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# GOLF COURSE & RESORT DEVELOPMENT, MENIE ESTATE, ABERDEENSHIRE

Report on Archaeological Test Pits along lines of deep drains on the Championship Golf Course

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# PROJECT SUMMARY SHEET

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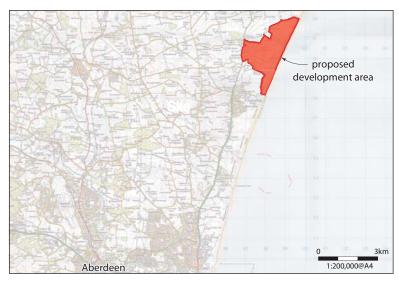
TRUMP INTERNATIONAL GOLF LINKS

Signed off by:  Mark Roberts BA(Hons) MIfA, Project Manager
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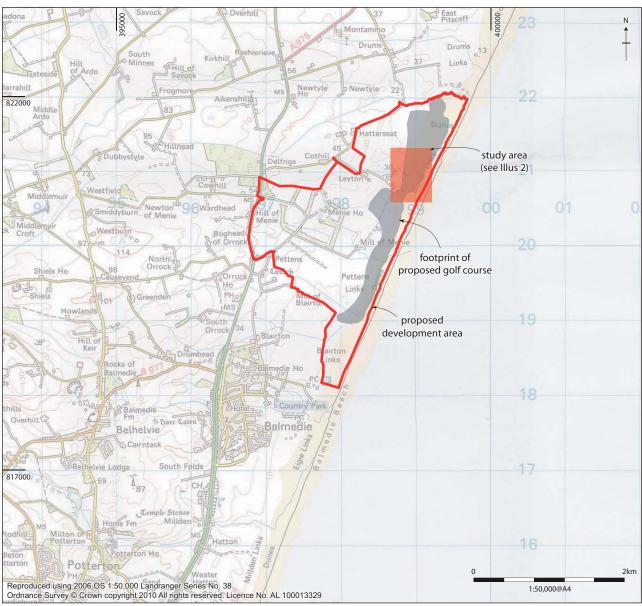
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**Illus 1**Trump International Links Golf Course – location plan

# GOLF COURSE & RESORT DEVELOPMENT, MENIE ESTATE, ABERDEENSHIRE

# Report on Archaeological Test Pits along lines of deep drains on the Championship Golf Course

by Magnar Dalland

As a part of the requirement for a watching brief an archaeological test pit evaluation was carried out along the lines of five deep drains in the area around the 18th fairway at the links golf course at Menie Estate, Aberdeenshire at the end of July 2010. The evaluation identified areas containing worked flints in the area to the north of Flint Scatter 2 surveyed in October 2009 but also next to the track some 400m to the south in an area where no flints had been seen previously. However no flints were retrieved from any of the other test pits excavated in the dune slack area.

A test pit was cut across the line of a possible old storm beach discovered during previous field work. The section across the feature confirmed that it had been formed as a result of sea erosion.

#### INTRODUCTION

This is a report on an archaeological test pits dug carried out on the new links golf course at Menie Estate, Aberdeenshire. The development area is situated some 8 km to the north of Aberdeen at Menie estate (NGR NJ 98 20) immediately to the north of Balmedie (Illus 1). The area is roughly D-shaped facing the North Sea to the east. The development area covers 452 hectares and extends just less than 4.3km along the coast and over 2km inland to the west.

The championship golf course will be located in the dune system along the coast to the east. It extends some 3.3km north to south along the coast. (Illus 1)

Previous surveys have identified a number of sites in the area affected by the construction of the golf course, mainly comprising early prehistoric flint scatters. Flint Scatters 1 and 2 (near the 10th and 18th holes) were examined in October 2009 and much of the material is of early prehistoric date (about 7th millennium BP) but were proven to be not in situ as they had moved horizontally and vertically with the active dune system (Dalland & Lochrie, 2009). During a watching brief carried out during dune stabilisation and Marram grass planting in March 2010, fresh flint scatters were observed along the old track to the southwest of Flint Scatter 1 (Dalland, 2010).

These pieces of work established that flints were only to be expected at the base of the dunes and archaeological work was targeted on this horizon. It was agreed with the contractors that they should contact Headland Archaeology to attend if any works were to be carried out near to the sensitive horizon. In order to avoid delaying construction

it was agreed that the deepest impact of the development – five drains would be subject to an evaluation. The test pits were dug in the area around the 18th fairway (Illus 2). One of the drains (DR1) started upslope amongst the hind dunes to the north of Flint Scatter 2 recorded previously and continued some 70m into the dune slack area to the south. The other four drains were located within the dune slack area.

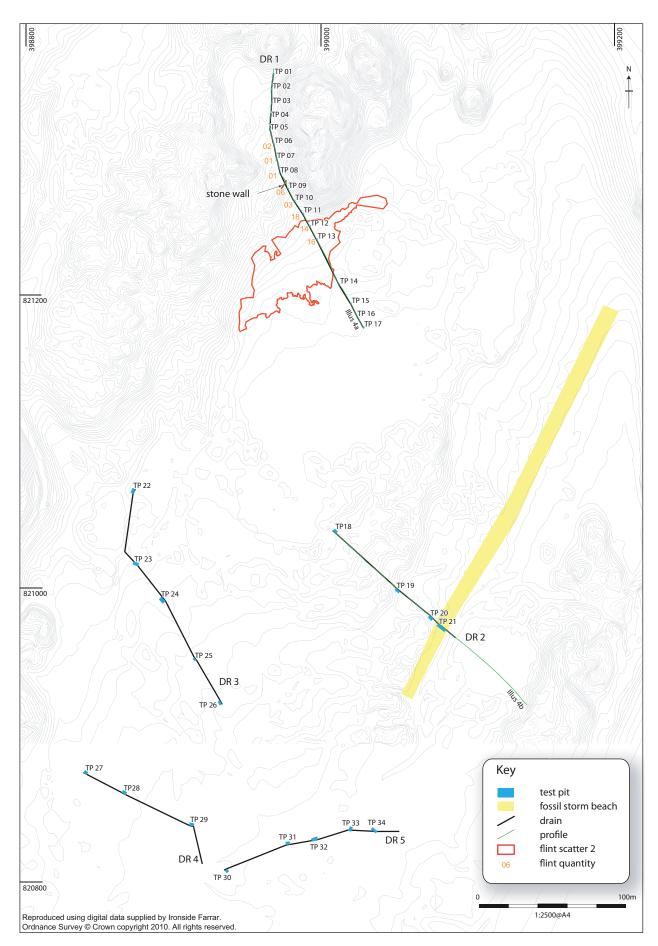
The work was carried out from 20th to 23rd of July 2010 in accordance with a written scheme that was prepared by Headland and based on requirements outlined by Moira Greig of Aberdeen Council Archaeology Service.

#### 2. METHODS

The pits along the line of drain DR1 were hand dug. These were the first pits that were excavated and hand excavation was chosen as an initial careful approach to get a better understanding of the stratigraphy in the area. The line of the drain also crossed a known flint scatter and hand dug pits would minimize the disturbance to the flint scatter. It turned out that the wind blown deposits were fairly shallow along most of this drain which facilitated manual excavation.

In order to get a reliable picture of the distribution of flints in the area around Flint Scatter 2 the spoil was sieved through a 1.5mm mesh for a full retrieval of finds. The residue was kept for later sorting.

The pits along the lines of the other four drains within the dune slack were machine excavated using a 1.8m wide bucket. The deposits of windblown sand were generally



Illus 2
Location of test pits along drain lines



**Illus 3** Panoramic view towards test pits TP05–09

much deeper in this areas and it turned out that machine excavation was the only feasible way of excavating the pits. The sides of the majority of the pits were unstable and usually collapsed which meant that most of the recording had to be done from outside the pits. In many cases the collapse occurred before the recording was completed. However, the test pits still produced valuable data about the depth of windblown sand deposits in this area.

#### RESULTS

#### 3.1 Drain DR1

The line of DR1 ran from the dune slack up into a blowout amongst the hind dunes (Illus 2, 3). A total of 17 pits were excavated along the line of DR1 (TP1–17). They were located at a distance of 10m except for TP13 and TP14 that were 33m apart. This was due to the presence of a recent platform that had been built from sand on top of Flint Scatter 2.

The evidence from the upper test pits (TP04–8) indicated that there was a fairly shallow deposit of windblown sand on top of gritty sand over clay, likely to represent till. A stone wall recorded during previous fieldwork was exposed in the blow-out. It was situated between test pits TP08 and TP09 at the point where the ground steepened down towards the dune slack to the south.

Test pits TP09–13 was cut into the steeper slope. A peat horizon representing an old ground surface was recorded in the upper pits. The depth of this horizon increased down the slope as the deposits of windblown sand deepened towards the foot of the slope and was therefore not encountered in the two lower pits (Illus 4a).

Test pits TP14–17 was cut into fairly level ground. Peat deposits were encountered in the two pits at the south end. The peat was overlying sandy deposits and must represent an old stable ground horizon.

The amount of flint debris retrieved from the test pits show a marked increase towards the base of the slope in front of the hind dunes. This corresponds with what was seen on the surface during previous fieldwork.

#### 3.2 Drain DR2

Drain DR2 was located some 150m to the south of DR1 in the middle of the dune slack (Illus 2). It was some 100m long and aligned north-west to south-east. Four test pits were excavated along this line. The two pits to the north-west (TP18–19) were situated 55m apart due to a small dune located in between. Deep unstable sand deposits were recorded in both pits.

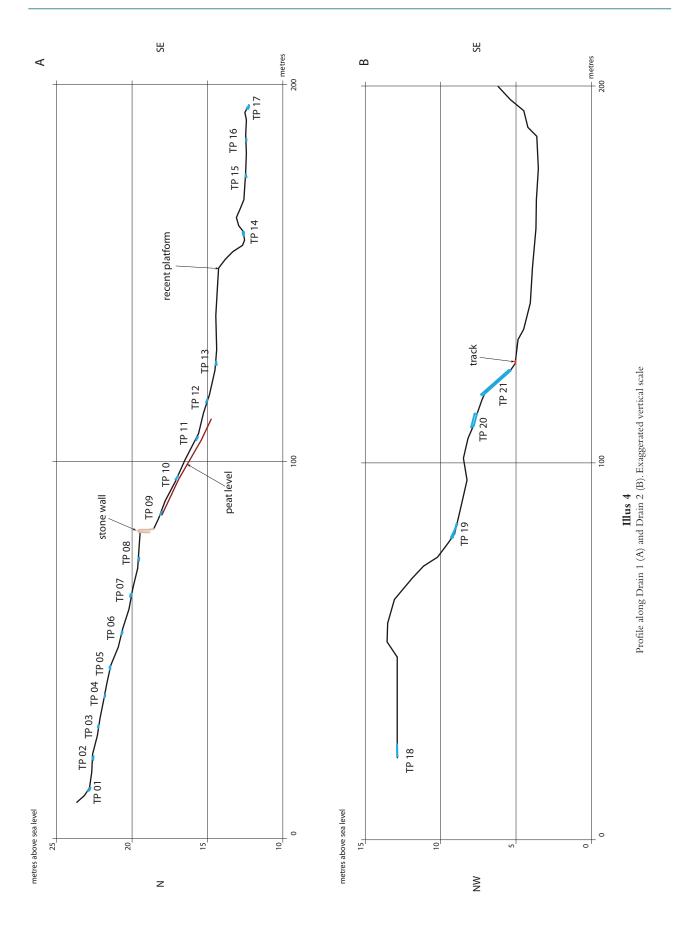
Test pit TP21 was cut across the line of a low linear cliff discovered during previous field work (Illus 4b). The trench exposed a section across an old sea-eroded cliff edge cut into grey stony till overlying red sand (Illus 5). In front of the cliff was wedge of eroded clay and stone, below a layer of beach shingles (Illus 6). The entire feature was covered in dune sand. The grey clayey till was also exposed in TP20 some 5m to the north-west.

## 3.3 Drain DR3

Drain DR3 was located some 150m to the west of drain DR2 and aligned roughly north to south. Five test pits (TP22–26) were excavated along the line of the drain, 30m to 50m apart. Deep sand deposits were uncovered in all pits. A peat deposit 0.7m to 1.4m below the surface overlying further sand deposits was recorded in test pit TP24–26 to the south.

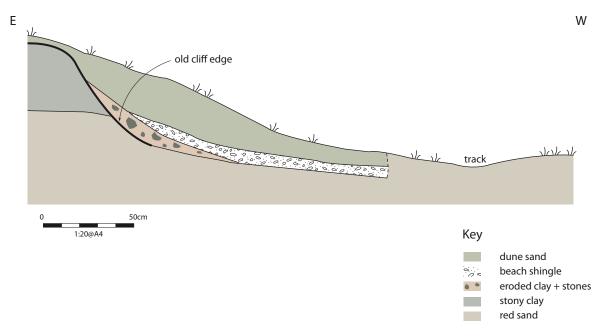
#### 3.4 Drain DR4

Drain DR4 was located some 90m to the south-west of drain DR3 and aligned roughly north-west to south-east. Three test pits (TP27–29) were excavated along the line of the drain, 30m to 50m apart. The two test pits to the north-west had to be abandoned due to flooding from a nearby drain, test pit TP29 to the south was excavated down to a depth of 1.4m into sand deposits.





Illus 5
Fossil sea-eroded cliff exposed in test pit 21



### 3.5 Drain DR5

Drain DR5 was located some 30m to the south-east of drain DR4 and aligned roughly east to west next to a track. Five test pits (TP30–34) were excavated along the line of the drain, 15m to 45m apart. The pits indicated that the depth of windblown sand in the area was generally at least 1m to 1.3m deep. The only exception was test pit TP31 where a stony sand layer was exposed at 0.6m below the surface. Two bi-polar flint cores and a flake were retrieved from this layer.

A possible drain was seen in pit TP33 comprising a discrete band of beach pebbles running diagonally across the pit at 0.9m below the surface.

### 4. DISCUSSION

Drain DR1 cut across Flint Scatter 2 recorded during fieldwork on October 2009. When recording extents based on flints visible on the surface there is always the uncertainty that the scatter could continue further below deposits of windblown sand or vegetation. However, the

results from the test pits indicate that the extent recorded previously was a fairly accurate representation of the true extent of the scatter, although the odd flints were retrieved from the area to the north of the scatter.

The fieldwork also recorded the presence of flints outwith the area previously identified from surface finds. The two cores retrieved from test pit TP31 were found in a layer below 0.6m of windblown sand. This find indicates that there could be further flint scatters in the area that are currently buried below windblown sand and thus not visible on the surface. All flints recorded during this fieldwork did not differ significantly from flints retrieved from this area previously (Dalland & Lochrie 2009).

Another significant result from this work was the identification of a fossil sea cliff at 5m above the present sea level. The cliff is formed by sea erosion of glacial till overlying red sand. This cliff may have been formed around the post-glacial sea level maximum during the 7th millennium BP (Dalland & Lochrie 2009). The beach shingles at the front of the cliff contained flint nodules presumably washed out of the till which is a likely source of the flint scatters recorded in this area.

There is a possible much older fossil sea cliff in the area along the front of the hind dunes. The line of drain DR1 cut across this feature, but the hand dug test pits were not sufficient deep to investigate its nature.

Although some flints were recorded in one of the test pits within the dune slack area, the majority of the test pits in this area exposed deep deposits of windblown sand. A peaty or dark grey sandy horizon was recorded in several pits indicating more stable periods within the dune system that allowed the formation of peat and turf surfaces.

## 5. REFERENCES

Dalland, M., & Lochrie, J., 2009, Trump International Golf Links Scotland. Report on Photographic and Electronic Survey of Flint Scatters on the championship golf course. Unpublished client report.

Dalland, M., 2010, 'Trump International Golf Links Scotland. Report on Watching Brief on Marram Grass planting and for the construction of the championship golf course. Unpublished client report.

### **APPENDICES**

# Appendix 1 - Site Register

## Test Pits Register



Test pit TP 01 DR 1 Drain

Surface No vegetation

Pit depth 0.65m

Stratigraphy

0-0.5m

0.5-0.52m Dark grey silty sand. Dune stabilization horizon

Mid yellow-gray fine sand. No inclusions. Probably wind-blown deposit 0.52-0.65m +



Test pit TP 02 Drain DR 1

Surface Patchy grass - mostly marram grass

Pit depth 0.55m

Stratigraphy

0-0.4mClean wind blown sand, reddish iron pan in lower

parts

0.4-0.45m Dark grey silty sand. Dune stabilization horizon

0.45-0.55m + Pale grey clean sand. No inclusions



TP 03 Test pit Drain DR 1

Surface Patchy vegetation - mostly marram grass

0.65m Pit depth

Stratigraphy

0-0.3m Clean wind blown sand

0.3-0.32m Dark grey silty sand. Dune stabilization horizon

0.32-0.65m + Pale grey clean sand. No inclusions. Probably

wind-blown deposit



Test pit TP 04

Drain DR 1

Surface Grassy turf

Pit depth 0.5m

Stratigraphy

 $0-0.1 \mathrm{m}$  Clean wind blown sand, iron pan at base  $0.1-0.12 \mathrm{m}$  Dark grey silty sand. Dune stabilization horizon  $0.12-0.5 \mathrm{m}$  Mid grey fine sand. No inclusions

0.5m + Stony sand – not excavated



Test pit TP 05

Drain DR 1

Surface Grassy

Pit depth: 0.65m

Stratigraphy

0–0.2m Clean sand mixed with patches of clay – looks like

redeposited upcast from some cut feature deep enough to disturb clay at base of sequence

0.2–0.5m Mid grey silty sand. Old ground surface?

0.5–0.65m Pale brown gritty sand

0.65m + Pale brown clay



Test pit TP 06

Drain DR 1

Surface Grassy

Pit depth 0.4m

Stratigraphy

0-0.12m Pale brown slightly silty sand with occasional small

stones

0.12–0.3m Mid brownish grey silty sand with occasional

small stones. Contained one piece of struck flint;

SF No 1

0.3–0.4m Pale brown slightly silty sand with few stones. The

sand is quite coarse and gritty - unlike wind-

blown dune sand

0.4m + Stiff pale brown clay. Solid thick layer - not

bottomed



 Test pit
 TP 07

 Drain
 DR 1

 Surface
 Grassy

 Pit depth
 0.39m

Stratigraphy

 $0\hbox{--}0.13m \hspace{1.5cm} \hbox{Pale brown slightly silty sand with occasional small} \\$ 

stone

0.13–0.19m Mixed/mottled slightly silty sand. Pockets of pale

sand and patches of iron pan

0.19–0.3m Mid grey silty sand with occasional small stones.

Old ground surface? Contained a piece of struck

flint; SF No 2

0.3–0.39m Pale brown rather coarse, gritty sand
0.39m + Pale brown stiff clay – not excavated



Test pit TP 08

Drain DR 1

Surface Patchy vegetation

Pit depth 0.45m

Stratigraphy

0–0.25m Pale brown slightly silty sand, rather patchy. Gully

filled with clean sand running across pit - possibly

an erosion gully

0.25–0.4m Mid grey silty sand. Old ground surface?

Contained a piece of struck flint; SF No 3

0.4–0.45m + Coarse gritty pale brown silty sand



Test pit TP 09

Drain DR 1

Surface Grassy

Pit depth 0.4m

Stratigraphy

0–0.02m Vegetation and root mat

0.02–0.07m Fine sand with occasional small stones. The

context was sampled (20l) and sieved on site. The

unsorted residue was retained; SF No 14

0.07–0.2m Dark grey silty sand with moderate small stones.

Same as the buried soil seen further down the slope (TP 10, 11, 12), but as the peat here is not protected by sand and the iron pan being much shallower, so peat has all oxidized. The context was sampled (40l) and sieved on site. The unsorted

residue was retained; SF No 15

0.2--0.4m + Pale brown clayey sand – subsoil



 Test pit
 TP 10

 Drain
 DR 1

 Surface
 Grassy

 Pit depth
 0.34m

Stratigraphy

0-0.02m

0.02 – 0.05 m Soft sand with occasional small stones. The context

was sampled (201) and sieved on site. The unsorted

residue was retained; SF No 12

0.05m Iron pan

0.05–0.15m Mid grey fine sand with organic lenses

0.15–0.34m Solid peat at top, grading into coarse sandy /

gravely peat at base. The context was sampled (20l) and sieved on site. The unsorted residue was

retained; SF No 13

0.34m + Tough pale brown sandy clay – natural subsoil

beneath buried soil



 Test pit
 TP 11

 Drain
 DR 1

 Surface
 Grassy

 Pit depth
 0.6m

Stratigraphy

0-0.02m Vegetation and root mat

0.02–0.05m Fine wind blown sand with occasional small

stones. The context was sampled (60l) and sieved on site. The unsorted residue was retained; SF No

10

0.05–0.2m Fine wind blown sand

0.2m Iron pan

0.2–0.3m Mid grey sand with organic patches

0.3–0.5m Peat. Grades from solid, firm highly organic peat at

top, to sandy / gravely silt at base. Buried soil. The context was sampled (40l) and sieved on site. The

unsorted residue was retained; SF No 11

0.5–0.6m + Firm clayey sand – subsoil relating to peaty soil

profile above



Test pit TP 12

Drain DR 1

**Surface** No vegetation

Pit depth 0.9m

Stratigraphy

0–0.05m Soft sand with occasional small stones. The context

was sampled (80l) and sieved on site. The unsorted

residue was retained; SF No 8

0.05–0.29m Soft fine sand. No inclusions

0.29–0.3m Thin dark silty / stony line – sort of crust with

moderate small stones. The context was sampled (201) and sieved on site. The unsorted residue was

retained; SF No 9

0.3–0.9m + Fine sand with frequent dark silty laminae. No

stones at all



Test pit TP 13

Drain DR 1

Surface No vegetation

Pit depth 1m

Stratigraphy

0–0.15m Fine sand with occasional small stones. The

context was sampled (80l) and sieved on site. The

unsorted residue was retained; SF No 6

0.15–0.3m Fine sand with no inclusions

 $0.3-0.35 \mathrm{m}$  Mid brown silty sand. Appears as a crust above a

thin stony layer. The context was sampled (201) and sieved on site. The unsorted residue was

retained; SF No 7

0.35–1m + Fine sand, no inclusions



Test pit TP 14

Drain DR 1

Surface Sparse vegetation

Pit depth 1m

Stratigraphy

 $0{\text -}0.03\text{m}$  Root mat. Some organic material  $0.03{\text -}0.15\text{m}$  Pale fine sand with occasional stones

0.15–1m + Fine wind blown sand



Test pit TP 15

Drain DR 1

**Surface** Sparse vegetation

Pit depth 0.5m

Stratigraphy

0-0.09m Laminated sand with organic lenses and occasional

very small stones. Root penetration

0.09–0.13m Clean fine sand. No inclusions. Very occasional

small stones

0.13–0.5m + Clean wind blown sand



Test pit TP 16

Drain DR 1

Surface Grassy

Pit depth 0.62m

Stratigraphy

0-0.25m Fine sand – root mat on top

0.25-0.35m Peat

0.35–0.48m Laminated sand with organic lenses

0.48-0.57m Peat

0.57-0.62m + Mid brown sand



Test pit TP 17
Drain DR 1
Surface Grassy
Pit depth 0.6m

Stratigraphy

0–0.25m Fine sand – root mat on top

0.25–0.36m Peat

0.36–0.46m Laminated sand and peaty material

0.46–0.6m Peat

0.6m + Clean wind blown sand

Test pit TP 18

Drain DR 2

Surface No vegetation

Pit depth 2m

Stratigraphy

**Comment** Deep sand. Pit sides collapsed before any recording

could be done

n/a









Test pit TP 19
Drain DR 2
Surface Grassy
Pit depth 1.2m

Stratigraphy

0–1m Wind blown sand 1m–1.2m + Dark grey sandy silt.

**Comment** Due to collapsing sides the stratigraphy was recoded from the side of the trench

Test pit TP 20
Drain DR 2

Surface Grass and crowberry shrub

Pit depth 0.5m

Stratigraphy

0-0.4m -

0.40–0.5m Dark grey silty sand – Old ground surface? 0.5m + Clay till containing moderate large stones

Test pit TP 21

Drain DR 2

Surface Grass and crowberry shrub

Pit depth 1m

**Stratigraphy** The trench was cut across a low linear break of

slope previously identified as a fossil storm beach (Dalland & Lochrie 2009). .The sides of the trench were unstable which prevented any detailed recording of the section; however it was possible to record a sketch section showing the main

features (Illus 6).

The profile indicated that the break of slope was formed as wave erosion had formed a low cliff by cutting into subsoil comprising grey stony clay till overlying red sand. In front of the cliff edge was a wedge of eroded clay and stone underlying a layer of rounded beach pebbles. The eroded cliff was

covered by a layer of windblown sand.

Test pit TP 22

Drain DR 3

Surface Grassy

Pit depth 1.6m

Stratigraphy

0–1.1m Wind blown sand

1.1–1.3m Dark grey sand (due to organic content?)

1.3-1.6m + Yellow sand

**Comment** Due to collapsing sides the stratigraphy was

recoded from the side of the trench









TP 23 Test pit Drain DR 3 Surface Grassy Pit depth 1.2m

Stratigraphy

Wind blown sand 0-1.2m

1.2m +

Due to collapsing sides the stratigraphy was recoded from the side of the trench Comment

TP 24 Test pit DR 3 Drain Surface Grassy Pit depth 1.5m

Stratigraphy

0-0.1m Root mat 0.1-1m Sand

1-1.2m Black organic sandy layer

1.2-1.5m + Dark grey sand

Comment Due to collapsing sides the stratigraphy was

recoded from the side of the trench

Test pit TP 25 DR 3 Drain

Grass and crowberry shrub Surface

Pit depth 1.4m

Stratigraphy

0-0.1m Root mat

Fine windblown sand 0.1-1.2m

1.2-1.4m Mid grey sand

1.4m +

Due to collapsing sides the stratigraphy was Comment

recoded from the side of the trench

Test pit TP 26 Drain DR 3

Surface Grass and crowberry shrub

Pit depth 0.9m

Stratigraphy

0-0.1mVegetation, root mat

0.1-0.7m Fine wind blown sand - no inclusions

0.7-0.9m Peat 0.9m +

Due to collapsing sides the stratigraphy was Comment

recoded from the side of the trench

n/a

Test pit TP 27

Drain DR 4

Surface Grassy

Pit depth 0.5m

Stratigraphy

0–0.1m Vegetation and root mat

0.1-0.5m + Sand

**Comment** Due to flooding from nearby drain, the pit had to

be abandoned at 0.5m



Test pit TP 28

Drain DR 4

Surface Grass and crowberry shrub

Pit depth 0.7m

Stratigraphy

0-0.1m Vegetation and root mat

0.1–0.7m + Sand

**Comment** Due to flooding, the pit had to be abandoned at

0.7m



Test pit TP 29

Drain DR 4

Surface Grass and crowberry shrub

Pit depth 1.4m

Stratigraphy

0.5-1.4m +

0.1–0.25m Sand

 $\begin{array}{ll} 0.25\text{--}0.35\text{m} & \text{Brown sand} \\ \\ 0.35\text{--}0.5\text{m} & \text{Yellow fine sand} \end{array}$ 



Test pit TP 30

Drain DR 5

**Surface** Grass and crowberry shrub

Grey sand

Pit depth 1.3m

Stratigraphy

0.1-1.3m + Fine sand.

**Comment** Due to collapsing sides the stratigraphy was

recoded from the side of the trench



TP 31 Test pit DR 5 Drain

Surface Grass and crowberry shrub

Pit depth 0.6m

Stratigraphy

0-0.1m Vegetation and root mat

0.1-0.6m Fine sand

0.6m +



Test pit TP 32 Drain DR 5 Surface Grass Pit depth 1.3m

Stratigraphy

0.1-1.3m +Fine sand – no stones

Comment Due to collapsing sides the stratigraphy was

recoded from the side of the trench



Test pit TP 33 DR 5 Drain Surface Grassy Pit depth  $0.9 \mathrm{m}$ 

Stratigraphy

0.1-0.9m Sand

at 0.9m

Comment Due to collapsing sides the stratigraphy was

recoded from the side of the trench



Test pit TP 34 DR 5 Drain Surface Grass Pit depth 1m

Stratigraphy

0-0.1m Vegetation and root mat

0.1-1m +Sand

Due to collapsing sides the stratigraphy was recoded from the side of the trench Comment

# Photographic Register

Picture no.	Prints	Slides	Digital file name	Facing	Description
1–26	_	_	-	-	Pictures taken during initial survey in July 2009
27–41	_	_	_	_	Pictures from evaluation of 'cairn'
42-72	_	-	-	-	Pictures taken during survey of flint scatters
73–102	_	-	-	-	Pictures taken during watching brief of marram grass planting
103	1	1	TIGL08-008-Pic103.jpg	SE	View towards S end of drain DR1
104	1	1	TIGL08-008-Pic104.jpg	N	View towards N end of drain DR1
105	1	1	TIGL08-008-Pic105.jpg	W	Test pit TP01
106	1	1	TIGL08-008-Pic106.jpg	N	Test pit TP02
07	1	1	TIGL08-008-Pic107.jpg	W	Test pit TP03
.08	1	1	TIGL08-008-Pic108.jpg	N	Test pit TP04
09	1	1	TIGL08-008-Pic109.jpg	E	Test pit TP06
10	1	1	TIGL08-008-Pic110.jpg	N	Test pit TP07
11	1	1	TIGL08-008-Pic111.jpg	N	View towards N end of drain DR1 and Test pit TP104
12	1	1	TIGL08-008-Pic112.jpg	S	View along line of drain DR1 towards Test pits TP105–7
13	1	1	TIGL08-008-Pic113.jpg	E	Test pit TP05
14	1	1	TIGL08-008-Pic114.jpg	E	Test pit TP08
15	1	1	TIGL08-008-Pic115.jpg	W	Test pit TP17
16	1	1	TIGL08-008-Pic116.jpg	W	Test pit TP16
17	1	1	TIGL08-008-Pic117.jpg	S	Test pit TP14
18	1	1	TIGL08-008-Pic118.jpg	N	Test pit TP15
19	1	1	TIGL08-008-Pic119.jpg	W	Test pit TP21 showing fossil sea eroded cliff
20	1	1	TIGL08-008-Pic120.jpg	NE	Test pit TP21 showing fossil sea eroded cliff
21	1	1	TIGL08-008-Pic121.jpg	SW	Test pit TP20
22	1	1	TIGL08-008-Pic122.jpg	NW	Test pit TP19
23	1	1	TIGL08-008-Pic123.jpg	SW	Test pit TP26
24	1	1	TIGL08-008-Pic124.jpg	W	Test pit TP25
25	1	1	TIGL08-008-Pic125.jpg	NW	Test pit TP24
26	1	1	TIGL08-008-Pic126.jpg	S	Test pit TP23
27	1	1	TIGL08-008-Pic127.jpg	W	Test pit TP22
28	1	1	TIGL08-008-Pic128.jpg	SW	Test pit TP28
29	1	1	TIGL08-008-Pic129.jpg	S	Test pit TP31
30	1	1	TIGL08-008-Pic130.jpg	SW	Test pit TP13
31	1	1	TIGL08-008-Pic131.jpg	SW	Test pit TP12
32	*	*	TIGL08-008-Pic132.jpg	N	Test pit TP09
33	*	*	TIGL08-008-Pic133.jpg	N	Test pit TP10
34	*	*	TIGL08-008-Pic134.jpg	SW	Test pit TP11
135	*	*	TIGL08-008-Pic135.jpg	W	Test pit TP29
136	*	*	TIGL08-008-Pic136.jpg	SW	Test pit TP30
137	*	*	TIGL08-008-Pic137.jpg	W	Test pit TP32
38	*	*	TIGL08-008-Pic138.jpg	N	Test pit TP33

Picture no.	Prints	Slides	Digital file name	Facing	Description
139	*	*	TIGL08-008-Pic139.jpg	Е	Test pit TP34
140	*	*	TIGL08-008-Pic140.jpg	NW	Test pits TP05-6 seen from dune to the E
141	*	*	TIGL08-008-Pic141.jpg	W	Test pits TP05-8 seen from dune to the E
142	*	*	TIGL08-008-Pic142.jpg	SW	Test pits TP08–9 seen from dune to the E
143	*	*	TIGL08-008-Pic143.jpg	S	and drains DR2-5
144	*	*	TIGL08-008-Pic144.jpg	S	View towards dune slack. Fore dunes in the background
145	*	*	TIGL08-008-Pic145.jpg	SE	View towards dune slack. Fore dunes in the background
146	n/a	n/a	TIGL08-008-Pic146.jpg	S	Panoramic view towards dune slack. Fore dunes in the background
147	n/a	n/a	TIGL08-008-Pic147.jpg	W	Panoramic view towards Test pits TP05-9

<sup>★</sup> Camera failure

# Appendix 2 - Finds Assessment

Julie Lochrie

#### Finds Summary

In July 2010, during test pit evaluation at Trump International Golf Course, 116 stone finds were retrieved, including 110 pieces of flint, four pieces of chert, a quartz flake and a large piece of natural granite.

The chipped stone mostly consists of small flakes and chips but also includes five bipolar flint cores, a few flint blades and an edge retouched piece. The material is very similar to that retrieved during a survey of nearby flint scatters in 2009 (Dalland & Lochrie) and the assemblage likely dates to the Mesolithic.

#### References

Dalland M., & Lochrie J., 2009, Trump International Golf Links Scotland: Report on Photographic and Electronic Survey of Flint Scatters on the championship golf course. Unpublished client report.

## Finds Catalogue

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Test Pit	Small find no.	Material	Qty	Object	Description	
TP06	1	Lithics	2	Flint	Secondary blade whose dorsal surface indicates previous blade production; small burnt primary flake	
TP07	2	Lithics	1	Flint	Secondary blade	
TP08	3	Lithics	1	Flint	Burnt and broken flake	
_	4	Lithics	3	Flint	Burnt fragment, distal fragment, distal fragment and a piece of quartz with no clear signs of working	
TP31	5	Lithics	4	Stone	Two flint bipolar cores, a possibly bipolar flint flake, a large piece of ?granite, appears to be natural	
TP13	6	Lithics	16	Flint & chert	Small flakes an chips	
TP13	7	Lithics	38	Flint	One bipolar core, small flakes and chip, some burnt	
TP12	8	Lithics	14	Flint	One microblade, small flakes and chips, one burnt	
TP12	9	Lithics	1	Flint	Small burnt flake	
TP11	10	Lithics	18	Flint	Two bipolar cores, one edge retouched piece, flakes and chips. 2 burnt	
TP10	12	Lithics	3	Flint	Flakes	
TP10	13	Lithics	1	Flint	Flake	
TP09	14	Lithics	6	Flint	One blade fragment and 5 flakes	
TP09	15	Lithics	8	Flint	Flakes	