

***Wick John
O'Groats Airport –
Runway 13/31
Rehabilitation***

***Completion
Statement***

60474265-DOC-003

Wick John O’Groats Airport
 Runway 13/31 Rehabilitation – Completion Statement

Issue	Date	Details	Prepared by	Checked by	Approved by
1	30 August 2016	First Issue	r.13 Senior Assistant Engineer	r.13 Technical Director	r.13 Technical Director
2	5 September 2016	Final Version	r.13 Senior Assistant Engineer	r.13 Technical Director	r.13 Technical Director
				r.13	

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1. INTRODUCTION

This document describes the works carried out under the recent Wick Runway 13/31 Rehabilitation contract at Wick John O’Groats Airport in Caithness, Scotland.

The contract was awarded to Balfour Beatty in April 2016.

Works commenced on site on 18 April and were completed on 26 August.

The contract was project managed and supervised by AECOM who had a full-time Supervisor on site throughout the works.

2. DESCRIPTION OF THE PROJECT

The works included in the contract are shown on attached drawing numbers 60474265-701 rev Z1 and 60474265-702 rev Z1. The works comprised:

RUNWAY 13 END

Section A1: Existing concrete removed and replaced with 125mm Dry Lean Concrete under 250mm Pavement Quality Concrete.

Section C1: Existing asphalt removed and replaced with Marshall Asphalt to a thickness of 275mm.

RUNWAY 31 END

Section C2: Existing asphalt removed and replaced with Marshall Asphalt to a thickness of 275mm.

Section A2: Existing concrete removed and replaced with 125mm Dry Lean Concrete under 250mm Pavement Quality Concrete.

RUNWAY SHOULDERS

Outer 7.5m widths of Runway 13-31 between Area C1 and C2 were planed out to 50mm depth and replaced with 50mm Marshall Asphalt

RUNWAY 08/26

Section E: Existing asphalt overlaid with 275mm thickness of Marshall Asphalt.

ACCESS TRACKS

Access Tracks Alpha and Bravo: Constructed with 200mm Marshall Asphalt over 320mm Type-1 Sub base.

3. DESIGN

A Pavement Survey was carried out by an AECOM specialist pavement team. The results of the survey formed the basis of the design of the works and this design was agreed with USAF in early 2016. This design was enshrined in the construction contract.

The as-built design thicknesses of the rehabilitated areas give a PCN of 20 for the full length of both Runway 13/31 and Runway 26 North.

In line with the original basis of design, the as-built design is also confirmed as being adequate for 12(5)(a) movements of a Boeing C-17 Globemaster aircraft. HIAL are content with this and are prepared to permit these operations on a case-by-case approval. HIAL will instigate a post-operation assessment to re-assure themselves that the pavement and associated infrastructure has not been detrimented.

4. CONSTRUCTION

The works have been completed in accordance with the design and specification set out in the contract documents.

The specification included the following UK standard Ministry of Defence - Defence Estate (DE) specifications:

DE Specification 13 – Marshall Asphalt for Airfields

DE Specification 33 – Pavement Quality Concrete for Airfields

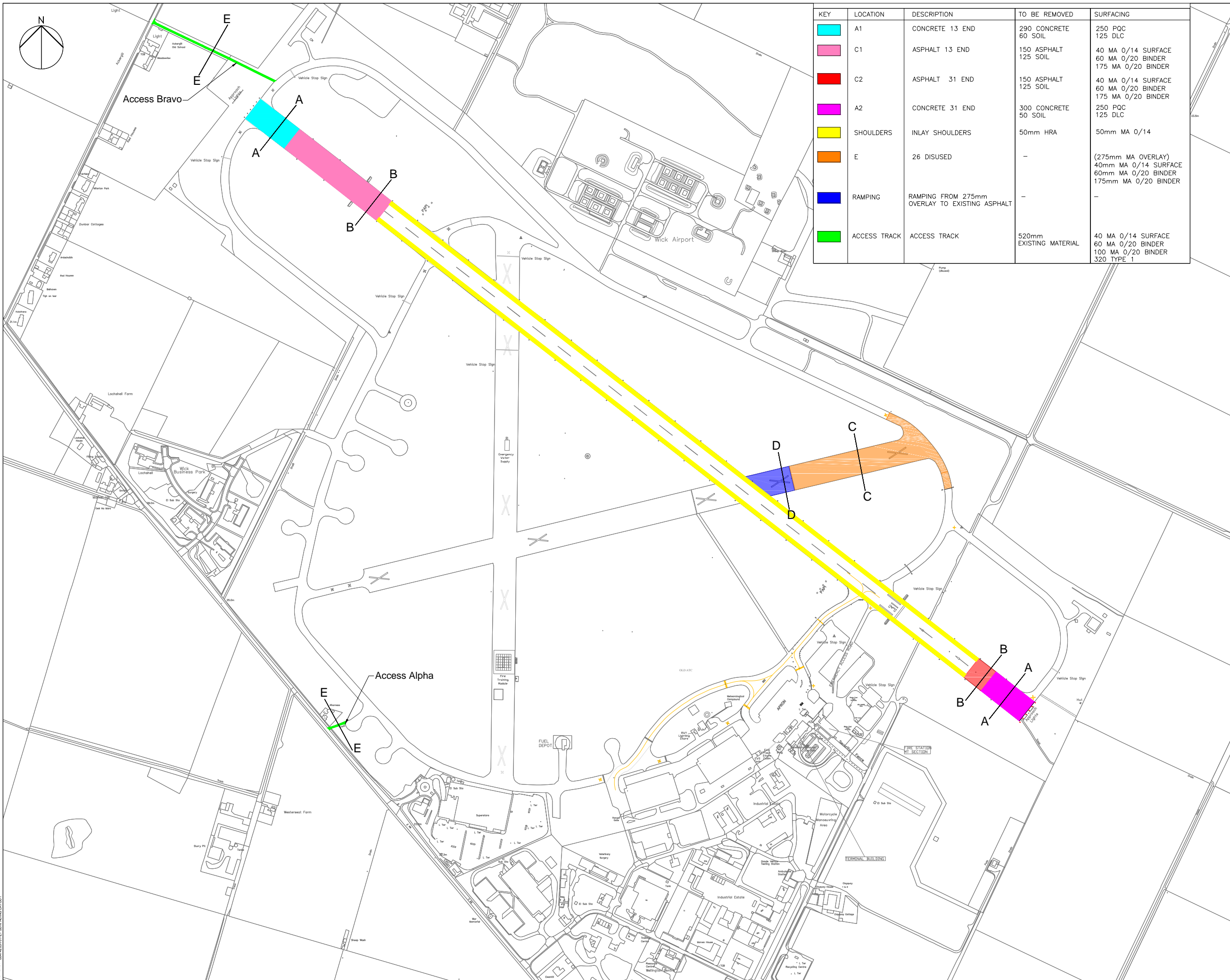
Wick John O'Groats Airport
Runway 13/31 Rehabilitation – Completion Statement

DE Specification 51 – Cement Bound Granular Material for Airfields (Dry Lean Concrete)

The above specifications set out the approach to construction including requirements for testing of materials and construction.

Testing has been undertaken on this basis and all results received have demonstrated that materials and construction are fully in accordance with the Specification. In addition, site inspections were undertaken over the contract duration to provide confirmation that works were completed satisfactorily. Contemporary logs, photos and records were also maintained throughout and are available for inspection.

The works were accepted by HIAL on 26 August 2016 and the airport has been handed back in a fully operational condition.



KEY	LOCATION	DESCRIPTION	TO BE REMOVED	SURFACING
■	A1	CONCRETE 13 END	290 CONCRETE 60 SOIL	250 PQC 125 DLC
■	C1	ASPHALT 13 END	150 ASPHALT 125 SOIL	40 MA 0/14 SURFACE 60 MA 0/20 BINDER 175 MA 0/20 BINDER
■	C2	ASPHALT 31 END	150 ASPHALT 125 SOIL	40 MA 0/14 SURFACE 60 MA 0/20 BINDER 175 MA 0/20 BINDER
■	A2	CONCRETE 31 END	300 CONCRETE 50 SOIL	250 PQC 125 DLC
■	SHOULDERS	INLAY SHOULDERS	50mm HRA	50mm MA 0/14
■	E	26 DISUSED	-	(275mm MA OVERLAY) 40mm MA 0/14 SURFACE 60mm MA 0/20 BINDER 175mm MA 0/20 BINDER
■	RAMPING	RAMPING FROM 275mm OVERLAY TO EXISTING ASPHALT	-	-
■	ACCESS TRACK	ACCESS TRACK	520mm EXISTING MATERIAL	40 MA 0/14 SURFACE 60 MA 0/20 BINDER 100 MA 0/20 BINDER 320 TYPE 1

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX

IT IS ASSUMED THAT ALL WORKS ON THIS DRAWING WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROPRIATE METHOD STATEMENT.

THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT.

NOTES

AS BUILT	MK	29/08/16	Z1
Revision Details	By	Date	Suffix
By	Check		

Purpose of issue: **AS BUILT**

Client: **Highlands & Islands Airports**
 Head Office: Inverness Airport
 Inverness
 IV2 7JB
 Tel: 01667 462445

Project Title: **WICK RUNWAY 13-31 REHABILITATION**

Drawing Title: **SURFACING LAYOUT**

Designed	Drawn	Checked	Approved	Date
KC	MK	KC	RH	15.01.16

AECOM Internal Project No. 60474265
 Scale @ A1: NTS

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Drawing Number: **60474265 - 701** Rev: **Z1**

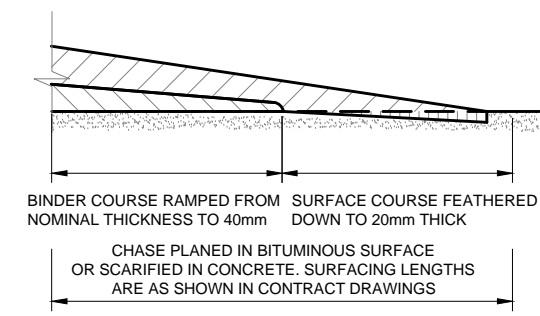
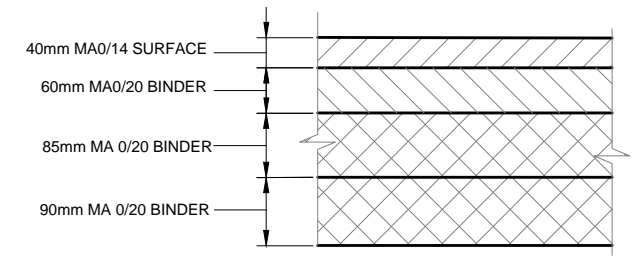
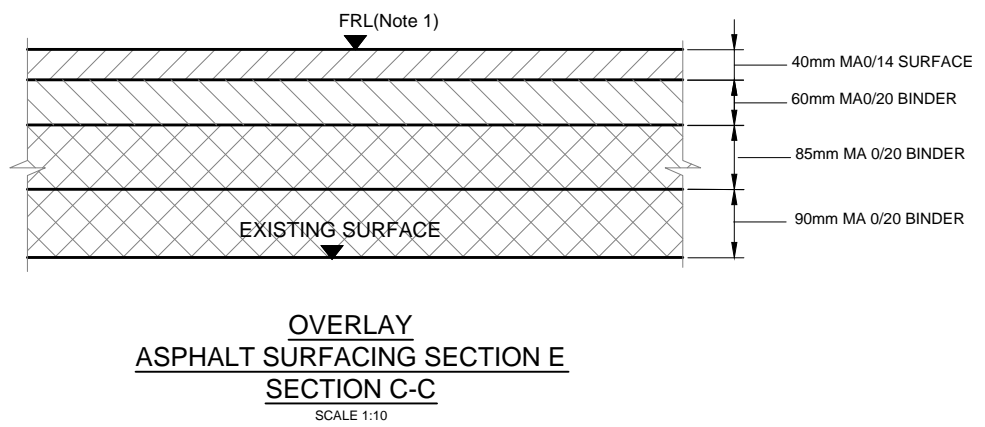
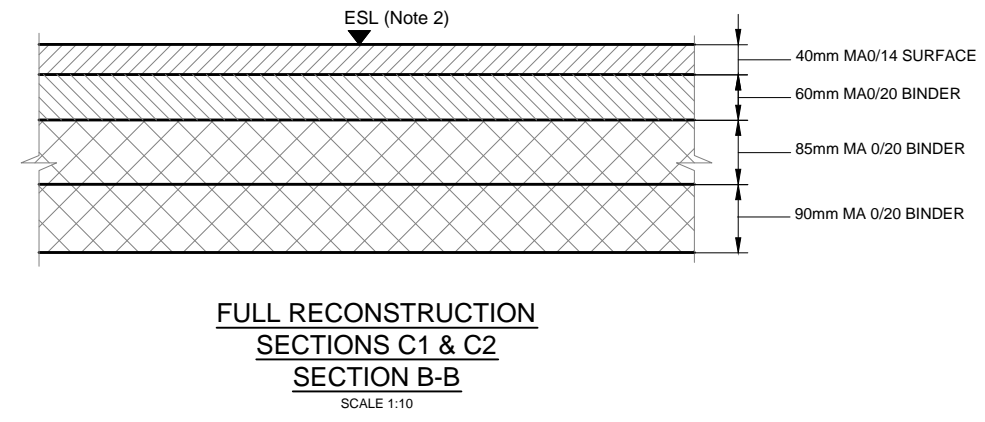
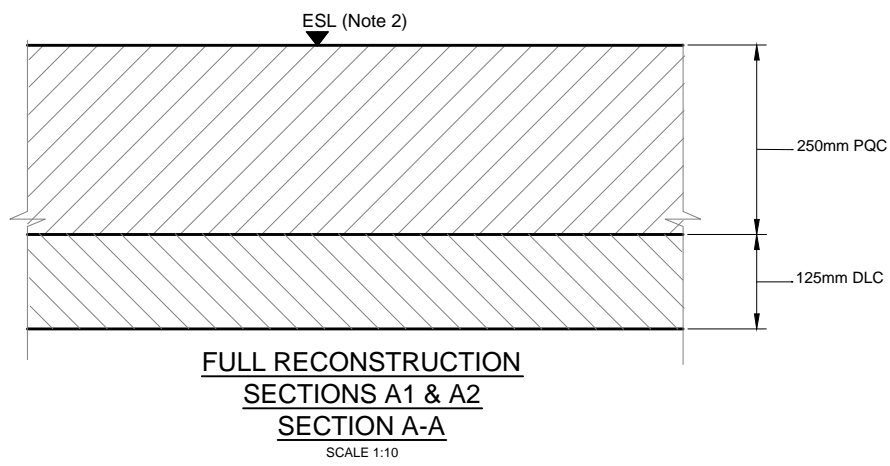
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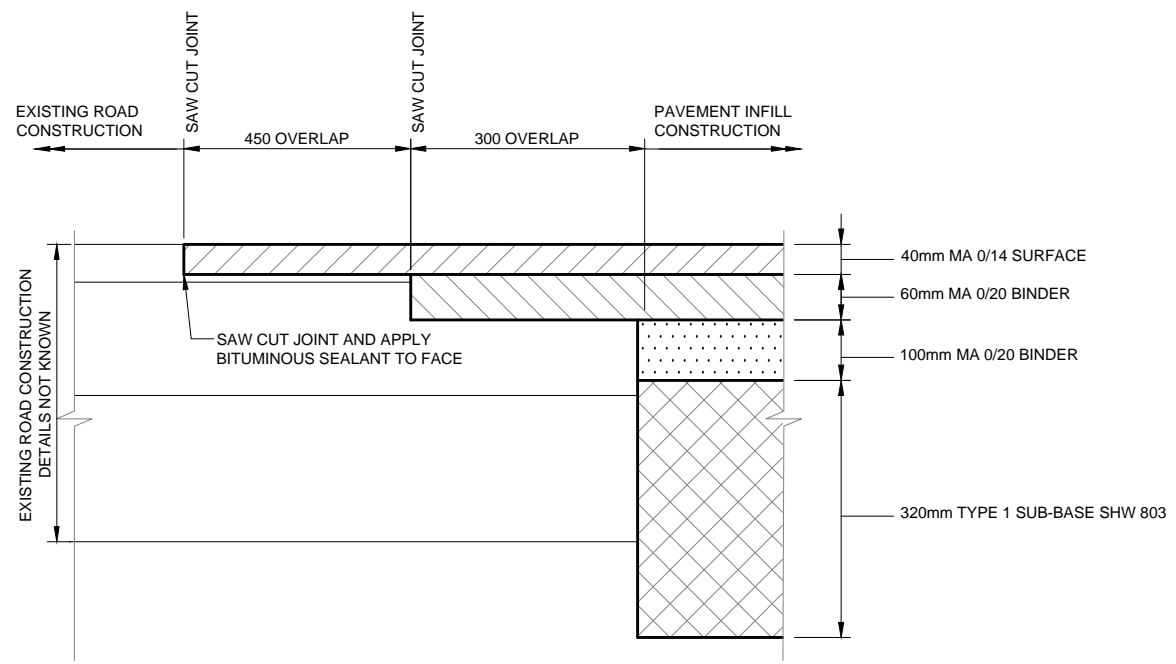
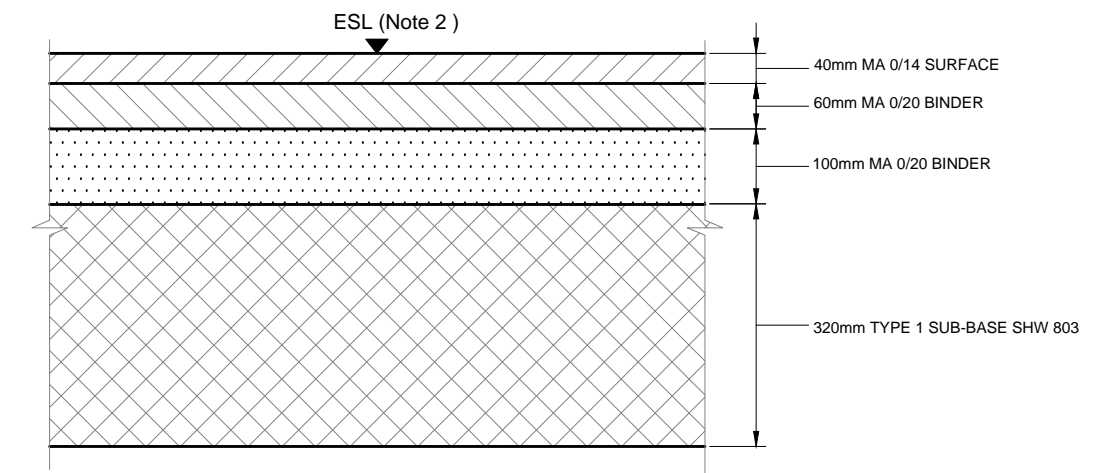
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NOTES

1. FRL= FINAL RUNWAY LEVEL
(TO HAVE SUFFICIENT CAMBER/CROSSFALL TO DRAIN)
2. ESL= EXISTING SURFACE LEVEL



RAMPING
TIE IN DETAIL TO EXISTING BITUMINOUS SURFACE
SECTION D-D
SCALE 1:10



AS BUILT	MK	KC	29-08-16	Z1
Revision Details	By	Check	Date	Suffix

Purpose of issue: **AS BUILT**

Client: **Highlands & Islands Airports**
Head Office: Inverness Airport
Inverness
IV2 7JB
Tel: 01667 462445



Project Title: **WICK RUNWAY 31-31 REHABILITATION**

Drawing Title: **SURFACING DETAILS**

Designed KC	Drawn MK	Checked KC	Approved RH	Date 15-01-16
URS Internal Project No.		Suitability		
Scale @ A1 1:10		Zone		

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Drawing Number 60474265-702	Rev Z1
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ABOUT AECOM

In a complex and unpredictable world, where growing demands have to be met with finite resources, AECOM brings experience gained from improving quality of life in hundreds of places.

We bring together economists, planners, engineers, designers and project managers to work on projects at every scale. We engineer energy efficient buildings and we build new links between cities. We design new communities and regenerate existing ones. We are the first whole environments business, going beyond buildings and infrastructure.

Our Europe teams form an important part of our worldwide network of nearly 100,000 staff in 150 countries. Through 360 ingenuity, we develop pioneering solutions that help our clients to see further and go further.

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