

Discovery and Excavation in Scotland

Updated on 15/06/2007

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PROJECT TITLE/SITE NAME:	St Andrews Cathedral
PROJECT CODE:	HSCO-90260-2015-01
PARISH:	St. Andrews and St. Leonard's
NAME OF CONTRIBUTOR:	Gordon Ewart
NAME OF ORGANISATION:	Kirkdale Archaeology
TYPE(S) OF PROJECT:	Watching brief
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NGR (2 letters, 8 or 10 figures)	NO 5147 1664 to NO 5146 1661
START DATE (this season)	31 July 2015
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PREVIOUS WORK (incl. DES ref.)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A watching brief was maintained during the replacement of an electrical cable running from the south wall of the cathedral cemetery to the tower of St. Rule's Church. The ground breaking works only disturbed the area of the original power line, and exposed only deposits previously disturbed when the original cable was laid. Some disarticulated and un-contextualized fragments of human bone were seen in the redeposited material.
PROPOSED FUTURE WORK:	
CAPTION(S) FOR ILLUSTRS:	
SPONSOR OR FUNDING BODY:	Historic Environment Scotland
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**HISTORIC SCOTLAND PROPERTIES IN CARE
MINOR ARCHAEOLOGICAL WORKS 2015/2016**

St. Andrews Cathedral • Watching Brief • July 2015

HS PIC Index Number: 90260

SITE: St. Andrews Cathedral, St Andrews.

N.G.R.: NO 5147 1664 to NO 5146 1661

DESCRIPTION: Archaeological watching brief during the replacement of an electrical cable running from the south wall of the cathedral cemetery to the tower of St. Rule's Church.

PROJECT CODE: HSCO-90260-2015-01

CONTENTS:

Introduction.....	1
Description.....	2
Conclusions.....	4
List of Contexts.....	5
List of Drawings.....	5
List of Digital Photographs.....	5
List of Finds.....	8



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AUGUST 2015

INTRODUCTION

Under the terms of its PIC contract with Historic Scotland, Kirkdale Archaeology was asked to carry out an archaeological watching brief at St. Andrews Cathedral during the replacement of an electrical power line running through the cemetery from the south wall of the cathedral to the tower of St. Rule's Church. This entailed the ground disturbance of a 50m track through the cemetery to locate and reveal the full extent of the electrical line (Fig.1). The ground breaking works only disturbed the area of the original power line.

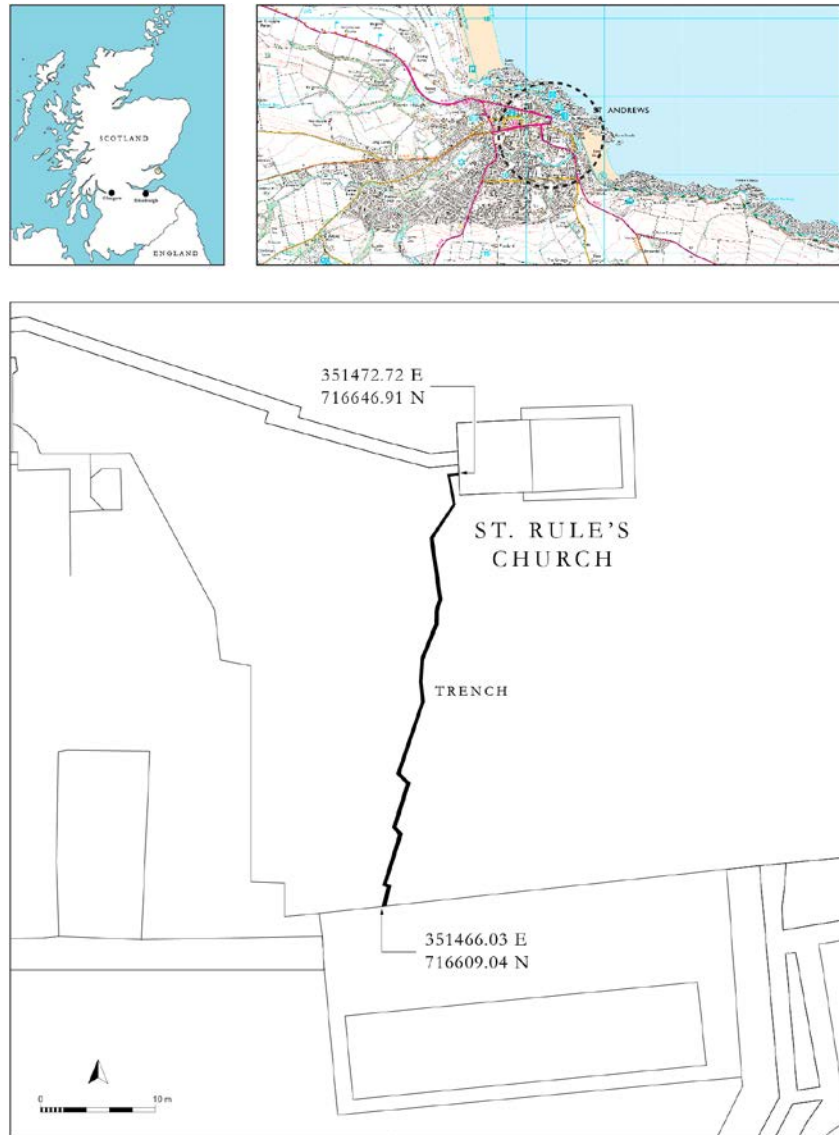


Figure 1: Plan showing the general location of the trench.

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Excavation was undertaken by hand, by Historic Scotland staff under archaeological supervision, and took place on 31st July, and 3rd August, 2015.

DESCRIPTION

The old electrical cable **004** ran from the south wall of the cemetery **003** to the tower of St. Rule's Church **005**. The end points of the cable were visible in the south wall and the tower. Historic Scotland staff followed the line from the south wall through the graveyard to the tower. The turf and topsoil **001** was removed with turf cutters. Only a single deposit of soil, **002**, a black/brown silty-humic soil with yellow/brown sandy lenses was removed to locate the electrical cable, **004**. This deposit was clearly the backfill placed over the cable following its installation. The cut for this deposit was not revealed.

The trench **006** stretched the *c.*50m between the cemetery wall and tower in a slightly diagonal N/S alignment. Although an approximation of the location of the **004** cable was found using a ground CT scan, the exact location of the cable was revealed by following the cable through the topsoil, resulting in an irregularly shaped trench. The width of the trench varied from 21 – 28cm and the depth between 25 – 30cm. Only the turf/topsoil **001** and the original backfill **002** were disturbed.

All finds were located within the **002** deposit in the trench. This included a large quantity of human remains, none of which were *in-situ*. The human remains were all situated well within the trench, in **002**, making it likely that these remains were disturbed during the original placement of the electrical cable **004** and re-deposited with the backfill. Due to the depth of the trench, all the human remains were probably not *in-situ* even when originally disturbed.

The human remains included both juvenile and adult remains, with some representation of infant bones. All bones were disarticulated and many of the long bones lay in line with the N/S trench, while the graves that trench **006** crossed were aligned E/W. At least one adult male was identified from a fragment of ilium. The bones were fairly evenly distributed along the trench, although the trench was subdivided into three sections to show if there was any change in concentration. The only notable difference was a lack of bones in the last 1 – 2m towards the tower (**005**). The only notable pathology was a single adult lumbar vertebrae that exhibited Schmorl's nodes; this may be age related, though not enough evidence remained to draw any conclusions as to their formation. The lack of age related pathology on many of the adult bones may suggest that some were of a younger adult age which would correspond with the ages listed on the graves crossed by the trench. The disarticulated and fragmental nature of the human remains prevents in depth analysis, and the ages of the skeletal elements can only be estimated. An accurate minimum number of individuals would be very difficult to establish due to the state of the remains, though at least five could be represented due to the variation in ages. All the human remains were recorded, photographed and respectfully reburied within the trench.

Other finds included an iron handle, possibly from a coffin, along with oyster and clam shells, iron coffin nails, modern plastic and garbage.

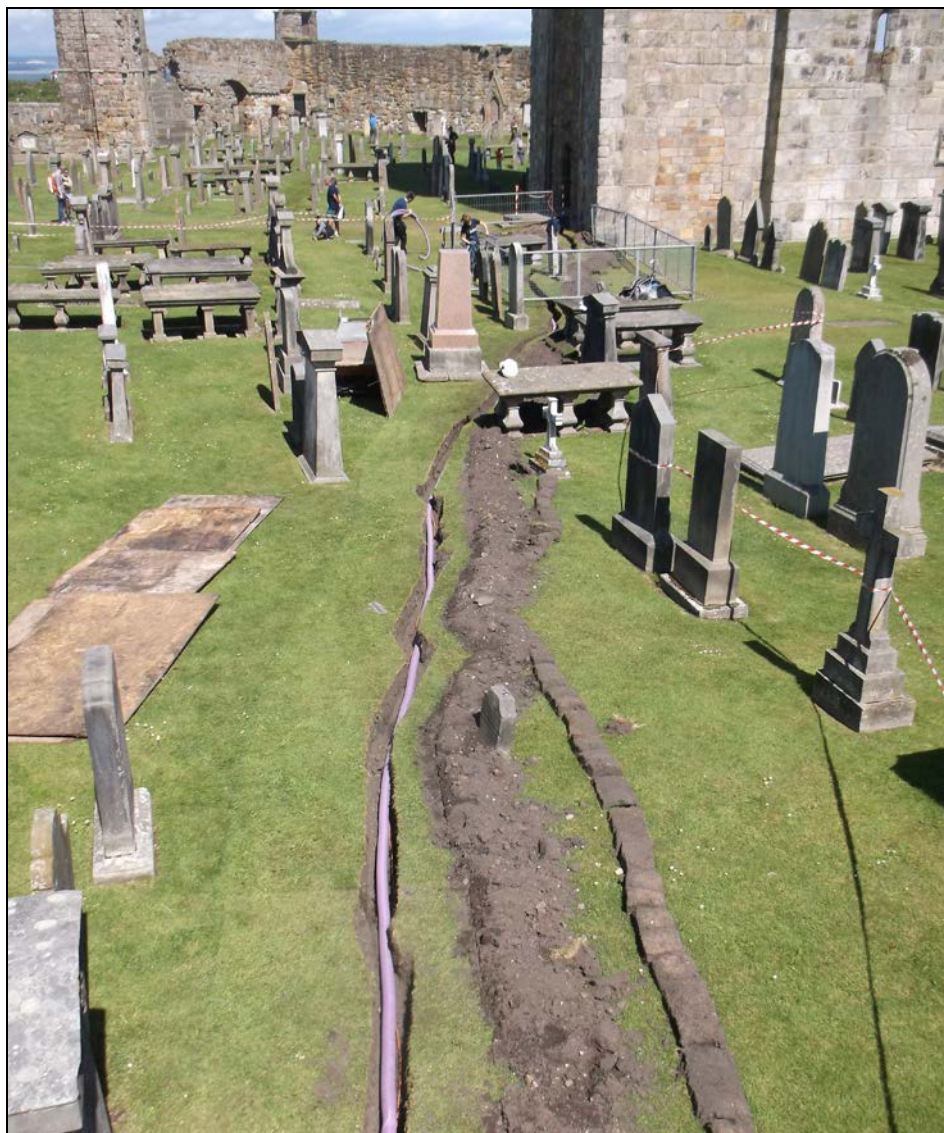


Plate 1: View of the trench, from the south.

CONCLUSIONS

The ground works to remove and replace the old electrical cable exposed only deposits previously disturbed when the original cable was laid. The disarticulated and un-contextualized nature of the human remains prevented extensive analysis.

No further archaeological intervention should be necessary for the installation of the electrical services in this area. The plastic tubing housing the new electrical wire should allow access to the new cable and help prevent the need for this trench to be reopened. The presence of finds, and particularly human remains, so close to the surface of the ground does suggest, however, that any future ground-breaking works in the area should be archaeologically monitored.

LIST OF CONTEXTS

Trench	Description
001	Turf and dark brown/black sandy-humic topsoil, c.8cm deep.
002	Black/brown moist silty-humic soil with some gravel and small stones. The soil had some light yellow/brown sandy lenses from the backfilling. This was the backfill from when the original electric cable was laid between the tower and the south stone wall.
003	Southern stone wall of the graveyard from which the electric cable emerged.
004	Electrical cable.
005	Tower of St. Rule's Church.
006	Cut made to locate the old cable for replacement. The trench did not reveal the extent of the original cut for the cable. The trench put in followed the old cable 004 from the south wall 003 to the bell tower 005. The trench followed a jagged diagonal line running more or less N/S and was c.50m long. It varied in width from 21 – 28cm and in depth from 25 – 30cm.

LIST OF DRAWINGS

No.	Type	Description	Scale
1	Plan	Trench location.	NTS

LIST OF DIGITAL PHOTOGRAPHS

No.	Description	From	Date
1	Human remains from the first 0 – 20m of the trench.	N/A	31/07/15
2	Human remains from first 0 – 20m of the trench.	N/A	31/07/15
3	Finds from first 0 – 20m of the trench.	N/A	31/07/15
4	First length of trench 006 during excavation.	N	31/07/15
5	First length of trench 006 during excavation. Showing the south wall 003.	NE	31/07/15
6	Excavation shot.	E	31/07/15
7	Human remains from the first 0 – 20m of the trench.	N/A	31/07/15
8	Finds from the first 0 – 20m of the trench.	N/A	31/07/15
9	Human remains from the first 0 – 20m of the trench.	N/A	31/07/15
10	Human remains from the first 0 – 20m of the trench.	N/A	31/07/15
11	Finds from the first 0 – 20m of the trench.	N/A	31/07/15
12	View of trench covered by timber at end of day (31/07/15).	NE	31/07/15
13	View of the first part of the trench.	N	03/08/15
14	View of the south end of the trench.	N	03/08/15
15	View of the south end of the trench.	NE	03/08/15
16	View of the north end of the trench.	S	03/08/15
17	View of location where cable 004 enters the graveyard through 003 wall.	N	03/08/15
18	View of location where cable 004 enters the graveyard through 003 wall.	N	03/08/15
19	View of the south end of the trench.	N	03/08/15
20	View of the south end of the trench.	N	03/08/15
21	View of middle part of the trench.	N	03/08/15
22	View of the electricians with plastic tubing.	NE	03/08/15
23	View of the south part of the trench.	NE	03/08/15
24	View of the north end of the trench.	N	03/08/15
25	View of the north end of the trench.	NE	03/08/15
26	View of the north end of the trench.	N	03/08/15
27	View of where the cable 004 enters the tower 005.	S	03/08/15
28	Human remains from 21 – 35m of the trench.	N/A	03/08/15

No.	Description	From	Date
29	Human remains from 21 – 35m of the trench.	N/A	03/08/15
30	Human remains from 21 – 35m of the trench.	N/A	03/08/15
31	Human remains from 21 – 35m of the trench.	N/A	03/08/15
32	Human remains from 21 – 35m of the trench.	N/A	03/08/15
33	Human remains from 21 – 35m of the trench.	N/A	03/08/15
34	View of the entire trench.	S	03/08/15
35	View of the entire trench.	S	03/08/15
36	Human remains from 21 – 35m of the trench.	N/A	03/08/15
37	Human remains from 21 – 35m of the trench.	N/A	03/08/15
38	Human remains from northern 36 – 50m of the trench.	N/A	03/08/15
39	Human remains from northern 36 – 50m of the trench	N/A	03/08/15
40	Human remains from northern 36 – 50m of the trench	N/A	03/08/15
41	Human remains from northern 36 – 50m of the trench	N/A	03/08/15
42	Human remains from northern 36 – 50m of the trench	N/A	03/08/15
43	Human remains from northern 36 – 50m of the trench	N/A	03/08/15
44	Human remains from northern 36 – 50m of the trench	N/A	03/08/15
45	Human remains from northern 36 – 50m of the trench	N/A	03/08/15
46	Human remains from northern 36 – 50m of the trench	N/A	03/08/15
47	Oyster shell from 0 – 20m of the trench.	N/A	05/08/15
48	Large and small iron nail from 0 – 20m of the trench.	N/A	05/08/15
49	Bone from 0 – 20m of the trench.	N/A	05/08/15
50	Iron objects from 36 – 50m of the trench.	N/A	05/08/15
51	Bone from 36 – 50m of the trench.	N/A	05/08/15
52	Oyster and clam shell form 36 – 50m of the trench.	N/A	05/08/15
53	Pottery from 36 – 50m of the trench.	N/A	05/08/15
54	Plastic from 36 – 50m of the trench.	N/A	05/08/15
55	Iron objects form 21 – 35m of the trench.	N/A	05/08/15
56	Bone from 21 – 35m of the trench.	N/A	05/08/15
57	Pottery from 21 – 35m of the trench.	N/A	05/08/15
58	Shells from 21 – 35m of the trench.	N/A	05/08/15
59	Modern plastic and glass form 21 – 35m of the trench.	N/A	05/08/15
60	Stone from 21 – 35m of the trench.	N/A	05/08/15
61	Wood from 21 – 35m of the trench.	N/A	05/08/15

LIST OF FINDS

No.	Context	Area	Type	Description
001	002	0 – 20m	Human Remains	All human bone found was disarticulated charnel and no longer remained <i>in-situ</i> . All bone lay within the trench suggesting it may have been disturbed and re-deposited during the laying of the original cable. 1) Two adult vertebrae, one thoracic and one lumbar. No pathology. 2) One possible fragment of adult vertebrae. 3) One neural arch of a juvenile lumbar vertebrae. 4) One possible fragmental adult talus (<50% preservation). 5) One adult right II metacarpal. 6) One adult metatarsus (50 – 75% preservation) Possibly the II or III. 7) <50% fragment of an adult metatarsus. 8) Two proximal hand phalanges from an adult. 9) One very fragmental piece of pelvis likely from and adult ilium, though it could be juvenile. 10) One juvenile scapula c.6 years old. 11) One juvenile femur from an infant. 12) >25% fragment of adult scapula. 13) 13 fragments of adult rib. 14) Two possible juvenile rib fragments. 15) Four fragments of adult long bond <25% of bone preserved, likely femur. 16) One large right

No.	Context	Area	Type	Description
				adult humerus broken in two, but fully preserved. 17) One complete adult left first rib. 18) Three fragments of adult long bone (ulna/radius/fibula). 19) Two fragments of adult lower arm bone, less than 50% preserved, may be radius. 20) 19 fragments of unidentified human bone.
002	002	21 – 35m	Human Remains	All human bone found was disarticulated charnel and no longer remained <i>in-situ</i> . All bone lay within the trench suggesting it may have been disturbed and re-deposited during the laying of the original cable. 1) 30 fragments of human rib including one intact first rib and one juvenile rib. 2) One almost intact left adult ulna. 3) One juvenile left distal humerus. 4) One juvenile distal tibia with no metaphysis. 5) One shaft of possible juvenile tibia. 6) Two possible femur fragments. 7) Three fragments of small long bone, one possible adult radius. 8) One infant scapula c.1 year old, 75% intact. 9) Five fragment of adult scapula including glenoid cavity, all are <25% intact. 10) Two fragments of clavicle from adults, 50% preservation. 11) Two adult vertebral bodies. 12) Three adult vertebrae neural arch fragments. 13) Three juvenile neural arch fragments from vertebrae. 14) Two adult pelvis fragments including ilium and ischium, less than 25% preserved. 15) One possible juvenile ischium. 16) Two temporal adult bone fragments, <50% preservation. 17) One adult frontal bone fragment. 18) 12 fragments of juvenile and adult skull. 19) 74 fragments of unidentified human bone, fragmented. 20) Four adult hand phalanges. 21) One adult toe phalanx. 22) One possible navicular. 23) One first metatarsus from an adult. 24) Two fragmental metacarpals or metatarsals from an adult, fragmented. 25) One adult calcaneus. 26) One possible fragmental cuboid.
003	002	36 – 50m	Human Remains	All human bone found was disarticulated charnel and no longer remained <i>in-situ</i> . All bone lay within the trench suggesting it may have been disturbed and re-deposited during the laying of the original cable. 1) One juvenile talus, surface is badly damaged. 2) One juvenile calcaneus. Fragmented. 3) Six adult hand phalanges, including two intermediate and four proximal. One may be juvenile. 4) One hamate. 5) Two adult fragmental metacarpals. 6) One first metacarpal from a juvenile. 7) One adult metacarpus. 8) One adult left IV metacarpus. 8) One adult right IV metatarsus. 9) One adult left II metacarpus. 9) One left juvenile III metatarsus, no distal head. 10) One adult proximal 1/2 of left II or III metatarsus. 11) One adult left IV metatarsus. 12) One V metacarpus from an adult, likely left. 13) One adult left III metatarsus. 14) Two shafts and one head of an adult metatarsus. 15) One adult male pelvis fragment, portion of the ilium and sciatic notch intact. 16) One juvenile pelvis fragment. 17) Two possible young juvenile pelvis fragments. 18) One left adult patella. 19) One possible manubrium. 20) 14 adult long bone shaft fragments. 21) One ulna shaft fragment adult. 22) Two ulna/radius shaft fragments from adults. 23) One radial head from an adult. 24) One long bone femoral condyle from a possible juvenile. 25) One femoral head from a juvenile. 26) One humeral head from and adult. 27) One infant long bone. 28) One third maxilla molar from an adult. 29) One juvenile

No.	Context	Area	Type	Description
				jaw with three molars, molars are well preserved, juvenile may have been c.12 years old. 30) One occipital fragment of an adult skull. 31) 13 skull fragments from juveniles and adults. 32) One left adult distal clavicle. 33) 18 fragments of rib from juveniles and adults. 34) One adult left vertebrae with Schmorl's nodes. 35) One navicular. 36) Three vertebral bodies including two lumbar. 37) One lumbar neural arch. 38) Three thoracic adult vertebrae including one neural arch. 39) Four fragments of neural arch, likely adult. 40) 60 fragments of unidentified human bone
004	002	0 – 20m	Shell	Seven badly degrading oyster shells. Probably incidental inclusions.
005	002	0 – 20m	Metal	One large iron nail and one small iron nail. Both are badly oxidized. They may be coffin nails.
006	002	0 – 20m	Animal bone	One astragalus, possibly from CAPRA/OVIS.
007	002	36 – 50m	Metal	Two badly oxidized iron objects. One seems to be a handle and was found in close proximity to the entrance of the tower 005. This may be from a coffin.
008	002	36 – 50m	Animal bone	One CAPRA/OVIS molar. One intermediate BOS phalanx. Two unknown mammal bones.
009	002	36 – 50m	Shell	One degraded oyster shells and two clam shells. These could be incidental and not deliberately deposited.
010	002	36 – 50m	Ceramics	Four fragments of ceramic. One green glaze, one brown glaze, one unglazed fragment and one white fragment of ceramic. All are badly fragmented with surface damage.
011	002	36 – 50m	Plastic	Fragment of modern plastic.
012	002	21 – 35m	Metal	Three fragments of oxidized iron nails. Possibly coffin nails.
013	002	21 – 35m	Bone	One CAPRA/OVIS molar. One CAPRA/OVIS astragalus. One fragment of large mammal long bone. One fragment of large mammal rib.
014	002	21 – 35m	Ceramics	Three sherds of very fragmental ceramics. Two are unglazed with surface damage. One is from a white and blue designed ceramic.
015	002	21 – 35m	Shell	Two degrading oyster shell and one periwinkle shell.
016	002	21 – 35m	Glass	Two fragments of modern window glass.
017	002	21 – 35m	Plastic	One fragment of white plastic tube.
018	002	21 – 35m	Stone	Two possible flint stones. Two slate stones. These may be incidental.
019	002	21 – 35m	Wood	One fragment of fairly recent wood. Possible particle board.