

# GUARD ARCHAEOLOGY



## Mossend, West Calder Data Structure Report Project 4138

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## Mossend, West Calder Data Structure Report

**On behalf of:** CgMs Consulting (on behalf of Walker Group)

**NGR:** NT 01440 63660

**Project Number:** 4138

**Report by:** Kevin Mooney

**Illustrations:** Fiona Jackson

**Project Manager:** Warren Bailie

<b>DRAFT</b>  19/06/15	Warren Bailie Project Manager	<b>FINAL</b>  19/06/15	Warren Bailie Project Manager
			

*This document has been prepared in accordance  
with GUARD Archaeology Limited standard operating procedures.*

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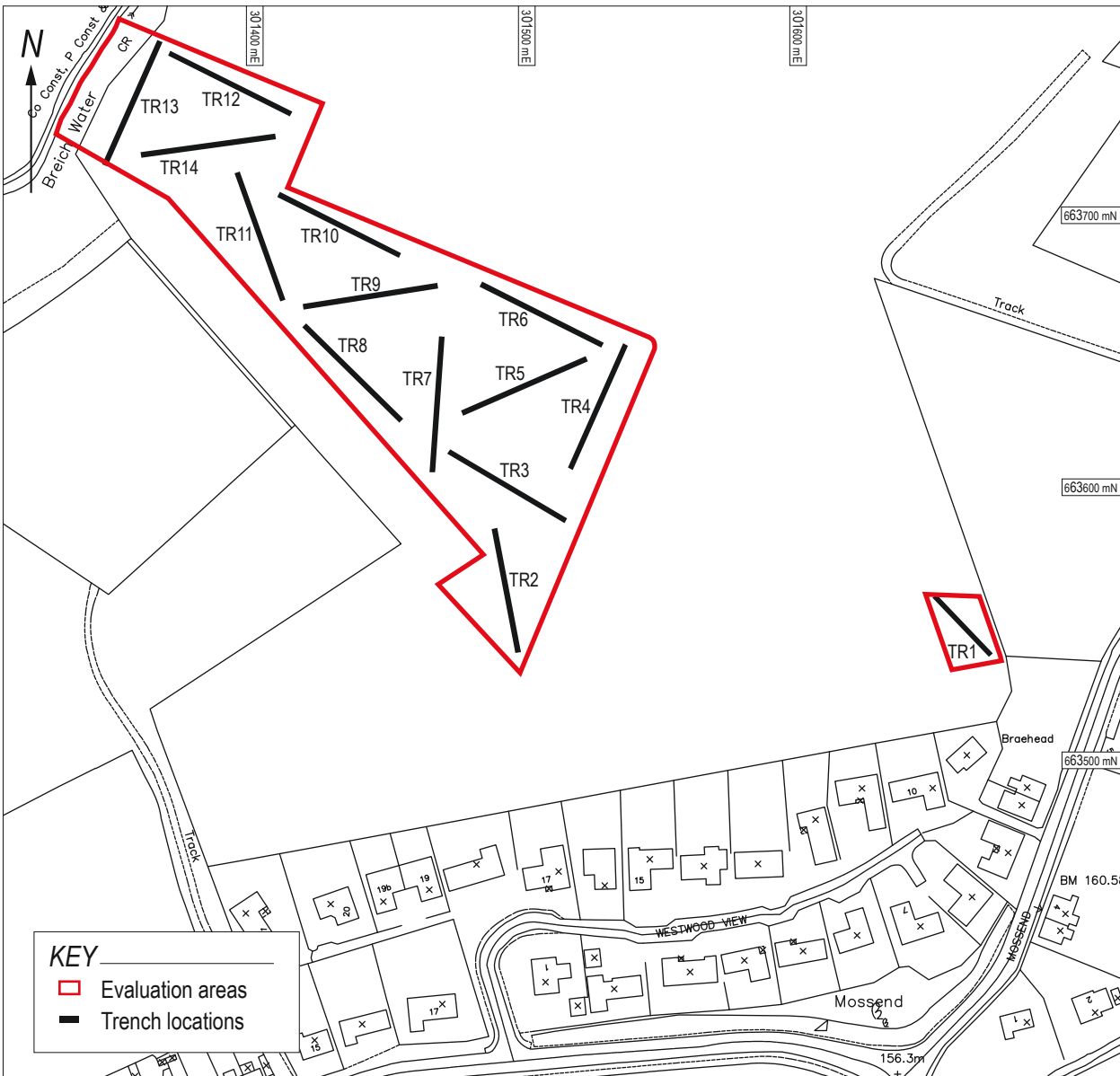
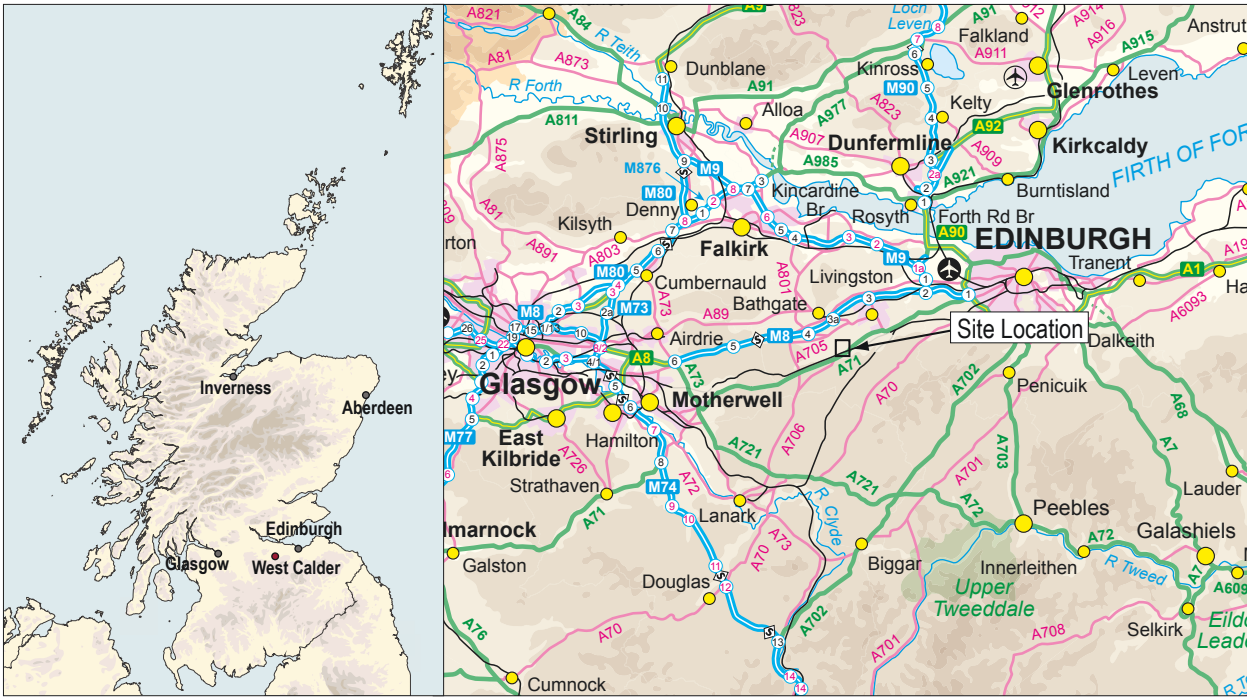
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**KEY**  
 Evaluation areas  
 Trench locations

Figure 1:  
Site location.



## Executive Summary

- 1.1 An archaeological evaluation was undertaken by GUARD Archaeology Ltd on behalf of CgMs Consulting Ltd (for Walker Group) on an area of land at Mossend located to the north-west of the town of West Calder, West Lothian. An 8% trial trench evaluation was undertaken in connection with a current planning application lodged with West Lothian Council (0875/FUL/14 & 0876/P/14) for residential development within Site Y Phases 2a and 2b and Phase 3 at Mossend. The work was undertaken in accordance with a Written Scheme of Investigation agreed with the West of Scotland Archaeology Service (who had advised West Lothian Council that a negative suspensive condition be attached to approval of the noted applications). The trenching was undertaken between 09<sup>th</sup> and 10<sup>th</sup> June 2015 and revealed evidence of the former Addiewell and Polbeth railway but no features of archaeological significance. The trenches did reveal shallow topsoil and evidence for intensive cultivation (modern ploughing). This may have had a detrimental impact on the survival of archaeological remains if any did in fact exist on the site in the past. However, no artefactual evidence was retrieved to indicate the former presence of any such remains.

## Introduction

- 2.1 This report sets out the results of the archaeological evaluation undertaken by GUARD Archaeology, on behalf of CgMs Consulting Ltd (acting for Walker Group) on a site proposed for the construction of a residential development at Mossend, West Calder.
- 2.2 The evaluation was undertaken in connection with a current planning application lodged with West Lothian Council (0875/FUL/14 & 0876/P/14) for residential development within Site Y Phases 2a and 2b and Phase 3 at Mossend. The work followed a Written Scheme of Investigation (CgMS 2015) agreed with the West of Scotland Archaeology Service (WoSAS). WoSAS had advised West Lothian Council that a negative suspensive condition be attached to any consent with the following wording:

*No development shall take place within the development site as outlined in red on the approved plan until the developer has secured the implementation of a programme of archaeological works in accordance with a written scheme of investigation which has been submitted by the applicant, agreed by the West of Scotland Archaeology Service, and approved by the Planning Authority. Thereafter the developer shall ensure that the programme of archaeological works is fully implemented and that all recording and recovery of archaeological resources within the development site is undertaken to the satisfaction of the Planning Authority in agreement with the West of Scotland Archaeology Service.*

- 2.3 During the course of the evaluation a total of 1360 square metres of trenching was undertaken, spread over 14 individual trenches arranged across the site covering areas of both high and low potential. The trenches were located in two discrete areas: a relatively small area in the south-east corner of the field the proposed development is located in and a larger area in its south-west corner (Fig.1).

## Site Location, Topography and Geology

- 3.1 The areas for evaluation measured 1.7 ha and the site is centered at NGR (NS 01440 63660) to the north-west of the village of West Calder, West Lothian. The areas of investigation lay to the west of Mossend road, with the Breich Water to the north and an area of late 20<sup>th</sup> Century housing located to the south of the B792. The fields around the development area appeared intensively cultivated with evidence of cereal crops still visible across the site. The geology in the area comprised of Hopetoun sedimentary rock cycles with overlying devensian tills. The land earmarked for development within the redline boundary lay between approximately 146 m and 158 m AOD.

## Archaeological Background

- 4.1 An assessment undertaken in 2011 included the current application area within its study area (AOC 2011). The results are summarised here, as are those from evaluation and excavation undertaken to the immediate north of the current evaluation (AOC 2014).
- 4.2 The assessment noted that there had been some chance finds of prehistoric artefacts in the surrounding area; those noted in the report are several hundred metres from the current application area and south-west of West Calder. The assessment noted that little is known about the area during the medieval period; however, documented settlements were not in the proximity to the proposed development. A historic map regression provided a greater understanding of settlement and land use during the post-medieval period. The assessment noted the presence of a farmstead known as 'Clovensforddyke' within the area evaluated in 2014; a farmstead at Mossend was depicted on the opposite side of Mossend Road and hence outside the area of proposed development. Clovensforddyke was first depicted on Roy's map of the mid 18<sup>th</sup> century (although the labelling is unclear and it is referred to as 'Cafarsyke' or similar); it is shown surrounded by fields under rig and furrow cultivation. The shale industry transformed the area during the later 19<sup>th</sup> century; notably this included the building of miners cottages at Mossend, since removed and immediately east of the proposed development area. It also included the construction of the Addiewell and Polbeth railway (between 1853 and 1909); the former line of the railway is in the west of the area to be evaluated'.
- 4.3 The archaeological evaluation undertaken in 2014 established that the area was covered by a thin plough-soil over glacial deposits (clay), which had been cut by numerous land-drains and furrows indicative of rig and furrow cultivation. Over the site of the former Clovensforddyke farmstead the evaluation established the presence of sub surface structural remains of an ancillary building, nearby was a cobbled surface with well and drainage ditches. These remains were associated with numerous artefacts of 19<sup>th</sup> and 20<sup>th</sup> century date as well as several fragments of Scottish reduced wares of earlier date. The remains were therefore thought to relate to the settlement depicted here by Roy in the mid 18<sup>th</sup> century and apparently abandoned by the early 20<sup>th</sup> century; however, it was noted that the ancillary building may have been demolished as late as the 1970s (AOC 2014). The evaluation also recorded the former line of the Addiewell and Polbeth railway. The former railway line is a mapped and well-understood feature. Further archaeological work concentrating on it is not likely to contribute any useful data and it is not regarded as archaeologically sensitive for the purposes of this evaluation (and as agreed in the WSI).

## Aims and Objectives

- 5.1 The main aims of the archaeological evaluation were :
- to determine the presence or absence of any archaeological remains that could be subject to disturbance during proposed development;
  - if present to determine the nature, extent and significance of any remains in order to inform an appropriate mitigation strategy (likely to be preservation by record, i.e. excavation, analysis and dissemination of results).

## Methodology

- 6.1 The areas for archaeological investigation covered 1.7 ha. Some 8% of the area was sampled by archaeological trial trench; amounting to 1360 metres squared.
- 6.2 No parts of the area had been previously identified as having an elevated archaeological potential. Linear trenches (with a width of 2 m and length of 50 m) with varying orientations were placed to provide even coverage across the development area. An indicative trench plan was included in the WSI and set out the locations of 13 trenches of 50 m length and one of 30 m within the small discrete area of investigation in the south-east. The trench plan was followed.

- 6.3 A mechanised excavator equipped with a flat-bladed ditching bucket was used to excavate the trial trenches. The excavator removed topsoil/ploughsoil under direct archaeological control. Excavation was continued until clean geological deposits were exposed. The resulting surfaces were hand cleaned where necessary and investigated for archaeological features. The stratigraphy of each trench was recorded in full.
- 6.4 WoSAS were kept informed of progress and visited site on 10 June during the works to discuss the results. WoSAS were satisfied that the evaluation provided sufficient information to allow appropriate decisions on the need or otherwise for further mitigation works.
- 6.5 All archaeological work satisfied the codes, standards and guidance set out by the Chartered Institute for Archaeologists (<http://www.archaeologists.net/codes/Cifa>; in particular ClfA 2008).
- 6.6 No small finds and environmental samples were recovered. Record photographs included a metric scale and general site photographs were taken and recorded in a register that included information on context and direction of shot.
- 6.7 A trench plan was recorded by digital survey, relative to the National Grid and Ordnance Datum.
- 6.8 No Bulk finds or Bulk Environmental samples were recovered.
- 6.9 No Human remains were encountered during the works.

**Results**

- 7.1 The evaluation was divided into two distinct areas, a small sub-rectangular area in the south-east of the development area accommodated one 30 m trench and a larger concentration of thirteen trenches were located in the western portion of the development area. (figure 1)
- 7.2 None of the trenches excavated contained features of archaeological interest. The topsoil deposits across the site varied between 0.25 m and 0.40 m and consisted of a dark brown organic rich silty loam displaying significant root and stone inclusions. Modern cultivation marks were prominent on the ground surface from the outset with evidence of well mixed and disturbed topsoil due to intensive ploughing across the site. The subsoil consisted of an orange/grey mottled sterile clay with few stone inclusions. Evidence of plough scarring was visible in a number of the trenches and their orientations were consistent with those of the modern crop lines still visible on the ground surface.



*Plate 1: Detail shot of trench 3 with plough scarring visible.*



*Plate 2: Detail of trench 3 showing topsoil depths.*

- 7.3 A number of trenches excavated in the north-west portion of the development area displayed evidence of an intermediate deposit between the topsoil and subsoil (Trenches 13 and 14). This thick deposit consisted of a dark grey/black silty shale and blaes deposit with occasional fragments of red brick in the deeper parts. The deposit ranged in depth between 0.20 m up slope to 0.50 m at the base of the slope. A number of fragmented red bricks within the deposit bore the mark “Thistle”. This marking could be attributed to a number of brick works, all in Stirlingshire: Milnquarter Fireclay & Gannister Works, Bonnybridge; Stein, Castlecary Fireclay

Works, Castlecary; Stein, Manuel Firebrick and Refractory Works, Whitecross, c.1930 – c 1990 and Stein & Co, Anchor Brickworks, Denny (<http://www.scottishbrickhistory.co.uk/thistle-48-57>).

- 7.4 A single modern ceramic field drain was noted in trench 8 running east-west however no further drainage was visible in any of the subsequent trenches.



*Plate 3: Detail shot of trench 13 showing deep intermediate layer.*



*Plate 4: Detail of trench 13 section.*

## Discussion

- 8.1 During the evaluation a series of fourteen trenches revealed no features of archaeological significance. The shallow undulating topsoil depths visible across the site coupled with the heavily cultivated use of the land may have had a detrimental impact on the survival of archaeological remains if they did in fact once exist in the evaluated areas through plough erosion. However, no artefactual evidence was retrieved to indicate the former presence of any such remains. The only deviation from the simple sequence of topsoil over glacial deposits observed during the evaluation was the presence of an intermediate layer visible in two of the trenches. This thick rubble and blaes deposit is thought to relate directly to the Addiewell to Polbeth railway which formerly crossed the development area in a north-east to south-west direction. The line of the former railway is still visible on satellite imagery and has been extensively documented in the past. As agreed in the WSI it is not viewed as an archaeologically sensitive feature for the purposes of this evaluation.

## Recommendations

- 9.1 The evaluation work has shown that no archaeologically sensitive deposits or features exist within the area evaluated in this proposed development. In consequence, it is recommended that no further archaeological work is required in connection with the evaluated areas.
- 9.2 GUARD would stress that these recommendations are intended for guidance only; final decisions on the nature and extent of any future archaeological work rest with the planning authority.
- 9.3 A summary of the project results will be submitted to Discovery and Excavation in Scotland. A copy of this is included in the Appendix. The archive for the project, including a copy of the report, will be submitted to the National Monuments Records for Scotland within six months
- 9.4 The online OASIS form at <http://ads.ahds.ac.uk/project/oasis> (OASIS Reference: guardarc1-214370 (1)) will be completed within 3 months. Once the Data Structure Report has become a public document by submission to or incorporation into the SMR, the WoSAS archaeologist will validate the OASIS form thus placing the information into the public domain on the OASIS website.

## Acknowledgements

- 10.1 GUARD would like to thank CgMs for commissioning us to conduct the evaluation. Thanks also



to Simon Stronach for his support throughout the duration of the work. Thank you also to Martin O'Hare of WoSAS for his site visit. Plant and drivers were supplied by Colliers Plant Hire Ltd. Technical support was from Aileen Maule. The evaluation was directed by Kevin Mooney. Assistance on site was provided by Erica Villis. A survey of trench locations was conducted by Kevin Mooney. The illustrations was produced by Fiona Jackson. The project was managed for GUARD by Warren Bailie for Simon Stronach of CgMs on behalf of Walker Group.

**Mossend, West Calder  
Data Structure Report**

**Section 2: Appendices**



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## Appendices

### Appendix A: Trench Details

Tr No	Length (m)	Width (m)	Depth (m)	Topsoil/Overburden	Intermediate	Subsoil	Details
1	30	2	0.4	001 – Medium compact, dark grey/black loam with many stone/root inclusions with a depth of 0.30 m.	-	002 – Medium compact, orange/brown mottled clay with some stone inclusions. Unknown depth.	No archaeology present – heavily ploughed
2	50	2	0.35 – 0.40	001 – Medium/loose compact, dark grey/black silty loam with many stone/root inclusions with a depth of 0.25 – 0.30 m.	-	002 – Medium compact, orange/grey clay/silt with many stone inclusions. Unknown depth.	No archaeology present – heavily ploughed
3	50	2	0.35	001 – Medium/loose compact, dark grey/black silty loam with many stone/root inclusions with a depth of 0.25 – 0.30 m.	-	002 – Medium/firm compact, orange/brown mottled silt/clay with many stone inclusions. Unknown depth.	No archaeology present
4	50	2	0.30 – 0.40	001 – Medium/loose compact, dark grey/brown silty loam with many stone/root inclusions with a depth of 0.30 – 0.40 m.	-	002 – Medium/firm compact, grey/orange mottled clay/silt with many stone inclusions. Unknown depth.	No archaeology present – Visible plough scarring running East – West across trench.
5	50	2	0.3	001 – Medium/loose compact, dark grey/brown silty loam with many stone/root inclusions with a depth of 0.25 – 0.30 m.	-	002 – Medium/firm compact, orange/brown mottled silty/clay with many stone inclusions. Unknown depth.	No archaeology present – Visible plough scarring running North – South.
6	50	2	0.4	001 – Medium/loose compact, dark grey/brown silty loam with many stone/root inclusions with a depth of 0.25 – 0.30 m.	-	002 – Medium/firm compact, dark grey/orange mottled silty/clay with stone inclusions. Unknown depth.	No archaeology present
7	50	2	0.4	001 – Medium/loose compact, dark grey/brown silty loam with many stone/root inclusions with a depth of 0.30 – 0.35 m.	-	002 – Medium/firm compact, dark orange/brown/grey mottled silty/clay with stone inclusions. Unknown depth.	No archaeology present
8	50	2	0.35 – 0.40	001 – Medium/loose compact, dark grey/brown silty loam with many stone/root inclusions with a depth of 0.30 – 0.35 m.	-	002 – Medium/firm compact, dark grey/light brown mottled silty/clay with stone inclusions. Unknown depth.	Ceramic modern field drain 15 m from South-east end of trench.
9	50	2	0.4	001 – Medium/loose compact, dark grey/brown silty loam with many stone/root inclusions with a depth of 0.30 m.	-	002 – Firm compact, orange/brown mottled silty/clay with stone inclusions. Unknown depth.	No archaeology present

Tr No	Length (m)	Width (m)	Depth (m)	Topsoil/Overburden	Intermediate	Subsoil	Details
10	50	2	0.45	001 – Medium/loose compact, dark grey/brown silty loam with many stone/root inclusions with a depth of 0.30 – 0.35 m.	-	002 – Firm compact, orange/brown mottled silty/clay with stone inclusions. Unknown depth.	No archaeology present
11	50	2	0.45	001 – Medium/loose compact, dark grey/brown silty loam with many stone/root inclusions with a depth of 0.35 – 0.40 m.	-	002 – Firm compact, orange/brown silty/clay with stone inclusions. Unknown depth.	No archaeology present
12	50	2	0.4	001 – Medium compact, dark grey/brown silty loam with many stone/root inclusions with a depth of 0.30 – 0.31 m.	-	002 – Medium compact, orange/grey silty/clay with stone inclusions. Unknown depth.	No archaeology present
13	50	2	0.40 – 0.70	001 – Medium firm, dark grey/brown silty loam with many stone/root inclusions with a depth of 0.10 – 0.15 m.	003 – Medium firm compact, dark grey/black silty blaes/rubble with brick fragments with a depth of 0.30 – 0.50 m.	002 – Medium firm compact, grey/orange mottled silty/clay with stone inclusions. Unknown depth.	Rubble/blaes intermediate layer associated with railway line – brick fragments display the word “Thistle”
14	50	2	0.4	001 – Medium loose, dark brown/grey silty loam with many stone/root inclusions with a depth of 0.30 m.	003 – Medium firm compact, dark grey/black silty blaes/rubble with brick fragments with a depth of 0.30 – 0.20 – 0.30 m.	002 – Medium firm compact, grey/orange mottled silty/clay with stone inclusions. Unknown depth.	Rubble/blaes intermediate layer associated with railway line – brick fragments display the word “Thistle”

## Appendix B: List of Photographs

Img. No.	Area	Context No.	Details
001	-	-	ID Shot
002	-	Gen	General shots of site – prior to trenching
003	-	Gen	General shots of site – prior to trenching
004	-	Gen	General shots of site – prior to trenching
005	-	Gen	General shots of site – prior to trenching
006	-	Gen	General shots of site – prior to trenching
007	-	Tr 01	General shot of trench
008	-	Tr 01	General shot of section
009	-	Tr 02	General shot of section
010	-	Tr 02	General shot of trench
011	-	Tr 03	General shot of section
012	-	Tr 03	General shot of trench
013	-	Tr 04	General shot of section
014	-	Tr 04	General shot of trench
015	-	Tr 05	General shot of section
016	-	Tr 05	General shot of trench
017	-	Gen	General shots of trenching

Img. No.	Area	Context No.	Details
018	-	Gen	General shots of trenching
019	-	Gen	General shots of trenching
020	-	Tr 06	General shot of section
021	-	Tr 06	General shot of trench
022	-	Tr 07	General shot of section
023	-	Tr 07	General shot of trench
024	-	Gen	General shot of site looking south
025	-	Tr 08	General shot of section
026	-	Tr 08	General shot of trench
027	-	Tr 09	General shot of section
028	-	Tr 09	General shot of section
029	-	Tr 10	General shot of section
030	-	Tr 10	General shot of trench
031	-	Tr 11	General shot of section
032	-	Tr 11	General shot of trench
033	-	Tr 12	General shot of section
034	-	Tr 12	General shot of trench
035	-	Tr 13	General shot of section
036	-	Tr 13	General shot of section
037	-	Tr 13	General shot of trench
038	-	Tr 14	General shot of section
039	-	Tr 14	General shot of trench

### Appendix C: Discovery and Excavation Scotland Entry

LOCAL AUTHORITY:	West Lothian
PROJECT TITLE/SITE NAME:	Mossend, West Calder
PROJECT CODE:	4138
PARISH:	West Calder
NAME OF CONTRIBUTOR(S):	Kevin Mooney
NAME OF ORGANISATION:	GUARD Archaeology LTD
TYPE(S) OF PROJECT:	Archaeological Evaluation
NMRS NO(S):	NA
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NT 01440 63660
START DATE (this season)	09 <sup>th</sup> June 2015
END DATE (this season)	10 <sup>th</sup> June 2015
PREVIOUS WORK (incl. DES ref.)	NA
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological evaluation was undertaken by GUARD Archaeology Ltd on behalf of CgMs Consulting Ltd on an area of land at Mossend located to the north-west of the town of West Calder, West Lothian. An 8% trial trench evaluation was undertaken to fulfil planning requirements in advance of the construction of an area of residential housing and associated infrastructure. The work revealed existing evidence of the former Addiewell and Polbeth railway but no further features of archaeological interest.
PROPOSED FUTURE WORK:	None
SPONSOR OR FUNDING BODY:	CgMS Consulting (on behalf of Walker Group)
CAPTION(S) FOR ILLUSTRS:	--
ADDRESS OF MAIN CONTRIBUTOR:	GUARD Archaeology Ltd, 52 Elderpark Workspace, 100 Elderpark Street, Glasgow, G51 3TR
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ARCHIVE LOCATION (intended/deposited)	NMRS

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