

Isle of Tiree Access Consultation 2011

Annex iii:

Costs

Tiree Access Forum - September 2011

Consultant: Paper.works



Introduction

A costing exercise has been carried out for the following access improvements as per Isle of Tiree Access Consultation 2011 Annex i | Draft Recommendations for Access Infrastructure Solutions as follows:

1. Crossapol – proposed improvements
 - a. Area 1
 - i. Repair track
 - ii. Stabilize parking area with geo-grid material
 - iii. Delineate parking area with sleepers
 - iv. Provide access to the beach using in filled tires.
 - b. Area 2
 - i. Upgrade track and beach access to allow for disabled access to beach
 - ii. Delineate parking area with sleepers
2. Gott Bay Silversands – proposed improvements
 - a. Stabilise ground using geo-grid material
 - b. Provide access for wheelchairs from car park onto beach (ramp structure)
 - c. Delineate parking area using sleepers
 - d. Signage
3. Gott Bay Machair – proposed improvements
 - a. Stabilise ground with geo-grid material
 - b. Delineate parking area using sleepers
 - c. Signage
4. Gott Bay Brock – proposed improvements
 - a. Upgrade entrance track
 - b. Delineate parking area with sleepers
 - c. Signage
5. Balephetrish
 - a. It is proposed to establish a new car parking facility, utilising an old aggregate storage area. Consultation with the grazing committee was undertaken and there is an acceptance of this proposal

6. Balevullin – proposed improvements

- a. Improve gravel track
- b. Install Geo-grid reinforcement material
- c. Use sleepers to delineate the parking area
- d. Improve signage
- e. Install a filled tire step way onto beach

7. Balephuill

- a. Redirect track to run adjacent to the fence at the Balephuill end of the Machair.
- b. Install fencing to prevent off road driving and place a gate at the old entrance

8. Greenhill – proposed improvements

- a. Upgrade track
- b. Reinforce car parking area
- c. Delineate parking area with poles
- d. Install a gate and fencing to prevent further access to the beach.

9. Sandaig – proposed improvements

- a. Make improvement to tracks where necessary
- b. Improve signage

Materials

The materials below have been recommended by the contracted design team, Roots Design Workshop as materials which can be incorporated in installations while remaining sympathetic to Tíree's unique environment.

(Ref Annex I Draft Recommendations for Access Infrastructure Solutions)



MATERIALS

Tracks

Use either locally sourced gravel/ chippings e.g. from the licensed quarry at West Hynish on Tíree or sterile gravel/chippings from the mainland to prevent the accidental introduction of alien weeds to the machair. On some tracks, it may simply be a case of flattening off bumps and redistributing existing gravel.



Car parks

Firm up the ground where required using Geogrid. This may involve localised skimming of the surface and redistribution of existing sand etc to flatten the area prior to fixing the Geogrid. Such areas may need to be dampened down with water or the work conducted in wetter periods to prevent the sand from blowing away. For most flatter areas, the grid should be able to be pushed directly into the ground with minimal disturbance to existing vegetation. The end result should make the car parks blend in to the surrounding machair.



Signage

Standardised for all sites- Council blue parking signs.

Way-markers for the longer tracks e.g. at Sandaig and Brock.



Car park delineation

Needs to be more livestock proof than is currently use but at the same time allow stock to graze the parking areas. Large rocks/ Stronger stakes?



Pedestrian beach access

Using old tyres buried into the sand to create stabilised steps that plants such as marram could grow in / around and thus help to reduce any further erosion. A low-tech soft-edged option like this should be easier to install, maintain and replace and would also be less visually intrusive than hard-edged wooden boardwalks etc.



Tíree Access Project - Consultation and Design by Tíree Rural Development, Mapping and Visualisations by Roots Design Workshop

Details of the proposed works

TRACKS – Excavate, level and surface

In total 1134 metre's of track upgrade has been recommended. This involves removing the surface where necessary, levelling the existing tracks, surfacing and rolling.

A total quantity of 1,123 tonne of Aggregate is required and 14 days of excavator, roller and operator hire. The tracks are located all over the island so some time allowance has been included in the machinery and labour hire for moving from site to site.

CAR PARKS – Level and secure

A total of 15,045 square metres of car parking area has been recommended for upgrading. This will involve levelling and rolling and where necessary installing a soil re-enforcement material such as Geogrid where necessary. These product allow the grass to grow through whilst strengthening the ground beneath. Two areas are considered to need areas of re-enforcement (Balevullin and Crossapol 1) with a total area of approximately 400 square metres being required.

CAR PARKS – Delineate

Each car park will be delineated using 7' strainer posts lying flat on the ground and spaced so that vehicles cannot drive between them.

Standard stock fencing, personnel and stock gates, in keeping with the rest of the island will be used where necessary (Balephuill and Greenhill) to prevent vehicles from deviating from designated tracks and parking areas.

PATHS, STEPS & WHEELCHAIR ACCESS

Paths will be scraped, surfaced and re-enforced with geo-grid where necessary.

Steps will be installed using filled recycled tyres collected on the island and planted with marram grass to strengthen and blend into the dunes.

SIGNAGE

A Tíree Access Forum unique signage system which is sympathetic to the surrounding environment but equally displays all necessary information will be professionally designed; signs will be produced and installed at all the Access sites and all future signage will be of the same design.

PROJECT DELIVERY

A three week contract will be issued to secure a community mandate for the final detailed and costed plan, to formulate the proposal and submit to funders.

Once funding is secured a project manager will be contracted for 20 weeks to oversee the capital works.

A contract will also be issued for management of the financial side of the project and deal with the grant administration for the project period.

Costs

An outline total project cost of £133,442 has been reached as a starting point for the proposal based on the recommendations

A summary of the total project costs is shown below at table 1 below.

A breakdown of the cost items for the above capital works and delivery of those works can be found in tables 1 – 7 on pages 7 – 12.

The total project cost at this point is indicative.

Competitive prices will be sought to firm up a final and current detailed cost plan when funding applications are being prepared for submission in due course.

Costs are exclusive of any VAT as TRD is VAT registered and the VAT is reclaimable.

Table 1.

PROJECT COST SUMMARY

Tracks	£57,811	Capital
Car parks levelling and securing	£50,729	Capital
Car parks delineate, fencing and gates	£3,799	Capital
Paths, steps and wheelchair access	£6,060	Capital
Signage	£7,446	Capital
Project Delivery	£7,598	Revenue

TOTAL PROJECT COSTS

£133,442

Table 2 | Cost breakdown

TRACKS

	Dimensions			Type 1 Aggregate			Machinery & Labour						TOTAL		
	length	width	depth	cubes	tonnes	Price	Cost	Days Exc	£/day	Cost	Days Roller	£/day		Cost	Total M & L
Balevullin	93	3	0.15	41.85	92.07	37.64	3,465.51	1	450	450	1	350	350	800	4,265.51
Balephuill	360	3	0.15	162.00	356.4	37.64	13,414.90	4	450	1800	4	350	1400	3200	16,614.90
Greenhill	250	3	0.15	112.50	247.5	37.64	9,315.90	3	450	1350	3	350	1050	2400	11,715.90
Sandaig								1	450	450	1	350	350	800	800.00
Brock	165	3	0.15	74.25	163.35	37.64	6,148.49	2	450	900	2	350	700	1600	7,748.49
Gott Ruaig		3	0.15	0.00	0	37.64	0.00		450	0	0	350	0	0	0.00
Gott SS		3	0.15	0.00	0	37.64	0.00		450	0	0	350	0	0	0.00
Crossapol 1	162	3	0.15	72.90	160.38	37.64	6,036.70	2	450	900	2	350	700	1600	7,636.70
Crossapol 2	104	3	0.15	46.80	102.96	37.64	3,875.41	1	450	450	1.04	350	364	814	4,689.41
Balephetrish	95	3	0.15	42.75	94.05	37.64	3,540.04	1	450	450	1	350	350	800	4,340.04
TOTALS	1,229.00	27.00	1.35	553.05	1,216.71	338.76	45,796.96	15.00	4,500.00	6,750.00	15.04	3,500.00	5,264.00	12,014.00	£57,811

Table 3 | Cost Breakdown

CAR PARKS

a) LEVELLING AND SECURING

	Area of car park	Geo grid			Type 1			Machinery & Labour						TOTAL	
		Sqm	Price	Cost	Sqm	Price	Cost	Days Exc	£/day	Cost	Days Roller	£/day	Cost		Total M & L
Balevullin	3396	20.00	4000.00	200.00	37.64	7528.00	3000.00	6	450.00	2700.00	11	350.00	3962.00	6662.00	18190.00
Balephuill	3000	20.00	0.00		37.64	0.00	3000.00	6	450.00	2700.00	10	350.00	3500.00	6200.00	6200.00
Greenhill	2460	20.00	0.00		37.64	0.00	2000.00	4	450.00	1800.00	8	350.00	2870.00	4670.00	4670.00
Sandaig	1500	20.00			37.64				450.00	0.00		350.00	0.00	0.00	0.00
Brock	1764	20.00	0.00		37.64	0.00	1700.00	3	450.00	1530.00	6	350.00	2058.00	3588.00	3588.00
Gott Ruaig	850	20.00	0.00		37.64	0.00	850.00	2	450.00	765.00	3	350.00	991.67	1756.67	1756.67
Gott SS	750	20.00	0.00		37.64	0.00	750.00	2	450.00	675.00	3	350.00	875.00	1550.00	1550.00
Crossapol 1	125	20.00	4000.00	200.00	37.64	7528.00		0	450.00	0.00	0	350.00	145.83	145.83	11673.83
Crossapol 2	0	20.00	0.00		37.64	0.00		0	450.00	0.00	0	350.00	0.00	0.00	0.00
Balepethrish	1200	20.00	0.00		37.64	0.00	1500.00	3	450.00	1350.00	4	350.00	1400.00	2750.00	2750.00
TOTALS	15045	400.00	200.00		376.40	15,056.00		26	4,500.00	11,520.00	45	3,500.00	15,802.50	27,322.50	50,378.50

Table 4 | Cost Breakdown

CAR PARKS

b) DILINEATION, FENCES, STYLES & GATES

	Dimensions		Fencing		10' Gates			Personell gate			TOTAL		
	No.	Price	Cost	No.	£/metre	Cost	No.	each	Cost	No.		each	Cost
Balevullin	14	13.05	182.70			0.00						0.00	182.70
Balephuill	12	13.05	156.60	425	4.50	1912.50	2	95	190.00	2	70	140.00	2,399.10
Greenhill	12	13.05	156.60	50	4.50	225.00	1	95	95.00	1	70	70.00	546.60
Sandaig	10	13.05	130.50			0.00			0.00			0.00	130.50
Brock	12	13.05	156.60			0.00			0.00			0.00	156.60
Gott Ruaig	6	13.05	78.30			0.00			0.00			0.00	78.30
Gott SS	6	13.05	78.30			0.00			0.00			0.00	78.30
Crossapol 1	12	13.05	156.60			0.00			0.00			0.00	156.60
Crossapol 2	0	13.05	0.00			0.00			0.00	1	70	70.00	70.00
Balephetrish	0	13.05	0.00			0.00			0.00			0.00	0.00
TOTALS	84	130.50	1,096.20	475.00	9	2,137.50	3.00	190.00	285.00	4.00	210.00	280.00	£3,799

Table 5 | Cost Breakdown

PATHS, STEPS & WHEELCHAIR ACCESS

	Dimensions		Geo grid for paths/wheelchair access				Tyres		Machinery & Labour			TOTAL
	length	width	Sqm	Price	no	price	Days	Labour	£/day	Cost		
Balevullin	30	0.75	22.50	20	450.00	40	900.00	8	2	120	1920	3,270.00
Balephuill			0.00	20	0.00		0.00	0		120	0	0.00
Greenhill			0.00	20	0.00		0.00	0		120	0	0.00
Sandaig								0		120	0	0.00
Brock			0.00	20	0.00		0.00	0		120	0	0.00
Gott Ruaig			0.00	20	0.00		0.00	0		120	0	0.00
Gott SS	6	0.75	4.50	20	90.00		0.00	2	2	120	480	570.00
Crossapol 1	20	0.75	15.00	20	300.00	32	480.00	6	2	120	1440	2,220.00
Crossapol 2			0.00	20	0.00		0.00	0		120	0	0.00
Balepethrish			0.00	20	0.00		0.00	0		120	0	0.00
TOTALS	56.00		42.00		840.00	72	1,380.00	16			3,840.00	£6,060

Table 6 | Cost Breakdown

SIGNAGE

	Design			Main sign		Directional Signs		Way markers			Labour (installation)			TOTAL
	£ each	No.	cost	£ each	no	£ each	No.	£ each	no.	cost	£/hr	days	cost	
All	1500	1	1500											1500.0
Balevullin				450.00	1	450	2	44.00	3	90	14	2.5	35	663.0
Balephuill				450.00	1	450	2	44.00		0	14	1.5	21	559.0
Greenhill				450.00	1	450	2	44.00	2	60	14	2.5	35	633.0
Sandaig				450.00	1	450	2	44.00		0	14	1.5	21	559.0
Brock				450.00	1	450	2	44.00	30	30	14	1.5	21	589.0
Gott Ruaig				450.00	1	450	2	44.00		0	14	1.5	21	559.0
Gott SS				450.00	1	450	2	44.00		0	14	1.5	21	559.0
Crossapol 1				450.00	1	450	2	44.00	2	60	14	2.5	35	633.0
Crossapol 2				450.00	1	450	2	44.00		0	14	1.5	21	559.0
Balephetrish				450.00	1	450	2	44.00	2	60	14	2.5	35	633.0
TOTALS		1	1,500		10	4,500	20		10	300		19.0	266	£7,446

Table 7 | Cost Breakdown

PROJECT DELIVERY COSTS (Revenue)

	Hrs	£ each	total
Finalise Plan & secure community mandate	36	18	648
Community Meetings	2	100	200
Project Management	300	18	5400
Financial Management & Grant administration	90	15	1350
			£7,598

over 3 weeks @ 12 hrs/week

over 20 weeks @ 15hrs/week
over 6 months @ 15hrs/month