge; that pin is not the application site boundary.
Design and Access Statement - DAS-001
Proposed Foul & Surface Water Drainage Report - FSWDR-001

### 56. Public guidance

[R1] Environment Agency Land Contamination Risk Management Stage 1 risk assessment
[R2] Mining Remediation Authority Planning applications and Coal Mining Risk Assessments
[R3] Coal Authority Mine entries dataset user guide

**57. Public sources and data provenance**

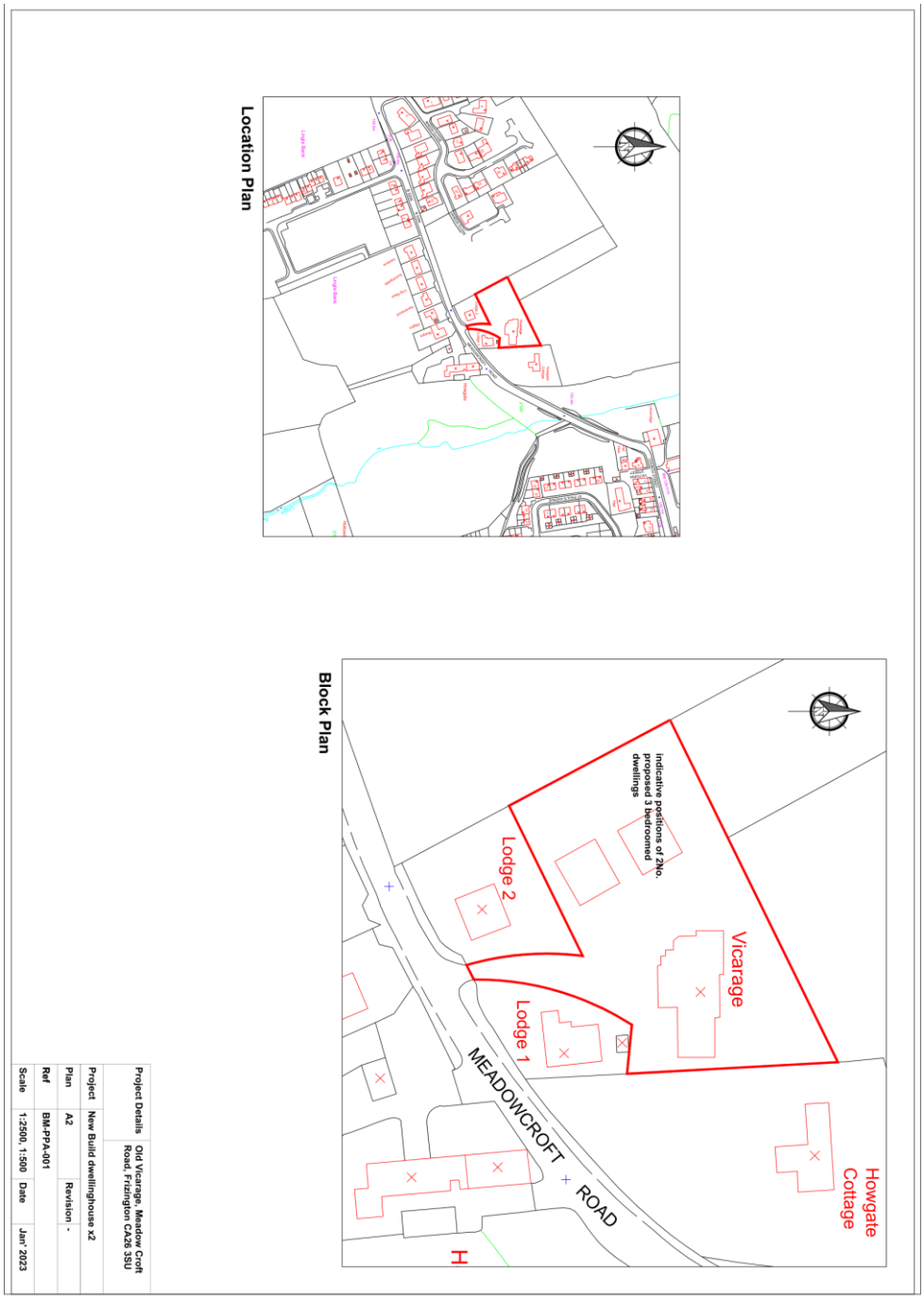
[R4] Coal Authority Shallow coal workings dataset user guide
[R5] Coal Authority Probable coal mine workings dataset user guide
[R6] BGS Geology 50K WMS service and documentation
[R7] BGS Geology of the west Cumbria district Memoir Sheets 28 37 and 47
[R8] BGS Haematite deposits of Cumbria
[R9] Cumberland Council Contaminated land and public register
[R10] Environment Agency Historic Landfill public spatial service
[R11] Environment Agency Source Protection Zones Merged spatial service
[R12] Copeland Local Plan 2021 to 2039 Adoption page
[R13] NPPF Chapter 17 Pollution public protection and security Policy P2
[R14] Mining Remediation Authority Mine plans dataset description
[R15] Mining Remediation Authority Guidance notes on how to get a permit
[R16] Mining Remediation Authority England planning guidance and standing advice valid 2025 to 2026
[R17] BGS Lexicon Whitehaven Sandstone Formation
[R18] BGS Lexicon Brockram
[R19] Planning Practice Guidance Land stability
[R20] Development High Risk Area metadata
[R21] Coal outcrops dataset user guide
[R22] Mining and groundwater constraints for development
[R23] Get a permit to deal with coal or coal mines
[R24] Guidance notes for applicants for incidental coal agreements

The Mining Remediation Authority is the trading name of the Coal Authority, which remains the legal body. Original feature references and field names are retained as supplied.

Cumberland-hosted legacy contaminated-land developer guidance dated January 2011 was also reviewed for context. Its references to earlier planning guidance and councils were not adopted as current policy. The 2026 NPPF online version was checked directly; superseded paragraph numbers from the 2023 advice are not repeated.

Contains British Geological Survey materials © UKRI 2026. Environmental spatial results contain Environment Agency data. Original supplied map images retain their visible provider copyright notices. Maps are reproduced as evidence extracts and are not survey plans.

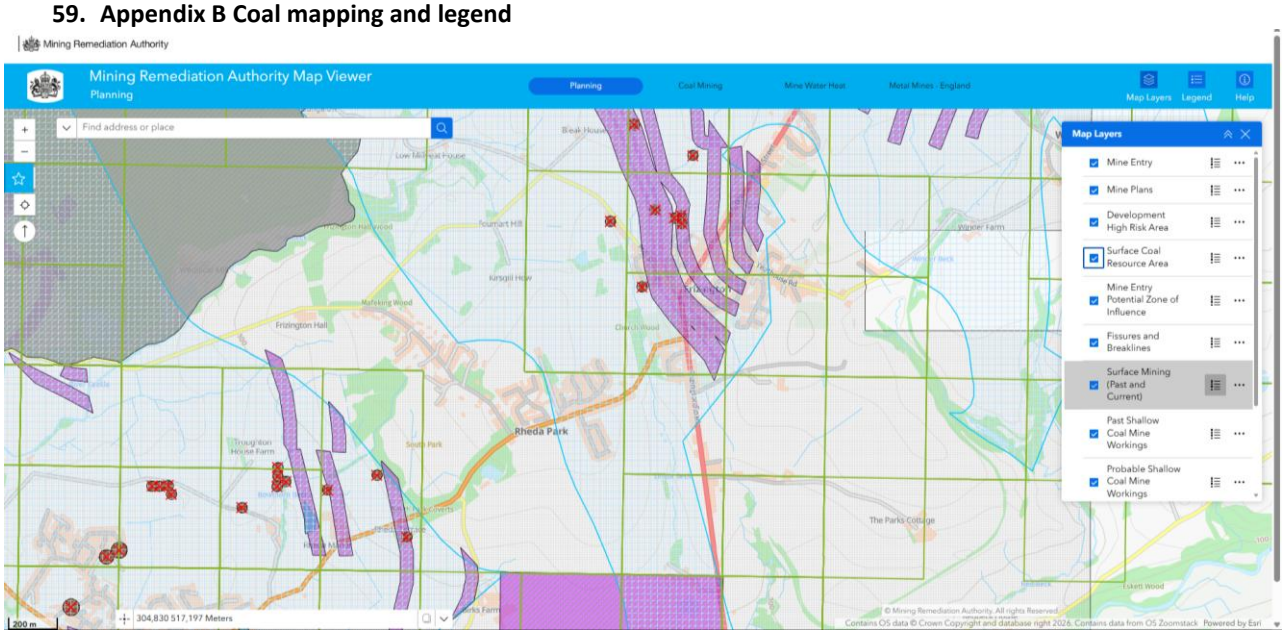
## 58. Appendix A Historical site plan



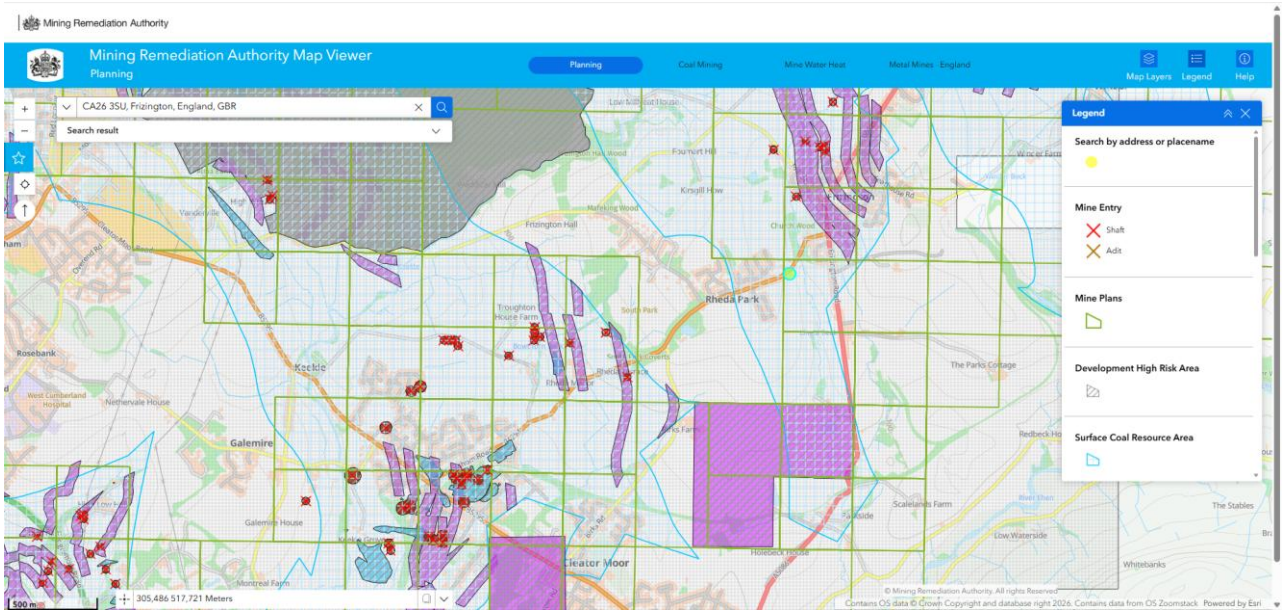

A1 Original BM-PPA-001 sheet dated January 2023. The red line and two indicative buildings are historical enquiry information. Reproduction is reduced and is not to the original drawing scale. [S1]

The final 2026 application plan is needed to define the assessment footprint and verify minimum mining-feature and environmental-source distances. This extract is not evidence that the current scheme comprises two dwellings.

## 59. Appendix B Coal mapping and legend

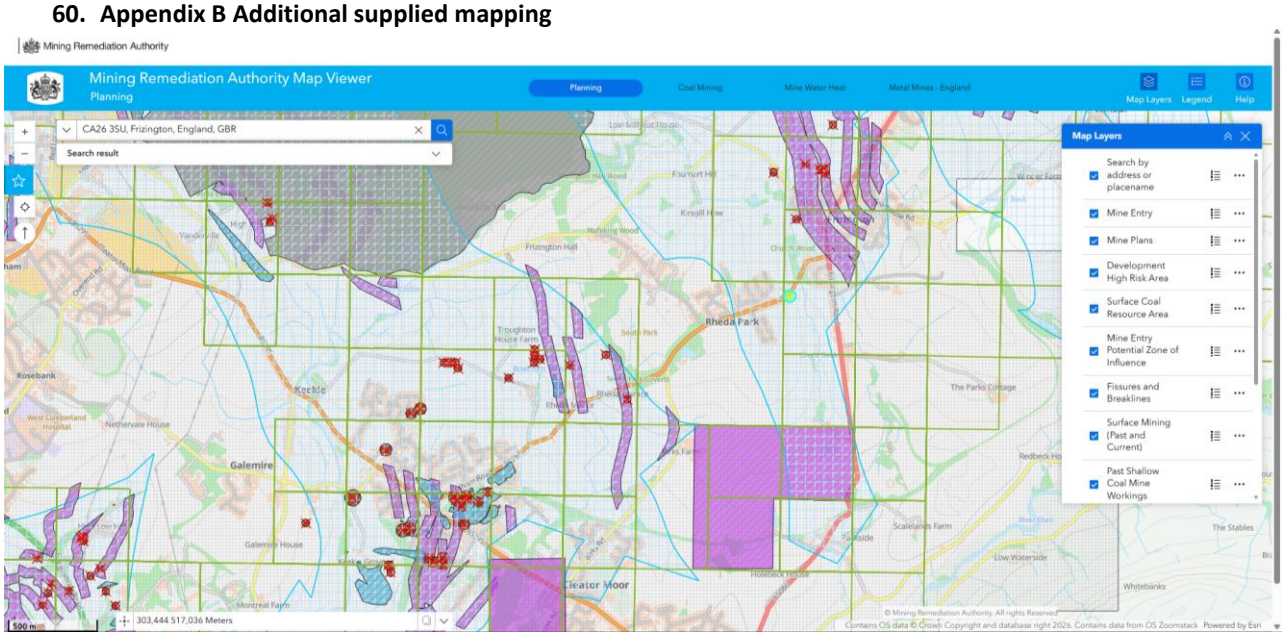



B1 Supplied map with Development High Risk Area and other mining layers enabled. Regional view; no current application red-line overlay. [S7]

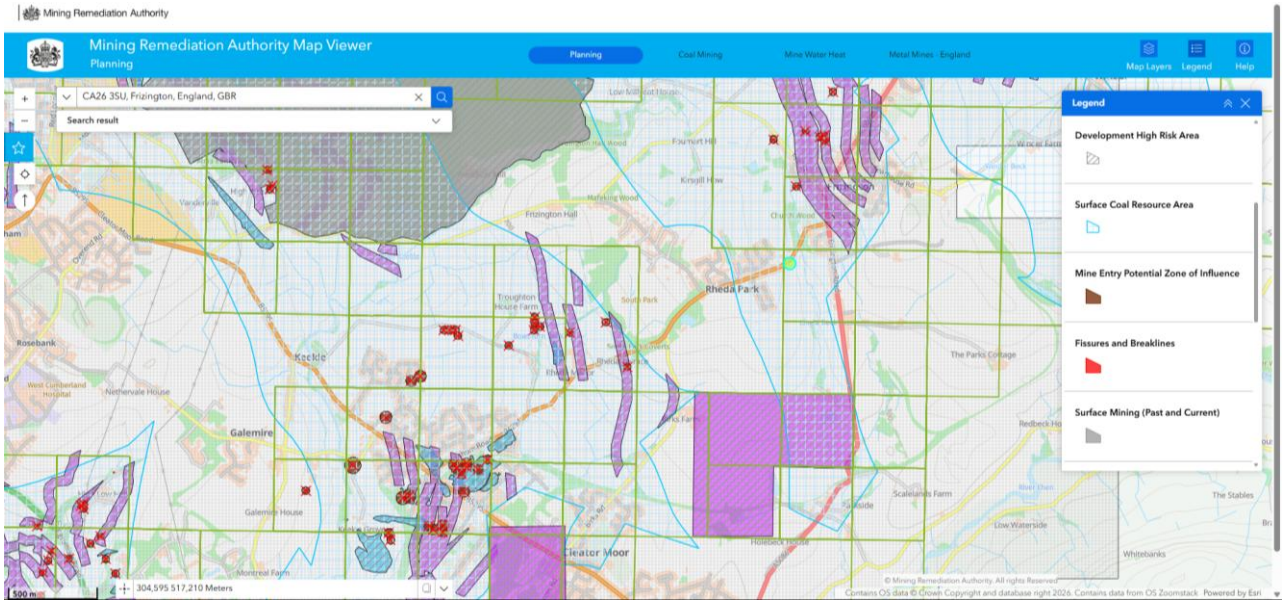



B2 Supplied legend identifies shafts adits mine-plan outlines high-risk-area hatching and surface coal resources. [S7]

## 60. Appendix B Additional supplied mapping

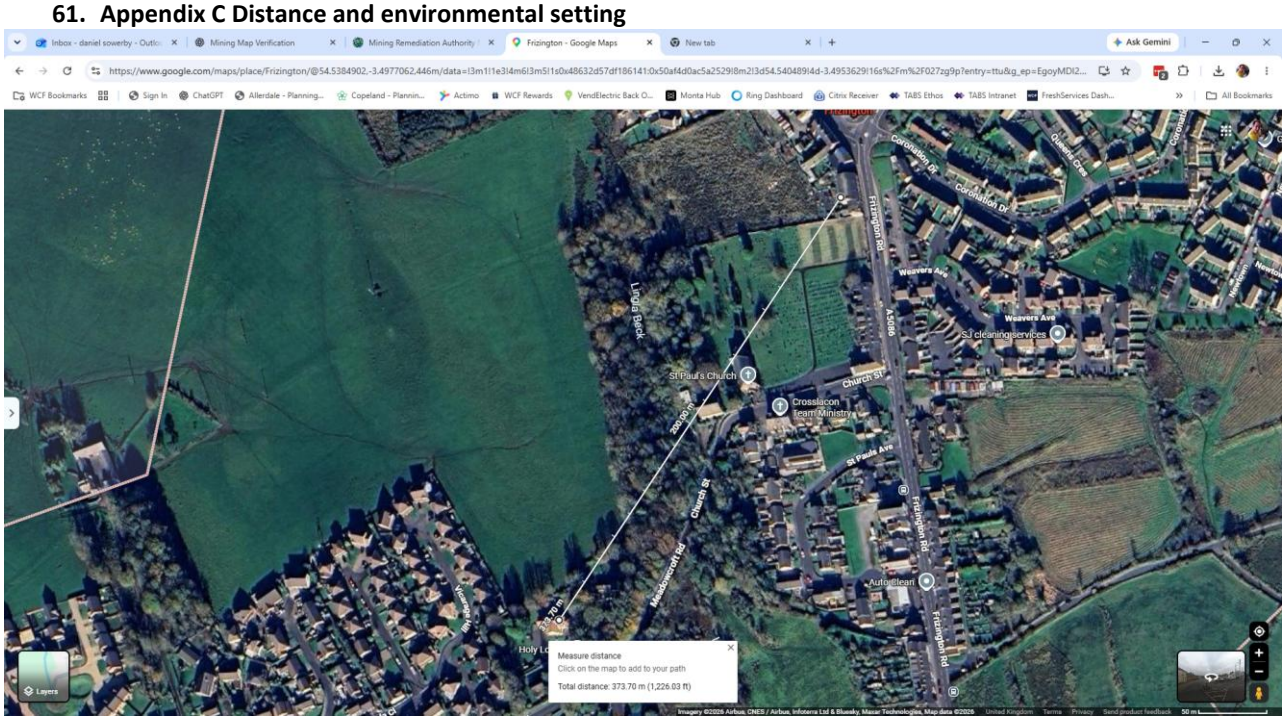



B3 Postcode search and enabled layers in wider regional context. Search marker is not the application boundary. [S7]

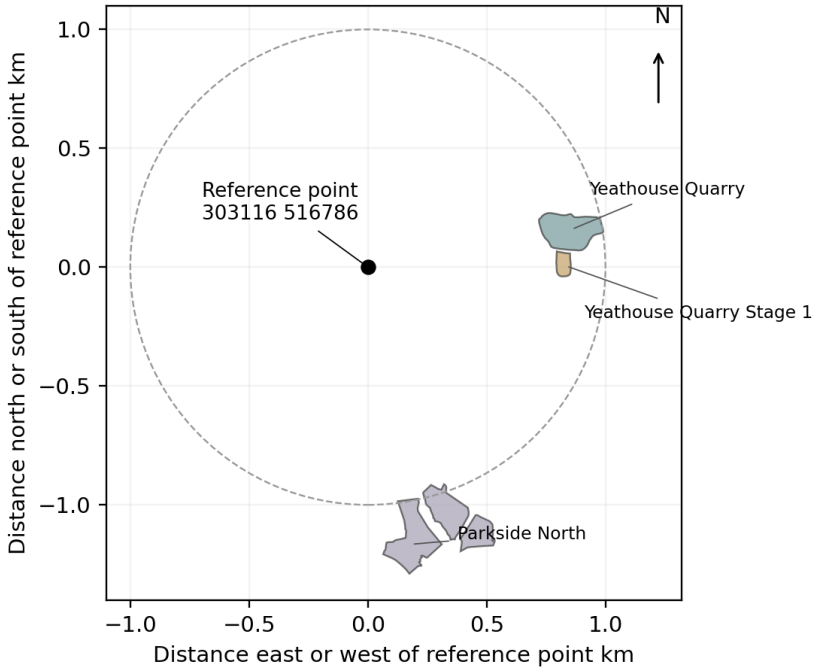



B4 Legend for entry influence zones fissures/breaklines and surface mining. Another supplied legend image identifies probable workings and outcrops. [S7]

## 61. Appendix C Distance and environmental setting




C1 Supplied aerial image shows 373.70 m between selected points. The image does not label mine entry 303517-008 or demonstrate the minimum final red-line-to-entry distance. [S7-S8]




C2 EA historic landfill polygons relative to E303116 N516786. Dashed circle is the 1 km search radius. This diagram has no application boundary and is not an OS base map. Calculated nearest-boundary distances are given in Section 37. [R10]

### 62. Appendix D Spatial search audit

All searches below were carried out on 9 October 2026 using the selected flood-map reference location. Public spatial-service results were retained during preparation. No exhaustive current licensed mining-database query or formal environmental-search product was completed.

| Search | Method and coverage | Result and limitation |
|---|---|---|
| BGS detailed geology | WMS 1.1.1 GetFeatureInfo; EPSG27700; bbox 298116 511786 308116 521786; 1001 by 1001 pixels; X500 Y500 | Bedrock WS-SDST and BK-BREC returned in query neighbourhood; TILLD-DMTN superficial deposits. Query tolerance can include adjacent polygons; no footprint-wide conclusion. |
| BGS other layers | Same reference-location request for artificial ground mass movement and linear features | No features returned. Does not exclude local fill small-scale instability or unmapped features. |
| EA Historic Landfill | Point 303116 516786; intersects within 1000 m; all attributes and polygon geometry; output EPSG27700 | Three polygons returned; no transfer-limit flag. Service data edit 24 Oct 2024. Distances calculated to nearest segment of returned boundary rings. |
| EA Source Protection Zones | Same point and 1000 m radius; polygon intersection | Zero features returned; no transfer-limit flag. Service data edit 15 Apr 2024. No abstraction or aquifer search implied. |
| Coal mining | Client map screenshots and attributes; official dataset/guidance interpretation | Reported distances and entry data retained as supplied. Current final-boundary spatial verification remains required. |
| Council public register | Published contaminated-land page and displayed entries | Old Vicarage not listed on page. No direct Council plot-specific environmental records response obtained. |

### 63. Distance calculation and accuracy

The landfill calculations use the shortest planar point-to-line-segment distance from the reference coordinate to the returned polygon rings. Results before rounding are 744.6 m for Yeathouse Quarry, 793.1 m for Yeathouse Quarry Stage 1 and 953.9 m for Parkside North. They inherit dataset boundary accuracy and do not measure the final application site. Landfill input dates and waste flags are reproduced as database attributes without a claim of verification.

### 64. Completion and professional review

Before reliance as a complete Phase 1 preliminary risk assessment, a competent reviewer should confirm the current plot and proposal, complete the walkover and remaining source checks, review the risk model and record the conclusion. Any change to layout excavation drainage or intended use should trigger a review of the relevant ground and contamination pathways.