

InvernessWestLinkRoad – GroundInvestigation ArchaeologicalWatchingBrief



DataStructureReport

NationalGridReference

PlanningRef

Site Code

RoCASReport

OASISNo.

Author

Client

Date

NH65224309(centred)

12/02050/SCOP

IWLR12

2013-05/IWLR12

rosscrom1-143270

MaryPeteranna

CapitaSymonds

4-2-2013

RyefieldFarmToreRoss

-shireIV67SB

Scotland

Email: rossandcromarch@gmail.com Mob:07776027306Ph:01463811310

CONTENTS

Lis	istofFigures		2
Lis	istofPlates		2
Su	Gummary		3
1lı	Lintroduction		
	1.1 Generalinformation		3
	1.2 Planningbackground		3
24	2Aimsandobjectives		3
3	Sitelocation ,topographyandgeology		4
4	Archaeologicalandhistoricalbackground		
	4.1Generalbackground		6
	4.2 Developments it ebackground		6
5	O7		
	5.1Desk -basedassessment		8
	5.2 Watchinghriof		8
	5.3 Watchingbrief		8
6			
	6.1Desk -basedassessment		11
	6.2 Walkoversurvey		15
	6.3Watchingbrief		17
7	7 Discussion		18
8	3 Recommendations		19
9R	PReferences		20
10	LOWeb -basedsources		20
	Appendix 1 Listof SitePhotographs		22
	Appendix 2 ListofFi ndsandFindsPhotograp	ohs	24
	Table 1 Artefactsreco veredfromfieldw oftheroutenearNess -sideFarr	_	18

ListofFigures

	Figure 1	Sitelocation	5
	Figure 2	Proposed location of the trial pits	7
	Figure 3	Locationofthearchaeologicalwatchingbrief	10
	Figure 4	ExcerptfromJohnHenriBastide 's1725map, AGeneralSurveyof	
		Inverness,andtheCountryAdjacenttothefootof Loch-Ness	12
	Figure 5	Excerptfromthe1 st EditionOS6in:1mimapof Inverness-shire	13
	Figure 6	Pre-ground investigation walk over survey results	16
Lis	stofPlates		
	Cover	LocationphotoofTP12/05,f acing N	
	Plate 1	SF09 – Flint flake, possible flint -working debitage	2
	Plate 2	$Section of the disused lade to the west of Holm Mills, facing N; located at the {\it the Mills} and {\it the Mills} and {\it the Mills} are {\it the Mills}. \\$	
		Scrossing of River Nessalong the line of the proposed Inverness West Link Rd	16
	Plate 3	Post-topsoil-stripping,Trial Pit12/16,facingSE	17
	Plate 4	Post-topsoil-stripping, Trial Pit 12/05, facing SW	17
	Plate 5	SF02 – Ironslagandpossiblepumicepieces	19
	Plate 6	SF03 – Possibleschooldrawingboardorgamingboard	19
	Plate 7	SF06 – Copperobject withrivet	19
	Plate 8	Plate8SF07 – Lead <i>bulla</i> -typeseal	19



Plate1 SF09 Flintflake, possibleflint -workingdebitage

Acknowledgements

FieldworkwasconductedbyJohnWombell,MaryPeterannaandLynnFraser.Wewouldlike tothankCapitaSymondsforcommissioningtheworkandJaneJacksonforsupplyingmapsand siteinformation.WewouldalsoliketothankHolequestfortheirassistanceonsite. All mapping,unlessotherwisestated,isreproducedbypermissionof LandmarkInformationGroup underRoCASlicenceLIG1044.LocationdatafortheproposedInvernessWestLinkRoadwas suppliedbyCapitaSymonds.

Summary

Thisreportpresents there sults of the archaeological watching briefunder taken on behalf of Capita Symonds during ground investigations ahead of construction of the Inverness West Link Road on the southwest side of Inverness. The watching briefwas are quirement from the Highland Council Planning Department during the digging of trial pits along the proposed route in order to check for any archaeological material. The digging of twenty to rial pits and inspection pits a head of four boreholes on the Caledonian Canal (Schedule Monument 6499) were monitored by an archaeologist. No archaeological features we rerecorded and no archaeological finds were recovered within the total pits or borehole in spection pits. Fifteen finds of interest were recovered from the plough soil from field walking during the watching briefatthe southwest end of the route.

1 Introduction

1.1 Generalinformation

AnarchaeologicalwatchingbriefwasundertakeninDecember2012 andJanuary2013 during groundinvestigationsaheadofconstructionoftheproposedInvernessWestLinkRoad,located tothesouthwestsideofInverness. TheworkwascommissionedbyCapitaSymondsandwas requiredbytheHighlandCouncilPlanningDepartment.

1.2 Planningbackground

TheInvernessWestLinkRoadhasbeenproposedint he areasofTorveanandNess -sidet o supportthefuturedevelopment inth esouthwestsideofInverness. Aspartofthedevelopment plan,anarchaeologicalwatchingbrief wasrequired duringthegroundinvestigationsaheadof construction. Thewatchingbriefrequirementhasarisenduetothesituationoftheproposed roadina nareawithsignificantpotentialforburiedprehistoric, MedievalandPostMedieval remains. Theproposedroadalsorunsalongsideandcrossesthe 19 the century-builtCaledonian Canal, Scheduled Monument 6499.

2 Aimsandobjectives

Thegeneralaimofthearchaeologicalwatchingbrief was toefficientlyidentifyandrecordany featuresorfindsofarchaeolog icalinterestduringthegroundinvestigations ,inorderto minimiseanydelaysordisruptionstotheprojectandtopropose appropriatemitigationinthe eventthatsignificantfeaturesofinterestareuncovered ¹. The *ScottishPlanningPolicy2010* andPAN2/2011 describehowarchaeologyshouldbemanagedwhenconsideringplanning decisionsanddeterminingconditionsfordevelop mentsthathaveanimpactonthehistoric environment². Theendresultofthearchaeologicalwatchingbriefistomakeavailablethe recordsofanyarchaeologicalremainsfoundonasite.

¹ IfA2008(a

[.]

² The Scottish Government 2010, 2011

Thespecificobjectives were:

- Toestablishthepresenceorabse nceofarchaeologicalremainswithintheproposed developmentarea
- Toremovebyhandanyoverburdeninordertoexposethearchaeologicaldeposits
- Torecordandexcavateallfeaturesandrecoveranyartefactspriortotheirdestruction
- Tosampledepositsf orpost -excavationwork,includingenvironmentalanalysisand dating

3 Site location,topographyandgeology

- 3.1 TheproposedInvernessWestLinkRoadiscentredonNGRNH6521943090onthesouthwest sideofInverness,approximately1.5kmfromthe citycentre(showninred, Figure 1).Thecity ofInvernessisconsideredthecapitaloftheHighlands,linkingthenorthofScotlandwiththe restofthecountry.Inverness,or *InbhirNis*, meaningmouthoftheNess,issituatedonthe banksoftheRiver Ness,wheretheriverflowsintoanaturalharbourwithintheMorayFirth, whichopensintotheNorthSea.Thecityoccupiesanadvantageouslocationattheeasternend ofLochNessandtheGreatGlen.
- 3.2 Thesouthhalfoftheproposedroadrunsalon gthe southeastsideoftheRiverNess.Fromthe Ness-sideroundaboutontheDoresRoadatHolm(NH6495142282),therouterunsnorthwest towardsNess -sideFarmandthentumsnortheastandrunsalongtherivertowardsHolmMills. Overthislengththe majorityoftheroutecrossesagriculturalland, although ashortsection crossesaformerindustrialyard .About140mwestofthemill (NH6524243128),theroute crossestheriverandrunsthroughthesouthwestendoftherugbyfields(NH6530243280) and along the base of the Caledonian Canalembank ment towards Inverness Leisure Centre.The proposedroute joins the A82 on the northwest side of thele isurecentre.Theroad willcrossthe CaledonianCanalonanewswingbridge120msouthoftheTomnahu richswingbridge(NH 6557643673) and will run west through the Torvean Golf Course to join the A82. Another shortsectionwillrunnorthwest -wardthroughthegolfcourseonthenorthsideoftheA82.
- 3.3 Thenatureofthesubsoilsintheareaofthep roposedroadarealluviumandraisedbeach depositsoverlyingglaciofluvialdepositscomprisinggravel,sandandsilt.Theprehistoric coastlinerunsbetweentheA82andtheCaledonianCanalinthenorthofthesiteandswings eastwardsbeneaththerugby fieldsandWhinParktotheeast.Theunderlyingbedrockis Devoniansandstone ³.

_

 $^{^3\,}Geological information provided by Capita Symonds$

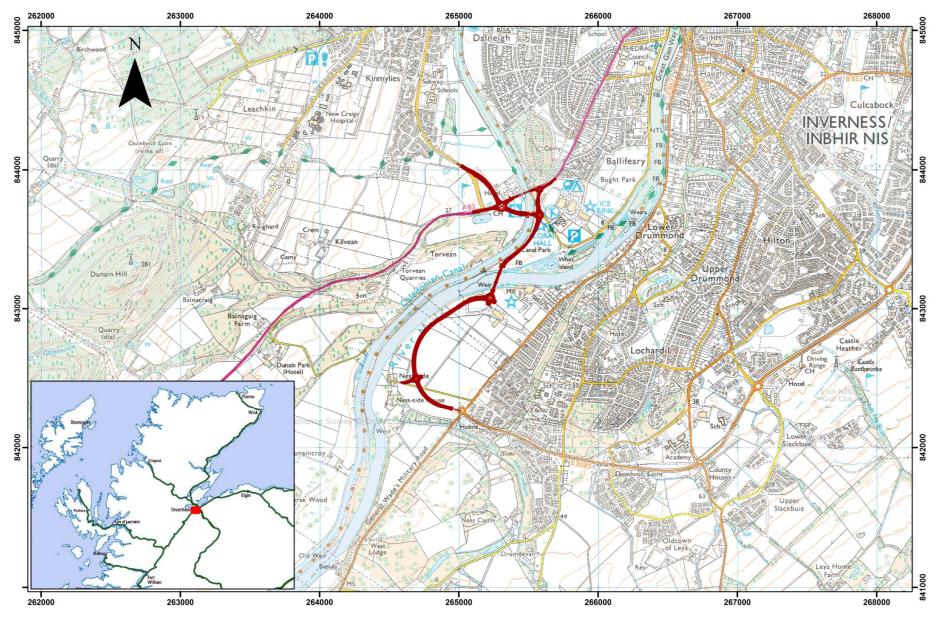


Figure1 Sitelocation

4 Archaeologicalandh istorical background

4.1 Generalbackground

Artefactualevidencein Invernessestablishesthattheareawasatleastintermittentlyoccupied duringtheMesolithicperiod . Numerous development-ledexcavations ,on terracesabove the southeast sideofInverness,haveuncoveredveryclearevidenceof substantialIronAge,Br onze AgeandNeolithicsettlement inInverness. Long-termoccupationis also reflectedintheIron AgehillfortatCraigPhadrig,whichoverlooksthemouthoftheRiverNessandtheMoray Firth. IthasbeensuggestedthatInvernesswaslater theseatof thePictishKi ngdom, visitedby StColumbain565CE. In1171, WilliamtheLion(I)ofScotlandgrantedacharterofone ploughgateoflandforthecreationofaparishchurchinInvernessin1171 ,thusformally establishingthetown .

4.2 Development sitebackground

Builtbetween 1803 and 1822, the Caledonian Canal, designed by Thomas Telford, runs along side and is crossed by the proposed road at the base of Torvean hillnear the northend of the route. A Pictish chain was recovered in 1808 by work ersdigging can alnear Torvean 4.

SituatedontopofTorveanhillandoverlookingthesouthwesthalfoftheroute,Torveanfort possiblydatingtotheIronAge,islocatedonthenorthwestsideoftheRiverNessand CaledonianCanal .Acairnwithpossi blecistwas alsoidentifiedat theb aseofth is hillinthe 19th century⁶.

TheareabetweenHolmMillsandNess -sidehasbeenoccupiedsinceatleasttheearly1700s, withhistoricalmapsdepictingfieldenclosuresandfarmsteads ⁷.BughtMill,locatedo nthe northsideofRiverNess,andHolmMills,onthesouthsideofRiverNess,werebothlocatedin closeproximitytotheproposedroute ⁸.

TheHighlandHistoricEnvironmentRecord(HHER)alsocontainstwositesofarchaeological interestnearthelocationoftheproposedroad.In 1808, agroupofcairns'attheBught'were removedduringtheconstructionoftheCaledonianCanal 9 and in1954 aBronzeAgecist containingamal e inhumationandbronzedaggerw ere discoveredinBughtPark 10.

⁴ HHERNo.MHG3800

⁵ HHERNo.MHG3749

⁶ HHERNo.MHG3760

⁷ National Library of Scotland (NLS) 2012

⁸ Ibid

⁹ HHERNo.MHG3771

¹⁰ HHERNo.MHG3757

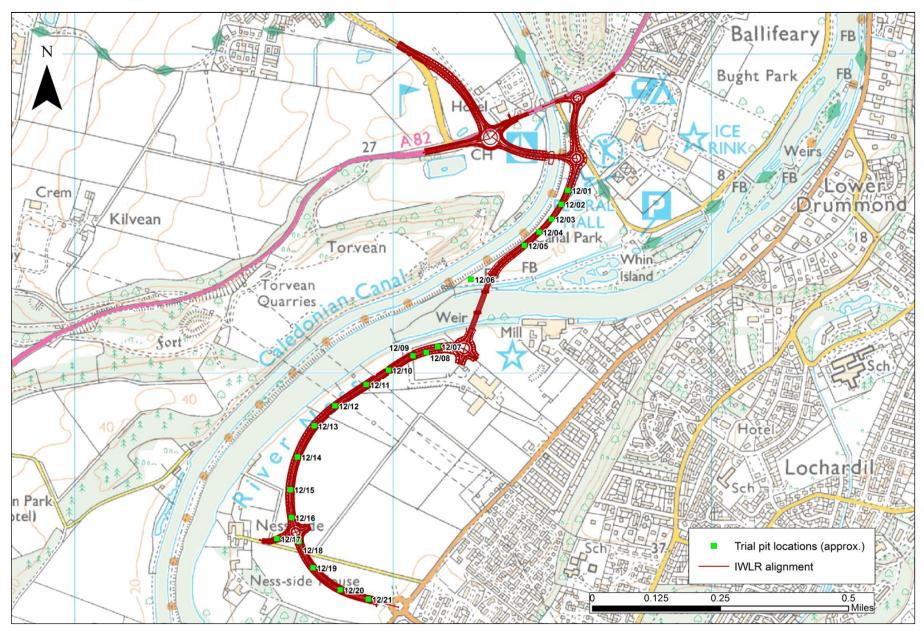


Figure 2 Proposed location of the trial pits

5 Methodology

A desk-based assessment, archaeological walkover survey and archaeological watching brief were conducted as part of the ground investigations for the Inverness West Link Road. A full methodology for the borehole and trial pit work was supplied by the Capita Symonds geotechnical team. Prior to the works, Capita Symonds submitted a Scheduled Monument Consent application for investigations within the scheduled area of the Caledonian Canal. The desk-based assessment and archaeological monitoring will serve to inform the final design and construction of the new road and bridges across the canal and the River Ness.

5.1 Desk-based assessment

The purpose of the desk-based assessment (DBA) was to gain information about the known archaeology or potential for archaeology within a given area or site (including the presence or absence, character and extent, date, integrity, state of preservation and relative quality of the potential archaeological resource), in order to make an assessment of its merit to assist in the formulation of a strategy for further work¹¹. The information will also inform the archaeologist of the potential nature of archaeological features to be uncovered during fieldwork.

The DBA was undertaken prior to the fieldwork commencing in order to assess the general archaeological and historical background of the proposed route. A full check of all available historical and archaeological records, aerial photographs and historical maps was conducted using the Highland Historic Environment Record (HER), the Highland Council archives, the National Monuments Record of Scotland (NMRS), Historic Scotland's databases, the National Library of Scotland (NLS) and any other available records or online resources about the area. LIDAR survey data, provided by the Highland Council, was also examined for any indications of archaeological remains visible on the ground surface.

5.2 Walkover survey

A site visit and walkover survey was conducted on 6 November 2012, ahead of the commencement of the ground investigations, in order to assess the site prior to fieldwork and to record any archaeological features which may be visible on the ground surface. Any archaeological sites identified during the survey were recorded using an Archer Field PC with ArcPad GIS software, rated to submetre accuracy. The location of any sites was reported to the geotechnical engineers on plan and in GIS shapefile format to inform the programme of ground investigations.

5.3 Watching brief

A Written Scheme of Investigation (WSI) was prepared ahead of the watching brief evaluation ¹² and contains further details about the ground investigation methodology, as supplied by Capita Symonds.

_

¹¹ IfA 2008 (b)

¹² Peteranna 2012

5.3.1 Groundinvestigationmethods

The ground investigations of the proposed Inverness West Link Road comprised a mixture of cable percussion and rotary boreholes, windows ampler boreholes and machine and hand dug trial pits.

Aspartofthiswork,boreholeswere utilised alongt he towpathofthe CaledonianCanal,a ScheduledMonument,inorder toascertainthenatureoftheembankmentfillandthe underlyingsoilstoadepthofapprox imately55mbelowtowpathlevel.Inspectionpitsdugas partofthepreparationforboreholingweremonitoredby anarchaeologist.

FromtheareasouthwestofInvernessLeisureCentretothesouthwestendoftheproposed route, twenty -one machinedug trialpits were planned (Figure 2) forexcavation to amaximum depthofth reemetresbelowgroundlevel. Ateachloca tion the existing turfand topsoil was carefully stripped using a straight -edged bucket and the area was examined . Following the examination, excavation proceeded to allow for logging and sampling of soils by the geotechnical engineer.

5.3.2 Archaeologicalmonitoring

5.3.2.1 Anarchaeologicalwatchingbriefwasconductedduringthetrialpitexcavations of twenty pits alongthepr oposedroute (Figure 3)tocheckforarchaeologicaldeposits, feature or finds that would need recording prior to their destruction. One of the pits, TP12/07, was not excavated due to difficulties with the landowner. This section of ground was, however, covered during the prior walk over survey.

AprogrammeofarchaeologicalmonitoringoftheCaledonianCanalwasalso undertakenas partoftheScheduledMonumentconsent.Duringthisworks,excavationoftheborehole investigationpitsandanyassociatedsiteclearancewasconductedunderarchaeological supervision.

- 5.3.2.2 Allfieldworkwasconductedinaccordancewith *InstituteforArchaeologists* Codeof Conduct¹³ andon -siterecordingwascarriedoutaccordingtostandardIfAprocedures.
- 5.3.2.3 Thelocation of each individual trial pitandany features of archaeological interest were plotted using a Trimble Geo XRR over, an Archer Field PC or a Garminhandheld GPS . The trial pits was recorded using high resolution digital photography throughout the watching brief in order to record the evaluation as well any finding so finterest.

_

¹³ IfA2010

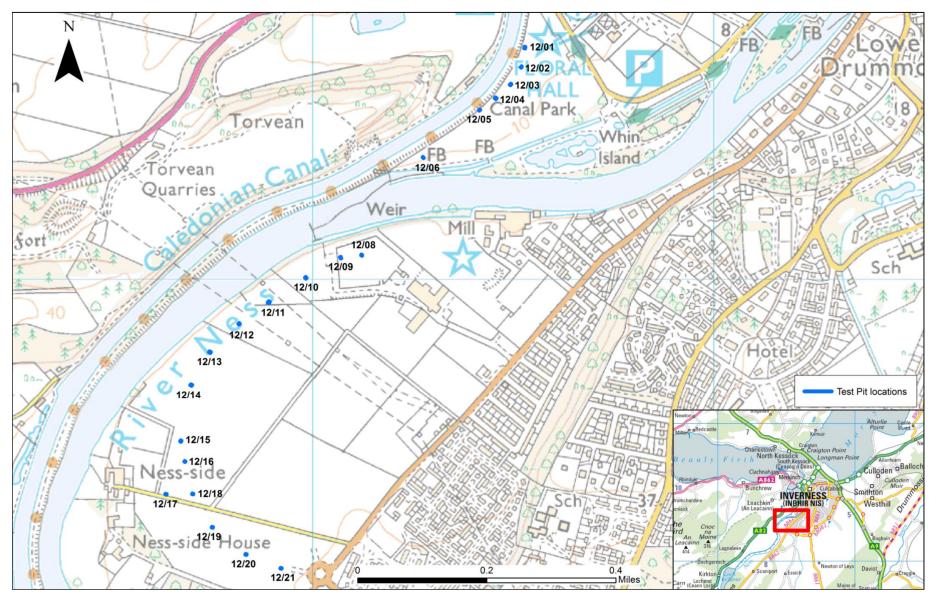


Figure3 Location of the archaeological watching brief

6 Results

6.1 Desk-based assessment

6.1.1 Cartographic sources

Mapping held at the National Library of Scotland (NLS) in Edinburgh was checked on-line and produced the following results:

John Henri Bastide's map of Inverness, 1725 A General Survey of Inverness, and the Country Adjacent to the foot of Loch-Ness

On the south side of the river near the line of the proposed West Link Road, the map shows a settlement of approximately six buildings with associated enclosed areas of cultivation to west and south. This settlement is not shown on the later 1st Edition Ordnance Survey mapping, and would have been located between Ness-side farmstead and Holm Mills. Settlement and associated areas of cultivation are also shown near the southwest end of the proposed route on the south side of Holm Burn and on the west side of the river in the same location (Figure 4).

A small settlement of four structures is shown at the northeast end of the proposed West Link Road, to the northeast side of Torvean hill.

Herman Moll's map of The East Part of the Shire of Inverness with Badenoch, 1745

The map shows settlement at *Holms* to the south of the SW end of the proposed West Link Road.

William Roy's Military Survey of Scotland, 1747-55

Roy's map depicts an area of settlement near the present location of Ness-side.

Ordnance Survey 6 inch to 1 mile 1st Edition *Inverness-shire (Mainland)*, Sheet CII and CIII- Surveyed 1869-1870, published 1872

The southwest half of the proposed West Link Road, the area between Ness-side House and Farm and Holm Mills, is shown as cultivated fields with enclosing boundary walls. The settlement depicted on Bastide's map is no longer shown (Figure 5).

The woollen mill at Holm Mills and the corn/flour mill at Bught Mill are located near the east side of the proposed West Link Road (northeast half of the route). Both mills have lades associated with them, which will be crossed by the proposed road (Figure 5).

6.1.2 Aerial imagery and LIDAR images

Aerial imagery for the site was checked using ESRI background base mapping. No visible archaeological features were noted within the area for the proposed Inverness West Link Road.

LIDAR images covering the area around the proposed road were supplied by the Highland Council. There were no visible archaeological features identifiable along the proposed route.



Figure 4 Excerptfrom JohnHenriBastide s1725map, AGeneralSurveyofInverness, and the Country Adjacent to the foot of Loch

-Ness¹⁴

¹⁴ NLS2012

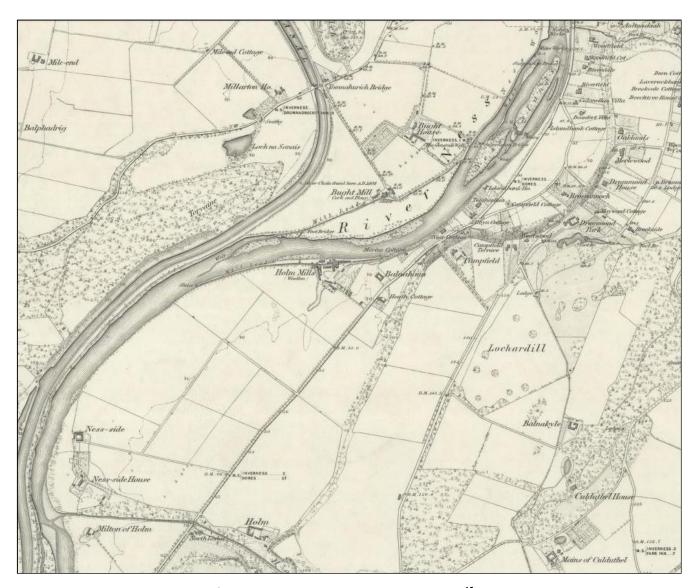


Figure5 Excerptfromthe1 st EditionOS6in: 1mimapof Inverness-shire15

6.1.2 HighlandHistoricEnvironment Record(HHER)

TheHighlandHistoricEnvironmentRecordwasconsultedonline ¹⁶ andthefollowingsitesor eventswererecordedwithin the corridorofthe proposed road and/orthesurrounding landscape:

EHG3277 NH6504642425(centred) ArchaeologicalEvaluati onatNessSide,Dore Road,Inverness

AnarchaeologicalevaluationwasundertakenpriortoconstructionofaTescostoreona greenfieldsiteatNessSide,DoresRoad,Inverness.Theworksconsistedofa5%sample evaluationona4.5halandparcell ocatedadjacenttothesouthendoftheproposedWestLink Road. Nosignificantarchaeologicalfindsorfeatureswereidentifiedduringthefieldwork.

¹⁵ Ihic

¹⁶ HighlandHER 2012,2013

EHG3099 NH 6675 4155 (centred) Evaluation, Inverness South-West Flood Relief Channel

In 2009 GUARD undertook an archaeological evaluation on an area of ground associated with the construction of a flood relief channel in south-west Inverness, a section of which ran along Holm burn by the southwest end of the proposed West Link Road. No significant archaeological features or finds were identified in this section.

MHG17894 NH 6555 4096 General Wade's Military Road

A portion of General Wade's military road runs along the E side of the B862 where it crosses Holm Burn to the south of the Dores roundabout next to the south end of the proposed West Link Road.

MHG49273 NH 65182 43128 Lade, Holm Mills, Inverness MHG54247

A mill lade with a sluice to the west end, where it channels water from the River Ness, is shown on 1st and 2nd edition Ordnance Survey mapping to west of Holm Mills.

MHG49272 NH 65521 43133 Holm Mills, Inverness

Holm Mills, a woollen mill powered by water, is located is located to the east side of the proposed West Link Road at the south crossing of River Ness. The mill is first shown on 1st edition Ordnance Survey mapping, marked as a Woollen Mills, with gasometer, sluices and lades to the E and W.

MHG3771 NH 6500 4300 Bught Park, Inverness

In 1808, a group of cairns 'at the Bught' were reportedly removed during the construction of the Caledonian Canal.

MHG3757 NH 6560 4370 Bught Park, Inverness

In 1954, a Bronze Age cist containing a male inhumation and bronze dagger were discovered in Bught Park by workmen bulldozing trees. The actual site of the find may be NH6571 4372.

SM6499 NH 6546 4353 Caledonian Canal: Dochgarroch Lock-Muirtown Lock

Built between 1803 and 1822, the Caledonian Canal, designed by Thomas Telford, runs alongside and is crossed by the proposed road at the north end of the route.

MHG3800 NH 6542 4346 Findspot of silver chain, Torvean

In 1808, workers digging the Caledonian Canal near Torvean recovered a massive Pictish silver chain, dating to between 400 and 800 AD. The find is with National Museums Scotland

MHG3760 NH65424346 Cairn,Torvean MHG4992

AlargecairnwasrecordedatthebaseofTorveanhillonthewestsideoftheriver,reportedly closetowhereaPictishsilverchain(MHG3800)wasfound.Itwas also said thatacist comprisingsixflagstoneswasfoundunderitlater.

MHG3749 NH 64374315 Fort,Torvean SM3806

Afort,probablydatin gtotheIronAge,issituatedalong aridgeonTorveanhill.Itisofoval form,100'longENE -WSWby50'wide, andsurroundedbya ditchforminganirregularoval shape ataconsiderablylowerlevel ontheslopesofthehill.Theouterlineofdefence comprisesaditchcutintotheslopewithanouterrampart.Theditchisbest -preservedtoN, measuringc3minwidthandc.0.8mindepthwiththerampartc.4minwidth.Amodernwall runsalongthes pineoftheridgeandbisectsthefort.

MHG3802 NH65104360 Findspot,LochnaSanois

 $A Neolithic stone axe was found near the Skating Pondat Loch \\ the proposed route Nof Torvean hill. It is held in Inverness Museum. \\ \\ -na Sanais, on the west side of the proposed route Nof Torvean hill. It is held in Inverness Museum. \\$

6.2 Walkoversurvey

- 6.2.1 Aheadofthegroundinvestigations,therouteoftheproposedInvernessWestLinkRoadwas walkedoverandsurveyedwiththegeotechnicalengineersinordertocheckforanyfeaturesof archaeologicalinterest.Astone/turfbou ndarywallwasrecordedbetweentrialpits12/10and 12/11,runningNW -SEtotheriverbank(Figure 6).Mostlyobscuredbythesurrounding vegetation,thefieldboundary measured approximately0.7mwideandup to0.4mhigh and appearedpartiallyrevetted intothegroundslope;t heremainsofadisusedpostandwirefence were detected overlyingt he alignmentofthe wall.Thelineoftheboundarywallappearsonthe FirstEditionandlaterOSmapping.
- 6.2.2 Apileof possible buildingrubblewithoverlyin grubbishwasidentifiedapproximately30m northeastoftheboundarywall(Figure 6)underasmalltree. Therewas not race of abuilding footing in the vicinity, although the dense and high vegetation and shrubs could easily have masked such a feature.
- 6.2.3 ThedisusedmillladelocatedtothewestsideofHolmMillswasalsophotographedduringthe survey.ShownonOSmapping,itappearsasasmallchannelalongsidethesouthsideofRiver Ness,runningE -Walongthroughthesouthrivercrossing. Theladeisstone -linedandobscured bydenseshrubandtreevegetationonbothbanks(Plate 2).Theproposedroutecrossesthrough thelade.

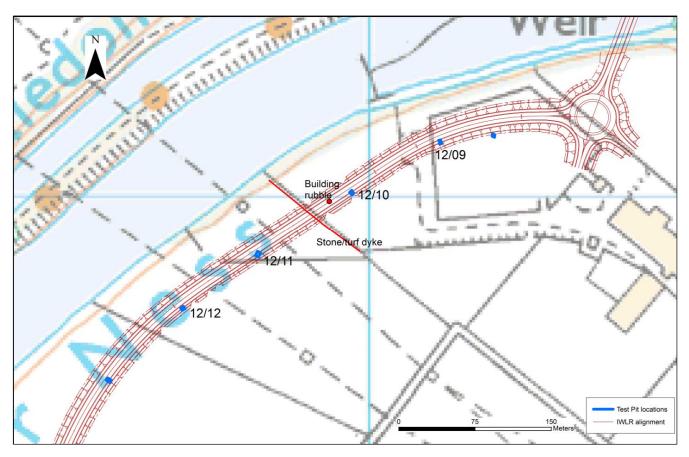


Figure6 Pre-groundinvestigationwalkoversurveyresults



 $Plate 2 \quad Section of the disused lade to the west of Holm Mills, facing N; located at the Scrossing of River Nessalong \\ the line of the proposed Inverness West Link Road$

6.3 Watchingbrief

6.3.1 TrialPits

- 6.3.1.1 Twentytrial(test)pits(Figure 3)were excavatedunderarchaeologicalsupervisionby mechanicaldiggerusingastraight -edgedbucket. Thepitsmeasuredbetween 2-3mlongby1 1.2mwide (Plates 3-4). Followingexcavationtothesubsoil,thepitwasdugtoadepthrequired bythegeotechnicale ngineertoallowforcollectionofenvironmentalsamples. Although twenty-onepitshadbeenplannedduringthegroundinvestigations,TP12/07wasnotexcavated duetodifficultieswiththelandowner.Therewerenofindsorfeaturesofarchaeological interestrecordedinanyofthetestpits.
- 6.3.1.2 Trialpits 12/01-12/6 were excavated in the rugby park to the south of Inverness Leisure Centre (Figure 3), along the base of the eastern bank of the Caledonian Canal. The topsoil was a mid browns il tyso il with 5 -10% graveland stones, measuring 30 -50 cm deep to the subsoil. Only four sherds of c.19 th -20th century glazed potter yand glass sherds were identified in the topsoil for the six pits. The subsoil was a pale or ange -brown sandy gravel.
- 6.3.1.3 Trialpits 12/11-12 were excavated in the disused fields near the centre of the proposed route (Figure 3). The rewere very few small glazed pottery sherds found in the topsoil, amid -dark brown gravelly soil measuring 30 -40 cm deep. The fields were covered in rough grass, willow and scrub vegetation. Trialpits 12/08-09 were located within the concrete base of a shallow tank associated with past industrial use. The rewas not opsoil surviving during excavation of the pits and no finding store port with the pits.
- 6.3.1.4 Trialpits 12/13-12/21 were excavated intwo field stothe east and northeast of Ness -side Farm (Figure 3). The topsoil, 30 -40 cmindepth, was amid -brown silty soil with 5 -10% small stones overlying a paleorange gravel subsoil. The rewerenumerous scattered finds visible in the plough soil in the surrou nding area, comprising mostly glazed pottery sherds, coal fragments, slate and glass sherds. The south field, which had recently been harvested of potatoes, had been stones e parated in 2012. Nine artefacts of interest were collected in the field sduring the walk over survey and ground investigations and are discussed in section 6.3.2.







Plate4Post -topsoil-stripping, Trial Pit12/05, facing SW

6.3.2 Archaeological finds

The fields to east and northeast of Ness-side Farm were walked over intermittently during the ground investigations, during free time allowed by the geological and environmental sampling. Although numerous c.19-20th glass and pottery fragments were observed in the ploughsoil, a selection of artefacts of interest were recovered and retained for the site records (Table 1).

The finds, which were spread throughout the topsoil and made visible from the machine harvesting, seem to indicate Post Medieval and earlier activity on the site. The clay pipe stems (SF05), gun flint (SF04), slate board fragment (SF03) and lead seal (SF07) are intriguing finds, almost certainly Post Medieval in date and reflecting objects of individuals; while the iron slag and pumice (SF01-02) and flint flake (SF09) are less conclusive and could suggest prehistoric activity.

Find No.	Material	Context	Description	Approx. Date
1	Fe	Ploughsoil	1 x lump of iron slag	Unknown
2	Fe	Ploughsoil	3 x lumps of iron slag and 1 fragment of possible pumice	Unknown
3	Slate	Ploughsoil	1 x fragment of slab with a filed edge and inscribed lines-possible school drawing board or gaming board	Post Medieval
4 Flint Ploughsoil 1 x gun flint; found at NH		Ploughsoil	1 x gun flint; found at NH 6467542407	Post Medieval (?)
5	Ceramic / bone Ploughsoil 3 x fragments from 3 clay pipe stems; 1 x fragment of burnt bone		Post Medieval	
6	Cu	Ploughsoil	Cu object with rivet; possible clothing or furniture decoration (?)	Unknown
7	Pb	Ploughsoil	Lead bulla (?) seal; 'TOLBU' inscribed; found at NH 64755 42396	Unknown
8	Ceramic	Ploughsoil	1 x fragment of cream-glazed earthenware pottery	Unknown
9	Flint	Ploughsoil	1 x flint flake, possible worked	Unknown

Table 1 Artefacts recovered from field walking at the southwest end of the route near Ness-side Farm

7 Discussion

It was unsurprising that there were no archaeological features or finds recorded during the watching brief, given the small size of the trial pits. However, the site of the proposed West Link Road remains of archaeological interest due to its location above the banks of the River Ness and the results of the desk-based assessment, which revealed numerous sites of archaeological interest near the northeast end of the route.

Historical mapping has also shown significant settlement along the south side of the river by Holm Burn at the southwest end of the route (Section **6.1.1**). The unrecorded settlement on Bastide's map appears to have been located somewhere near the east side of the proposed route between Holm Mills and Ness-side Farm, although it is not clear how far away it was. There is potential for archaeological remains of such a site to have survived below the ground surface, particularly in the disused field at between Trial Pits 12/09 and 12/12, where the dense and high ground vegetation may have masked archaeological features.

The mills at Bught and Holm are also of archaeological interest, particularly as the two mill lades will be crossed by the development at the south and north sides of River Ness.

Furthermore, therecovery of numerous archaeological finds of interest in the fields at the southwestend of the routesupports the potential for buried remains within the proposed route.



Plate5SF02 Ironslagandpossiblepumicepieces

Plate6SF03 Possibleschooldrawingboardor gamingboard





Plate7SF06 Copperobjectwithrivet

Plate8SF07 Lead bulla-typeseal

8 Recommendations

Asaresultofthedesk -basedassessmentandrecoveryoffindsatthesouthwestendoftheroute, anarchaeologicalwatchingbriefisrecommendedalongthelengthoftheroutewherethe monitoringofthegroundinvestigations was undertaken. Furthermore,archaeological monitoringshouldbecarriedoutduringallinvasiveworkstotheCaledonianCanal(Scheduled Monument).

Itisalsorecommendedthatadetailedphotographicrecordingofthe HolmMills andBught Mill lades beconductedpriortodevelopmentworkcommencing. The structure s should also be recorded in section, if they are breached by construction of the road.

9 References

BritishWaterways2011 CodeofPracticeforWorks AffectingBritishWaterways

Dunbar, Lindsay 2010 Ness Side, Dores Road, Inverness Evaluation: Data Structure Report Loanhead, AOC Archaeology Group.

HighlandCouncil.2001 *TheHighlandStructurePlan*: Section2.15,BuiltandCultural Heritage.

HighlandCouncil2012 StandardsforArchaeologicalWork ,v.1.

Http://www.highland.gov.uk/yourenvironment/conservation/archaeology/developmentguidance. htm.

HighlandCouncilHistoricEnvironmentTeam2012 *HighlandHistoricEnvironmentRecord* (HHER). Http://her/highland.gov.uk

HistoricScotland2006 OperationalPolicyPaper5:TheTreatmentofHumanRemain sin Archaeology.

Institute for Archaeologists (IfA) 2008(a) Standard and guidance for archaeological field evaluation. Reading: IfA.

InstituteforArchaeologists(IfA)2008(b) Standardandguidanceforarchaeologicaldesk basedassessment. Reading,IfA.

Institute for Archaeologists (IfA) 2010 By-laws of the Institute for Archaeologists: Code of Conduct. Reading, IFA.

Peteranna, Mary 2012 Inverness West Link Road Ground Investigation Archaeological Watching Brief: Written Scheme of Investigation. Rossand Cromarty Archaeological Services, Report no. 2012 - 21/IWL 12

TheScottishGovernment2010 ScottishPlanningPolicy. Http://www.scotland.gov.uk/Resource/Doc/300760/0093908.pdf

TheScottishGovernment2011 PlanningAdviceNote2/2011 (PAN2/2011): Planningand Archaeology. Http://www.scotland.gov.uk/.

10 Web-BasedSources

Bastide, John Henri 1725 AGeneral Survey of Inverness, and the Country Adjacent to the foot of Loch -Ness Accessed on linear National Library of Scotland.

BritishGeologicalSurvey(BGS)2010 *Digmap625*, downloadedfrom Http://bgs.ac.uk Moll,Herman1745 *TheEastPartoftheShireofInvernesswithBadenoch* .Accessedonlineat NationalLibraryofScotland.

National Map Library of Scotland 2012 – http://maps.nls.uk

Ordnance Survey 1874 *Inverness and Bona and Dores Parishes, Inverness-shire* Sheet CII Accessed online at National Library of Scotland.

Roy, William 1747-55 *Military Survey of Scotland* Accessed online at National Library of Scotland

Appendix 1 Listof Site Photographs

Photo No.	Direction facing	Trial Pit No.	Notes	Date taken	Initials
1	WNW	-	Photo of 'tattie' field at SW end of route during walkover survey; taken from Tesco roundabout off Dores Road	06/11/2012	MKP
2	NE	-	Photo of 'stubble' field at SW end of route during walkover survey; taken from E side of Ness-side Farm	06/11/2012	MKP
3	NNE	-	Derelict field adjacent to River Ness at centre of proposed route; during walkover survey	06/11/2012	MKP
4	NE	-	Gravel area and concrete base, location of Trial Pits 12/09 and 12/08	06/11/2012	MKP
5	N	-	Disused mill lade to west of Holm Mills on S side of River Ness; located at S river crossing of proposed route	06/11/2012	MKP
6	NE	12/06	Pre-excavation of trial pit	26/11/2012	JWom
7	NW	12/06	Post-topsoil stripping of trial pit; c.30cm topsoil	26/11/2012	JWom
8	NW	12/06	Post-excavation of trial pit	26/11/2012	JWom
9	SSW	12/21	Pre-excavation of trial pit	27/11/2012	JWom
10	ESE	12/21	Post-topsoil stripping of trial pit; c.35cm topsoil	27/11/2012	JWom
11	SSW	12/20	Pre-excavation of trial pit	27/11/2012	JWom
12	E	12/20	Post-topsoil stripping of trial pit; c.40cm topsoil	27/11/2012	JWom
13	E 12/19 Post-topsoil stripping of trial pit; c.35cm topsoil			27/11/2012	JWom
14	SW 12/18 Pre-excavation of trial pit		28/11/2012	JWom	
15	SE 12/18 Post-topsoil stripping of trial pit; c.35cm topsoil		28/11/2012	JWom	
16		SW 12/17 Pre-excavation of trial pit		28/11/2012	JWom
17 18		SE 12/17 Post-topsoil stripping of trial pit; c.30cm topsoil		28/11/2012 28/11/2012	JWom
19	SE	SW 12/16 Pre-excavation of trial pit		28/11/2012	JWom JWom
20	SW	12/15	2/16 Post-topsoil stripping of trial pit; c.30cm topsoil		JWom
21	SE	12/15	Pre-excavation of trial pit Post-topsoil stripping of trial pit; c.40cm topsoil	28/11/2012 28/11/2012	JWom
22	SW	12/13	Pre-excavation of trial pit	28/11/2012	JWom
23	SE	12/14	Post-topsoil stripping of trial pit; c.35cm topsoil	28/11/2012	JWom
24	WSW	12/13	Pre-excavation of trial pit	28/11/2012	JWom
25	ENE	12/13	Post-topsoil stripping of trial pit; c.30cm topsoil	28/11/2012	JWom
26	NNW	12/12	Pre-excavation of trial pit	28/11/2012	JWom
27	NNW	12/12	Post-topsoil stripping of trial pit; c.40cm topsoil	28/11/2012	JWom
28	NE	12/11	Post-topsoil stripping of trial pit; c.30cm topsoil	28/11/2012	JWom
29	NNE 12/10 Post-topsoil stripping of trial pit; c.20cm topsoil		29/11/2012	MKP	
30				29/11/2012	MKP
31	SSW	NE 12/10 Location of Trial Pit, during excavation SSW 12/10 Post-excavation of trial pit showing glacial gravels		29/11/2012	MKP
32	SW	12/10	. 00 0		MKP
33	NE NE	12/09	Post-excavation of trial pit showing glacial gravels Location of Trial Pit, during excavation; showing concrete base of ground 29/11/2		MKP
34	SE	12/08			MKP
35	SSW	-	Banks of the Caledonian Canal by Tomnahurich swing bridge-showing location of boreholing equipment on W bank	10/12/2012	MKP
36	sw	-	Banks of the Caledonian Canal by Tomnahurich swing bridge-showing location of boreholing equipment on W bank	10/12/2012	MKP

IWLR12Data Structure Report: Inverness WestLink Road Ground Investigations

Photo No.	Direction facing	Trial Pit No.	Notes	Date taken	Initials
37	SW	12/05	Post-topsoil stripping of trial pit; c.40cm topsoil	10/12/2012	MKP
38	Ν	12/05	Location of Trial Pit, during excavation	10/12/2012	MKP
39	NE	12/04	Post-topsoil stripping of trial pit; c.35cm topsoil	10/12/2012	MKP
40	NE	12/04	Post-topsoil stripping of trial pit; c.35cm topsoil	10/12/2012	MKP
41	NE	12/03	Post-topsoil stripping of trial pit; c.50cm topsoil	10/12/2012	MKP
42	NE 12/03 Location of Trial Pit, during excavation		10/12/2012	MKP	
43	ENE 12/02 Post-topsoil stripping of trial pit; c.45cm topsoil		10/12/2012	MKP	
44	44 SW 12/02 F		Post-excavation of trial pit showing glacial gravels	10/12/2012	MKP
45	SW 12/02 Location of Trial Pit, during geologist's sampling		10/12/2012	MKP	
46	SW 12/01 Post-topsoil stripping of trial pit; c.40cm topsoil		10/12/2012	MKP	
47	Post-topsoil clearance for investigation pit ahead of boreholing on the E side of the Caledonian Canal bank near Tomnahurich Bridge		17/01/2013	MKP	
48	S	-	Monitoring of scrub clearance on E bank of Caledonian Canal near Tomnahurich Bridge		LF

${\bf Appendix 2} \qquad {\bf List of Finds and Finds Photographs}$

Find	Material	Context	Description	Photo	Approx.Date	Initials	Date
No.				No.			
1	Fe	Ploughsoil	1xlumpofironslag	SF01	Unknown	JWom	27/11/2012
2	Fe	Ploughsoil	3xlumpsofironslagand1 fragmentofpossiblepumice	SF02	Unknown	JWom	27/11/2012
3	Slate	Ploughsoil	1xfragmentofslabwithafiled edgeandinscribedlines -possible schooldrawingboardorgaming board	SF03	Post Medieval	JWom	27/11/2012
4	Flint	Ploughsoil	1xgunflint;foundatNH 6467542407	SF04	Post Medieval(?)	JWom	28/11/2012
5	Ceramic/ bone	Ploughsoil	3xfragmentsfrom3claypipe stems;1xfragmentofburntbone	SF05	Post Medieval	JWom	28/11/2012
6	Cu	Ploughsoil	Cuobjectwithrivet;possible clothingorfurnituredecoration(?)	SF06a, SF06b	Unknown	JWom	28/11/2012
7	Pb	Ploughsoil	Leadbulla(?)seal;'TOLBU' inscribed;foundatNH6475542396	SF07a, SF07b, SF07c	Unknown	JWom	28/11/2012
8	Ceramic	Ploughsoil	1xfragmentofcream -glazed earthenwarepottery	SF08	Unknown	MKP	28/11/2012
9	Flint	Ploughsoil	1xflint flake,possibleworked	SF09	Unknown	MKP	28/11/2012