

Winter Operations and Snow Plan

Airside Operational Instruction 22

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DOCUMENT REVIEW HISTORY		
AOI 22	CURRENT VERSION:-	V5.0
ISSUE DATE:-	OCTOBER 2018	

VERSION	REVIEW	DATE
V1.0		September 2015
V2.0		April 2016
V3.0		January 2017
V4.0		December 2017
	4.1	April 2018
V5.0		October 2018

A. AMENDMENTS

This document will be subject to a routine review, over a period not exceeding 18 months. The latest version will be included in the annual reissue of the Aerodrome Manual; interim reviews are carried out as deemed necessary.

Only operational related amendments will prompt the issue of a new Version; pertinent amendments being highlighted in green text & indicated by a green bar in the right margin. Indication of any amendment of an administrative nature will be listed below.

B. REVIEW / AMENDMENT HISTORY

REVIEW SUMMARY			
VERSION / REVIEW REF:-	V2.0	REVIEW COMPLETED BY:-	CATHY WILLOUGHBY-CRISP
DATE:-	APR 16	ROLE:-	AIR TRAFFIC AND OPERATIONS MANAGER

PARAGRAPH	AMENDMENT
3.2.4 & 3.2.8	Revision to responsibilities due change in operational hours
3.2.8	Addition of Swissport contacts for receipt of Weather Warning
3.2.11	Magirus Deutz equipment removed from list

REVIEW SUMMARY			
VERSION / REVIEW REF:-	V3.0	REVIEW COMPLETED BY:-	CATHY WILLOUGHBY-CRISP
DATE:-	JAN 17	ROLE:-	AIR TRAFFIC AND OPERATIONS MANAGER

PARAGRAPH	AMENDMENT
3.4.4	Suspension of Runway Operations
Annex A	Addition of Matrix

REVIEW SUMMARY			
VERSION / REVIEW REF:-	V4.0	REVIEW COMPLETED BY:-	CATHY WILLOUGHBY-CRISP
DATE:-	DEC 17	ROLE:-	AIR TRAFFIC AND OPERATIONS MANAGER

PARAGRAPH	AMENDMENT
	New ownership
3.4.1.5	Emergency Call-Out numbers added for Facilities and MT

3.4.7	Airside revised stock holding and suppliers
3.5.7	Landside revised stock holding
Various	Role title changes; General Manager now Managing Director SATSEP now Air Traffic Engineering Manager

REVIEW SUMMARY			
VERSION / REVIEW REF:-	V4.1	REVIEW COMPLETED BY:-	CATHY WILLOUGHBY-CRISP
DATE:-	APRIL 2018	ROLE:-	AIR TRAFFIC AND OPERATIONS MANAGER

PARAGRAPH	AMENDMENT
3.4.8	New - Website, Social Media and Communications Procedure.

REVIEW SUMMARY			
VERSION / REVIEW REF:-	V5.0	REVIEW COMPLETED BY:-	CATHY WILLOUGHBY-CRISP
DATE:-	OCTOBER 2018	ROLE:-	AIR TRAFFIC AND OPERATIONS MANAGER

PARAGRAPH	AMENDMENT
	Full Review of Plan undertaken by key stakeholders; pertinent changes as listed below
3.3.2	Winter Planning Committee meetings
Various	Airside Snow Co-ordinator (ASC) now Airport Snow Co-ordinator; Landside Snow Co-ordinator role abolished
3.3.5	Review of Airside Snow Co-ordinator role
3.3.6	Training for appropriate PPE & COSHH
3.4.1.1	Call-out procedure
3.4.1.3	Apron De-icing procedures; ADM
3.4.4	Requirement for ASC to provide SNOWTAM data to ATC; Protocol for clearance of northern areas
3.4.5	Security protocol during Runway closure due snow clearance
3.4.6	Post clearance inspections and FOD Plod
3.4.8	Social Media communications and messages
Appendix 5	Table of available vehicles and equipment for snow clearance

1. INTRODUCTION

The purpose of this AOI is to detail the procedures, which are in place for Winter Operations and the clearance of snow / ice in Airside and Landside areas.

2. WINTER OPERATIONS

2.1 NOTIFICATION

Meteorological Warnings of snow, frost or freezing conditions are supplied by the Meteorological Office, Exeter on a 24 hour basis. Should such a Warning be received, or freezing conditions be observed on the Apron, details will be disseminated to airlines, operators and staff, via a Chroma Fusion visible in a yellow banner at the top of the screen display.

It is also the responsibility of airlines, handling agents and operators to warn passengers and staff of the likely presence of snow and/or ice in their operational areas, and to take self-help measures whenever possible.

Any winter hazards not specifically mentioned in BOH messages should be notified to Air Traffic Control on 01202 364150 for action.

2.2 ASSESSMENT

BOH will assess any freezing conditions and arrange for de-icing and gritting operations as deemed necessary. Airport staff will monitor passenger routes and any associated steps/ramps and take necessary action (Ref AOP 50). Any airline handling agent or operator experiencing difficulty should contact Air Traffic Control on 01202 364150 for action.

In the event of snowfall &/or ice , the Airside Snow Plan will be instigated by the Management Team.

2.3 BASIC PRECAUTIONS

Winter weather brings additional hazards, which require heightened awareness and more care whilst working on the aprons, in order to reduce the likelihood of accidents. All Airside workers must be constantly aware that, during periods of particularly cold temperatures, snow / ice may be present and as such must remain vigilant, taking extra precautions as necessary.

Simple precautions that can reduce accident risks should be taken as follows:-

- a) Drive with extra care, at a speed appropriate to the surface conditions, especially when in the vicinity of passengers, staff and aircraft; for example during an aircraft turn-round.
- b) Before transferring passengers between the Terminal building, coaches and aircraft, airline operators and handling agents should check for slippery surfaces, ensuring the apron surface is free of ice and snow contamination; particular attention should be paid to painted pedestrian walkways. Under the Health and Safety at Work Act, 1974 all employees have a duty to take reasonable care for the health and safety of themselves and others who may be affected by their acts or omissions at work and to co-operate with their employer and others to enable them to fulfil their legal obligations.

- c) Take extra care when walking, especially when carrying objects as some areas of snow/ice may not have been treated or may have refrozen. Airside Operators should ensure their staff are equipped with suitable footwear, with non-slip soles and appropriate PPE.
- d) It is the responsibility of handling agents and airline operators to ensure aircraft steps, including integral aircraft steps, are clear of snow and ice contamination, prior to and during use.
- e) Surfaces contaminated with aircraft de-icing fluid can be hazardous and slippery. Aircraft de-icing fluid is often transferred underfoot from the apron stand onto pedestrian walkways and into gate entrances. When aircraft de-icing has been undertaken, airline operators and handling agents should check for slippery surfaces before transferring passengers between the Terminal, coaches and aircraft.
- f) Additional time should be allowed for all ramp activities and extra care taken when walking across surfaces which may be slippery.
- g) Take extra care when driving, especially when approaching an aircraft or on the approach to a road junction. Ensure that attention is given to vehicle inspection prior to use; check the operation of lights, battery condition and that anti-freeze is used in coolants.
- h) Surfaces treated with de-icing/anti-icing fluids initially become more slippery, particularly painted areas. Staff and passengers should be warned to exercise extra care in these areas.
- i) Rock salt and grit must never be used to de-ice apron surfaces due to the corrosive effect upon aircraft.

2.4 AVOIDANCE OF WATER SPILLAGE

In freezing conditions, or when freezing conditions are forecast, action must be taken to avoid the unnecessary formation of ice on apron and road surfaces. Operators of specialist vehicles involved in the carriage of water must take special precautions as follows:-

- a) Operators of potable water tankers and toilet-servicing vehicles must be vigilant to ensure no spillage or leaks leading to subsequent freezing. The flushing of potable water tanks is not permitted on apron surfaces.
- b) Care must be taken in the use of potable water points to contain spillage and overflow to a minimum.
- c) The washing of apron equipment and vehicles is not permitted except in the dedicated wash down areas.
- d) Catering vehicle operators should ensure that any surplus ice from aircraft galleys is disposed of properly and not dumped on the apron.
- e) All operators of aircraft parked on stand during freezing conditions should ensure that galley drains are not left dripping on to apron surfaces and that when aircraft tanks are drained the water is disposed of where it cannot present an ice hazard if it subsequently freezes.

3. AIRPORT SNOW PLAN

3.1 REFERENCE

AOIs are stored on BIAIS, which is available to all staff and are issued to all based operators.

In addition, supplementary details for Snow and Ice Clearance of Runways and Taxiways are contained in MATS Part 2; copies are held by Air Traffic Control and an electronic copy is held on BIAIS.

3.2 CONTENT OF PLAN

3.2.1 GENERAL:-

- Introduction and Policy Statement
- Winter Planning Committee
- Annual Calendar of Events
- Precautions
- Responsibilities
- Training & PPE
- Weather Forecasting

3.2.2 AIRSIDE:-

- Airside Initiation Procedures
- Snow Coordinator
- Airside Snow Control Centre
- Airside Snow Plan
- Vehicles and Equipment
- Airside Safety
- Airside Media

3.2.3 LANDSIDE:-

- Landside Initiation Procedures
- Landside Snow Co-ordinator
- Landside Snow Plan
- Landside Snow Clearance Priorities
- Landside Vehicles & Equipment
- Landside Safety
- Landside Media

3.3 DETAIL OF PLAN; GENERAL

3.3.1 INTRODUCTION AND POLICY STATEMENT:-

As part of the Safety Management System in place at Bournemouth Airport (BOH), these instructions exist for the guidance/direction of staff involved in the operation of winter procedures. In addition, these procedures inform other interested parties of the measures to be employed to minimise disruption to operations at BOH during winter conditions.

These procedures utilise guidance contained within various documents, including:-

- ICAO Annex 14
- Regulation (EU) 139/2014
- CAP 1168; Guidance Material
- CAP 728; The Management of Safety
- CAP 493; Manual of Air Traffic Services; Part 1
- CAP 700; Operational Safety Competences

Anti-icing operations are necessary in order to prevent the formation of ice on ground surfaces; where appropriate, de-icing may be necessary.

BOH monitors the performance and actions of aircraft operators, handling agents and tenants who employ their own procedures for the anti-icing of aircraft, equipment or leased areas.

It is the aim of Bournemouth International Airport Ltd to maintain the Aerodrome in an operationally safe condition at all times during winter conditions, so far as is reasonably practicable.

3.3.2 WINTER PLANNING COMMITTEE:-

The Winter Planning Committee (WPC) will meet at least **twice a year; pre-season and post the winter season. Additional meetings will be convened as deemed necessary; eg, post implementation of the Plan.** The Committee will identify necessary actions, review events and their impact, review plans and assess additional equipment / material needs.

The Committee comprises:-

- Head of Technical Services (Chair)
- Air Traffic and Operations Manager
- Fire Service Manager
- Fire Service (Floating) Watch Manager
- Air Traffic Engineering Manager
- Asset Manager
- Customer Services Manager
- Customer Services Team Leader
- Security Team Leader
- Environment, Health and Safety Manager
- MT Team Leader
- Ground Services Co-ordinator

Additionally, the MD will attend the meetings as considered necessary.

3.3.3 ANNUAL CALENDAR OF EVENTS:-

WHEN	WHAT
Pre-Winter / before end of October	All vehicles / equipment to be serviced & prepared for the winter
	All relevant staff to be trained / refreshed in operating procedures
	WPC meeting to review Snow Plan in consideration of previous experience
	All appropriate materials to be on site
Post-Winter; April	WPC meeting to review knowledge / experience gained during winter operations
	Recommendations to be discussed for changes in light of lessons learnt
	All vehicles / equipment to be serviced & prepared for summer storage

Throughout the winter period, material usage must be constantly monitored & re-stocked as required by the Ground Services Co-ordinator; details of holding levels and where stored to be updated on BIAIS.

3.3.4 PRECAUTIONS:-

In addition to the precautions noted in Paragraphs 2.3 & 2.4 above, the following elements must also be noted:-

- a) Vehicle operations on the Aerodrome in snow / ice condition are to be restricted to essential movements only. Driving/operating of vehicles/equipment should be carried out with consideration being given to the prevailing conditions and the effects that this may have upon operating characteristics of the vehicle/equipment e.g. allowing additional stopping distances and greater control of speed.
- b) Close attention should be paid to the servicing/maintenance requirements of vehicles/equipment in winter conditions to avoid any failures that may result from such conditions. Pre-emptive measures may also be necessary to ensure that operations are maintained after winter conditions occur, e.g. storage of vulnerable equipment (water carrying equipment etc.) away from freezing conditions.
- c) In addition to the procedures in this AOI, all personnel are responsible for immediately reporting any areas identified as potentially hazardous as a result of winter conditions.

These reports should be made to:-

- | | |
|------------------------------------|--------------|
| ▪ Airport Duty Manager | 01202 364170 |
| ▪ RFFS Station Manager | 01202 364143 |
| ▪ Asset Manager | 01202 364195 |
| ▪ Air Traffic & Operations Manager | 01202 364155 |

Note! Between the hours of 20:00 & 06:00, the Airport Duty Manager (ADM) role may be fulfilled by the Security Supervisor.

3.3.5 RESPONSIBILITIES:-

Under the Health and Safety at Work Act (HSWA), every employer has a duty of care to employees and every employee has a duty to take care. It is the responsibility of employers to take steps to safeguard their employees and visitors.

All companies based at the Airport are reminded of their responsibilities, under the HSWA, to their employees, visitors and invitees. In winter conditions the roads, footpaths, car parks etc. are unlikely to always be totally free of ice or snow, particularly during the early stages or during prolonged snowfall. Driving and walking with care, compatible to the prevailing conditions and the wearing of appropriate footwear is essential.

The procedures specified are designed to prevent the accumulation of ice on Landside / Airside Roads, Aprons, the Runway and Taxiways. Whenever possible, preventative measures will be applied; this would normally be initiated by the Engineering Department on receipt of the Weather Warning from the Met Office.

In the event that weather conditions deteriorate when no warning was issued, responsibility for implementing the appropriate action will be as follows:-

- ADM / RFFS (Between the hours of 05:50 and 01:35):-

The ADM &/or the duty RFFS Station Manager are responsible for the initiation of winter procedures, as detailed in this Instruction. The RFFS team will provide initial and ongoing snow clearing / de-icing support to the Snow Plan, using appropriately qualified personnel.

- Security (Between the hours of 01:35 and 05:50):-

The duty Security Supervisor is responsible for activation of the Winter Call-in procedures, as detailed in this Instruction.

- Airport Snow Co-ordinator (ASC):-

The role of Airport Snow Co-ordinator is established to provide a point of contact for overseeing the implementation of this Plan. A roster of suitably qualified persons is issued annually to all departments; this covers the period from November through to the end of March.

- RFFS:-

When required, the RFFS are responsible for undertaking and completing the appropriate procedures detailed in this AOI; supported by personnel from other departments.

- MT Technician:-

The Asset Manager will ensure the MT department is manned during snow clearing operations, in order to repair or advise on the use of the clearance equipment.

- Air Traffic Engineering (ATE):-

As part of the daily inspection regime of Nav aids and aeri als, ATE staff should include checks for ice/snow build up that may affect operations.

- Other Staff:-

Other BOH staff, as available, will complete winter procedure tasks as required this AOI.

- Aircraft Operators, Handling Agents and Tenants:-

Aircraft operators, handling agents and tenants are responsible for any winter procedures within their leased areas, including equipment parking areas.

In addition, aircraft operators (or their agents) are responsible for operations in relation to aircraft and equipment associated with aircraft operations (such as passenger steps, baggage trolleys, conveyor belts etc.) Whilst BOH will make every effort to disseminate information, responsibility rests with aircraft operators, handling agents and tenants to warn passengers, visitors and their staff of the likely presence of ice and/or snow and to take self-help measures whenever possible.

3.3.6 TRAINING AND PPE:-

- Training:-

All relevant Airport teams are to receive training in winter operations and where specific requirements are identified, this should include vehicle and equipment operations.

A record of the training is to be maintained by the Departmental Manager and in the case of vehicle / equipment training, by the RFFS.

Additionally, appropriate awareness training and information on PPE and Control of Substances Hazardous to Health (COSHH), is to be supplied to those members of staff that are involved in the replenishment of materials for anti-icing activity.

- Personal Protective Equipment (PPE):-

Managers are responsible for ensuring adequate PPE is available to all their staff. Individuals are responsible for the maintenance and use of the correct PPE appropriate to the COSHH information and BOH Risk Assessment, which includes equipment operation and handling of materials. PPE must be worn where appropriate and safe systems of work employed at all times.

3.3.7 WEATHER FORECASTING:-

- Initial Information:-

Initial information / advice may be obtained from the weather forecast provided by the Meteorological Office (Met Office) in the form of Southern Area Forecast, Terminal Area Forecasts (TAFs) and Weather Warnings. These are readily available through ATC and the Copperchase computer system located in the ATC Visual Control Room (VCR). In addition, the Semi-Automated Meteorological Observing System (SAMOS), also located in the VCR, displays grass, ground and outside air temperatures.

- Snow Warnings:-

Snow Warnings are issued by the Met Office and will be issued not more than 12 hours and normally not less than 2 hours, in advance of the expected weather.

A Snow Warning will provide:-

- Whether snow is possible or definitely expected
- When snow is expected to start falling
- The approximate duration and intensity of the snow. This will include whether the snow is likely to settle and an indication of the accumulation that is likely using the scale of:-
 - Light Less than 1 cm depth
 - Moderate 1-4 cm depth
 - Heavy Greater than 4 cm depth

- Further Information:-

Further information may be obtained directly by telephone from the Met Office Aviation Forecaster on 01392 884930

3.4 DETAIL OF PLAN; AIRSIDE

3.4.1 AIRSIDE INITIATION PROCEDURES:-

These procedures are divided into 3 sections:-

- Anti-Icing Procedures
- De-Icing Procedures
- Snow Clearance Procedures

Before making any decisions concerning the initiation of winter procedures, the Snow Coordinator is to take account of the following:-

- The latest available Weather Forecast for BOH (EGHH); Elevation 38 ft
- When deemed appropriate, the forecast / actual weather conditions of other airports in the vicinity, including:-

AIRPORT	ELEVATION (FT)
Bristol	622
Exeter	102
Gatwick	196
Heathrow	80
Southampton	44

- Any adverse Weather Warnings issued by the Met Office
- The Ground Temperature indications from the SAMOS equipment in ATC
- Surface Inspection observations; i.e. damp / wet / snow / ice etc.
- Existing condition of the Runway, Taxiways and Apron
- Availability of alternate taxi routes if taxiways are likely to be, or are actually affected
- The likelihood of aircraft diversions
- The benefit of keeping Airfield lights switched on to encourage their heat to keep the lights clear of ice and snow

3.4.1.1 Weather Warnings Actions:-

ISSUE OF WEATHER WARNING	WEATHER WARNING ISSUED BY ATC TO:-	ACTION	COMMENT
08:00-17:00 MONDAY TO FRIDAY	- Head of Technical Services - Air Traffic & Operations Manager - RFFS Station Manager	RFFS Station Manager instigate Anti-Icing Procedure	Apply pre-emptive Anti-Icing; where necessary, call-out qualified personnel to undertake winter measures
	- Swissport Duty Manager	Liaise with Airlines / Passengers	
CALL- OUTCALL- OUTALL OTHER TIMES	- Airport Snow Co-Coordinator - Head of Technical Services - Air Traffic & Operations Manager - RFFS Station Manager - Airport Duty Manager - Watch Manager - Security Supervisor	ADM ⁽¹⁾ &/or RFFS Station Manager to instigate Anti-Icing Procedure	CP2 staff ⁽²⁾ to call-out personnel to undertake Anti-Icing measures, as required
	- Swissport Duty Manager	Liaise with Airlines / Passengers	

⁽¹⁾ The Security Supervisor covers for the ADM between the hours of 01:15 to 05:30

⁽²⁾ Out-of-hours, the Security staff in Control Point 2 (CP2) to call the Snow Co-ordinator; if no response, leave a message. Further calls then to be made to the BMT. On receipt of the call from CP2, the Snow Co-ordinator will initiate communication prior to snow clearing when the availability of the RFFS crews dictate.

3.4.1.2 Anti-Icing Procedures:-

- Airside:-

On receipt of the call for Anti-Icing measures, Engineering / RFFS will be responsible for delivering Anti-Icing procedures.

Where anti-icing procedures have been carried out on the afternoon prior to the Frost Warning period, the ADM, RFFS Station Manager and ATC are to be informed of this action, to prevent unnecessary call-outs. When it is necessary to carry out early morning anti-icing procedures to the apron area, the RFFS will commence this action two hours prior to the first aircraft arriving/departing.

- Runway:-

Due to the cost and disruption associated with the action of anti-icing of the Runway, the decision / responsibility for this operation will fall to the Airport Snow Coordinator (ASC).

The Head of Technical Services and the Air Traffic & Operations Manager are to be advised that this operation is taking place. The ASC will monitor the actual / forecast ground temperatures and actual / forecast ground conditions (i.e. damp / wet / snow / ice etc.)

If the forecast ground temperature is 0°C or below, for a period of 1 hour or greater, **and** there is either snow (to settle on exposed surfaces) or forecast snow (to settle on exposed surfaces) then anti-icing procedures are to be considered.

Liquid de-icer stocks should be used in age rotation until exhausted. Application of liquid de-icer is to be in spray form, from the liquid de-icer trailer, to the surface of the Runway. Application should commence from the 26 Threshold, starting on the centreline (the spray boom width is 12 m) and applications should be completed on either side of the centreline until the full Runway width has been covered. The camber of the Runway will assist the material to spread to the edges.

The spread of the liquid should be monitored and if necessary, additional applications undertaken.

- Apron Areas, Head of Stand, Roadways and Baggage Bay:-

On receipt of a Frost Warning, the Station Manager / Watch Manager will:-

- Check the Mayfly for the following day to see which Stands are in operation and will require de-icing
- Anti-ice the Stands, Head of Stands and Road Ways with Safegrip SF granules, using the Snowex spreader

Operational apron areas, outside of the footprint of parked aircraft, will receive anti-icing treatment using the appropriate materials by personnel from Engineering, RFFS and Customer Services.

Apron walkways and approaches to aircraft are to be protected using the "Turbo Cast 300" hand gritting equipment. East Apron areas will be managed by the ADM; West Apron will be managed by the RFFS.

Safegrip granules are to be dispersed along all passenger and staff walkways. Apron areas around aircraft parked on the East & West Aprons are also to be treated using this equipment.

3.4.1.3 De-Icing Procedures:-

On receipt of the call out for de-icing measures, Engineering, RFFS and Customer Services personnel will commence de-icing procedures.

Where de-icing procedures have been carried out, Engineering, RFFS are to inform the ADM, RFFS Station Manager, ATC and Air Traffic & Operations Manager of this activity.

- Runway:-

The responsibility for determining the de-icing operation will fall to the Airport Snow Coordinator (ASC). The ASC will monitor the actual/forecast ground temperatures and actual/forecast ground conditions (i.e. damp / wet / snow / ice etc.).

If the forecast/actual ground temperature is 0°C or below **and** there is snow settling on exposed surfaces (roads / runway / taxiways), then de-icing procedures should be considered.

- Apron Areas, Head of Stand & Airside Roadways:-

The ADM and or RFFS Station Manager will monitor the actual / forecast ground temperatures and the actual / forecast ground conditions (i.e. damp / wet / ice etc.)

If the forecast ground temperature is 0°C or below, for a period of 1 hour or greater, **and** there is ice accretion occurring on apron areas or airside roads, then de-icing procedures should be initiated.

Operational Apron areas, outside of the footprint of parked aircraft, will receive de-icing treatment, using the appropriate materials by Engineering, RFFS and Customer Services personnel.

These will be conducted in the following priority:-

- Apron Area
- From the southern end of the Apron Taxilane to abeam the northern edge of the Control Tower
- Airside roads & Fire Station forecourt
- Baggage Bay and access roads
- Passenger walkways from covered walkway to aircraft footprint
- Arrivals Hall baggage belt access area
- MT access road

Apron walkways and approaches to aircraft are to be de-iced using the "Turbo Cast 300" hand equipment. East Apron areas will be managed by the ADM; West Apron will be managed by RFFS.

Safegrip granules are to be dispersed along all passenger and staff walkways. Apron areas around aircraft parked on the East & West Aprons are also to be treated using this equipment.

The ADM will inspect the East Apron and assess whether the area to be de-iced around the aircraft footprint, is larger than what can be managed using the Turbocast. In consultation with the Fire Station Manager, the Apron area will then be de-iced using Safegrip SF granules from the Snowex on the rear of the Transit Connect; ensuring that the de-iced area extends as far as possible into the Baggage Bay and the Arrivals baggage area.

On completion of any de-icing activity, e-mail the Grounds Services Co-ordinator details of the amount used and remaining stock.

3.4.1.4 Airside Snow Clearance (Snow Plan):-

The Snow Coordinator (ASC) will monitor the actual / forecast ground temperatures and the actual / forecast ground conditions (i.e. damp / wet / snow / ice etc.). If the forecast/actual ground temperature is 0°C or below **and** there is snow settling on exposed surfaces (roads / runway / taxiways) and de-icing procedures are not preventing the accumulation of snow, then snow clearance procedures should be initiated.

In the event that the above occurs, the RFFS are to be requested to commence immediate snow clearing of the Runway surface, following the instructions as detailed:-

- a) The Security Supervisor is to ensure that during the normal security patrols of the Airport, Security staff monitor the actual conditions of the surfaces, both Airside and Landside. If they become aware of accretion of ice or similarly hazardous conditions, they are to notify their Supervisor immediately. The Security Supervisor is to relay any such warnings to the ADM &/or RFFS Station Manager.
- b) Call-out actions are to be noted in the Security Log, together with the time of each call and anticipated response time; if no direct contact is made, a message should be left. When required, the Snow/Ice Team and MT Fitter is to be called using the mobile telephone numbers detailed in the Emergency Call-Out List.
- c) Additional staff may be called as deemed necessary.

3.4.1.5 Call-Out Procedures:-

The following contact list is for internal and security distribution only; not for general distribution. All contact numbers are registered on the BOH Emergency Call-Out List.

When unable to take the call at the time, call-out recipients should acknowledge the message left at the earliest opportunity; arrival on site, should be advised to the Airport Snow Co-ordinator

AIRPORT SNOW CO-ORDINATOR (ASC)	NUMBER
Duty Airport Snow Co-ordinator (Refer to annual Roster)	07944 000277
Head of Technical Services	When not ASC, use Telephone Numbers detailed on the Emergency Call-Out List
Air Traffic & Operations Manager	
Air Traffic Engineering Manager	
Deputy Fire Service Manager	
Asset Manager	
Fire Service (Floating) Watch Manager	

ROLE	MOBILE NUMBER
ADM	07768 620451
RFFS Station Manager	07763 131408
Duty ATE	07768 947500
Ground Services Co-ordinator	07775 574411
MT Team Leader	07950 211941
Emergency Call-Out; Facilities	07771 990263
Emergency Call-Out; MT	07768 620449

When responding to a call-out, the members of the Engineering Team and 1 x MT Fitter are to, within 10 minutes of the initial call, telephone the 24-hour Security Telephone (01202 364186) and acknowledge that they have received and are responding to the call-in. In addition, they are to provide an estimate of their arrival time at BOH.

The receipt of the acknowledgement of the call-out, together with their estimated arrival time, is to be passed to the Security Supervisor, who is to then to pass this information to the ADM or RFFS Station Manager and then relayed to the Snow Co-ordinator, if required.

Upon arrival at BOH, the members of the Engineering Team, including 1 x MT Fitter, are to advise the Security Supervisor (Sierra 2) by radio call or by telephone (Ext 186) that they are on site; this should be a first action prior to commencing clearance duties.

3.4.2 AIRPORT SNOW COORDINATOR (ASC):-

The role of the Snow Coordinator (ASC) is to co-ordinate the information available concerning the prevailing/forecast winter conditions and in light of the available information, assess and initiate the best course of action. This task will be fulfilled on a daily roster basis, by suitably qualified staff from Operations, RFFS and Engineering, between November to March annually.

When notified of forecast/actual conditions that require the attention of the ASC, they will correlate the information required and assess what actions should be taken, in accordance with these instructions. This may necessitate the initiation of the call-out of staff or the attendance on site of the ASC and the initiation of the Airside Snow Control Centre.

With consideration of all the information available to them, the ASC is to make their best judgement as to the requirements to meet the Airside anti-icing, de-icing or snow clearance needs. It is acknowledged that, due to the position of BOH, accurate weather forecasting is difficult to achieve and that forecast conditions may differ from the actual conditions experienced. It is important to maintain Aerodrome operations whenever possible.

The ASC is to base their activities in the Airside Snow Co-ordination Centre located in the ATC Visual Control Room and ensure that, as far as is practicable, that they remain in this position. Only in exceptional circumstances (physical surface inspections) should the ASC leave the Airside Snow Co-ordination Centre.

The ASC is to advise the BOH BMT of Airport closures due to snow and ice and the estimated time that operations may recommence. The BOH BMT will then ensure that communications are amended to advise the travelling public and Airport Service Partners.

The Duty Snow Co-ordinator is to liaise closely with the Duty Air Traffic Controller to make best use of the Radar Weather Channel, which might be able to give an early warning of incoming winter weather.

3.4.3 AIRSIDE SNOW CONTROL CENTRE (ASCC):-

The Airside Snow Co-ordination Centre (ASCC) will be established in the ATC Visual Control Room whenever there is a need to carry out clearance procedures in Airside areas.

The ASCC will provide a facility to monitor and record what actions have been taken towards minimising the impact of winter conditions. In particular, the ASCC will maintain an accurate record of measures taken and remaining winter measures stock to ensure that decisions are taken to conserve this use most efficiently.

3.4.4 AIRSIDE SNOW PLAN:-

The implementation of the Snow Plan will be initiated by the ADM / RFFS Station Manager, or the Snow Co-ordinator.

The Snow Plan is to be employed so as to maximise the efficiency of materials, equipment and manpower, whilst bearing in mind the operational requirements of BOH. When both Airside and Landside areas require treatment, Airside areas are to take priority.

- Inspection Management:-

The inspection of the Runway will take place by trained staff to determine if clearance is required and this decision will be made by the ASC in consultation with those staff.

The ASC will complete the Snow Clearance Form and pass this to the Duty Air Traffic Assistant to facilitate the issue of a SNOWTAM.

A copy of this form, together with a worked example, are contained at Appendix 1A & 1B

Based upon the information provided, the ASC will instigate the measures required to maintain the Airport operation. If necessary, consultation may take place with the Managing Director / Head of Technical Services. Heads of Section are to make available as many personnel as possible to the ASC to assist with the clearance.

- Suspension of Runway Operations:-

Runway operations will cease during clearance activity. The estimated breaking action of a contaminated Runway, in consideration of the observed conditions, should be applied in accordance with the Runway Assessment Matrix detailed in the guidance material contained in the CAP 1168. The suspension of Runway operations should be actioned accordingly.

A copy of the Matrix is contained at Annex A; the CAP 1168 should be referred to for further guidance.

The authority to re-open a snow-closed runway will normally rest with the Airport Snow Co-ordinator. During operational hours, the Air Traffic & Operations Manager /or Head of Technical Services are to be consulted prior to taking this decision.

- Airside Snow Clearance:-

Southern Movement Area clearance is to be carried out using 2 x John Deere ploughs / brushes. The runway snow clearing is to be carried out with Sicards (See Appendix 2).

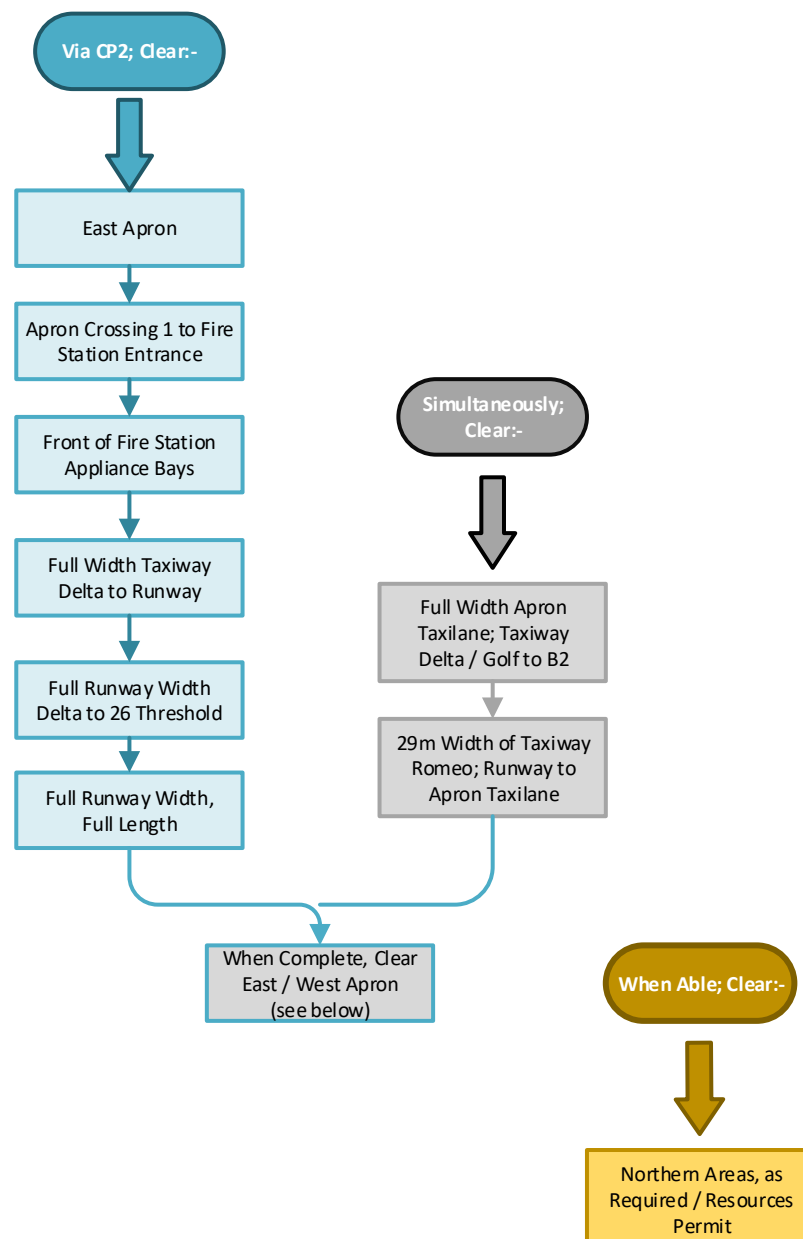
During snow clearance, all drivers are to be briefed concerning the importance of the Runway and Taxiway light fittings. Care must be exercised to avoid damage to these fittings and where feasible, these lights should be switched on to aid sight of their location.

The Airport Snow Co-ordinator should assess the likely usage of the Aerodrome by aircraft of varying size. If aircraft larger than a Boeing 737 are likely to use the Aerodrome, measures will be required to provide a Code D Taxiway or above; alternatively, aircraft may be required to be towed from the Runway to their parking area.

Airfield lighting, both Approach and Airfield, should be kept clear of snow accumulations by hand sweeping; responsibility for this task rests with the ATE personnel.

- Clearance Priorities:-

The order of priority for areas to be cleared is as follows, taking note of the requirement to maintain the separation for areas between the Critical Part and Airside Movement Areas:-



- Clearance Protocol:-

The following guidance should be applied to snow clearance operations:-

- a) Ensure that Taxiway bell-mouths, which are included in the Clearance Plan, are kept fully cleared at all times.
- b) The Runway is cleared to full width, using two brushes / ploughs / Sicards; the build-up of snow banks should be avoided wherever possible but if unavoidable, must not be more than 18" (45cm) high.
- c) No vehicles or aircraft are to be permitted access to the Movement Area, apart from those vehicles directly involved in the clearance procedure, until the clearance is complete. Care should be taken to leave any snow that is not required to be cleared in an undisturbed and un-compacted state as this will speed the thawing of the snow that remains.
- d) Snow clearance should take place as soon as possible, utilising all available resources. Vehicles should maintain a speed of approximately 8 mph and snow plough blades should not be overloaded, nor should snowdrifts be attacked too eagerly; better results are achieved using the "little at a time" ethos.
- e) Clearance of snow from around Runway and Taxiway lights should also be carried out as soon as possible; this should be carried out by hand to minimise the risk of damage. Care must also be exercised when clearing around Runway drainage areas in order to prevent damage or clogging.
- f) Where snow drifts or snow banks occur, it may be necessary to use the excavator to remove accumulations. The excavator may be used in conjunction with the high-sided tipper trailers for bulk snow removal.

- Clearance of Apron & Aircraft Parking Stands:-

This process is to be carried out using 2 x Ford ploughs / brushes (See Appendix 2)

When ready to commence clearance of the Aprons, start with those stands with aircraft parked, awaiting departure. Areas around aircraft and under wing areas are to be cleared by teams using hand held equipment; See Appendix 4 for Parking Stand Clearance parameters.

On completion of occupied East Apron Stands, the Stand clearance is to be in the following order:-

- Stand 3
- Stand 4
- Stand 5
- Stand 6

- Stand 1 (Sacrificial Stand, used for accumulated cleared snow)
- Stand 2

Whilst snow clearance of these areas may be complete, additional de-icing of these areas might be required on a regular basis to maintain the areas free of ice.

- Northern Movement Area Clearance:-

When the Runway and identified Taxiways are operational and sufficient Apron Stands are cleared, resources will be directed to commence clearance of the remaining Taxiways. Priority will be determined on any planned movements, operational requirements etc. and will be dependent on available resources.

3.4.5 VEHICLES AND EQUIPMENT:-

The number of different vehicles and types of equipment are available for winter procedures; these are listed in the table at Appendix 5.

Operation of the vehicles and equipment must be carried out by appropriately trained personnel in accordance with the published procedures, as reference in the table.

To optimise the efficiency of the clearance process, during periods when the Runway is closed for snow clearance, vehicles/equipment engaged in the snow clearing operations will not be subject to the usual security checks; they will be permitted free-flow through CP2 and in/out of the Critical Part.

The Security Supervisor is to be advised when the Runway is closed for snow clearance and again once operations return to normal; at this point, all normal security measures are to be re-instated.

Should additional / replacement equipment being required, this can be obtained as follows:-

ITEM	SUPPLIER	AVAILABLE FOR HIRE PLANT	CONTACT NUMBER
1H	Peter Noble	Tractor & Road Brush	01425 474987
2H		JCB Loading Shovel	
3H		Tractor & Vacuum Sweeper	

Hand held equipment includes:-

- 3 x Turbocast 300 Prill Spreader; stored with ADM and RFFS
- Snow Shovels and Brooms; stored with RFFS in Control Tower
- Grit Dispensers; located at strategic points, monitored / maintained by Engineering

3.4.6 AIRSIDE SAFETY:-

- Personal Protective Equipment (PPE):-

Individuals are responsible for the maintenance and use of the correct PPE appropriate to the task this includes equipment operation and handling of materials. PPE must be worn where appropriate and safe systems of work employed at all times.

PPE includes:-

- Gloves; for use with chemical / abrasive materials
- Face masks; for use with chemical / dusty materials
- Goggles / Eye protection
- Hi-Visibility clothing
- Foot protection
- Head protection

- **Post Snow Clearance Inspections:-**

During the process of snow clearance and de-icing activity, it is possible that essential equipment may become unserviceable or surfaces be damaged. In order to ensure that repairs can be instigated at the earliest opportunity, a full and detailed surface and lighting inspection is to be carried out as soon as ground conditions permit.

Additionally, a FOD plod of the Runway should be undertaken as soon as possible, post snow-clearance activity and in any instance, within 48hrs of re-opening.

ATE personnel, together with the Asset Manager will conduct a slow and detailed inspection of all light fittings and ground surfaces, logging all outages / fitting damage and any areas where ground surfaces appear to be damaged or failing.

On completion, the actions are to be prioritised for impact on safety and repaired as a matter of the highest priority; remaining items are to be incorporated into the routine maintenance program.

The Asset Manager will provide an Airport Serviceability report to the Managing Director and Head of Technical Services as soon as possible after any snow-clearing event.

- **Measures:-**

All Airside activities are to be carried out in accordance with the designated Airside safety measures and in conjunction with guidance detailed in this AOI. Prior to commencement of activities, equipment operators are to be aware of the following:-

- a) The importance of the Runway and Taxiway light fittings:- Care must be exercised to avoid damage to these fittings; where possible these lights should be switched on to aid sight of their location.
- b) Location of parked aircraft/equipment and the expected aircraft movements during the period of Airside activities:- Care must be exercised to avoid damage to aircraft / equipment, both from vehicle / equipment movements and the materials being applied.
- c) Grit spreaders are to be used in such a manner as to not present hazard to members of the public or staff. In addition, they are not to be used close to aircraft.

3.4.7 AIRSIDE MEDIA:-

- **Media Holding:-**

MEDIA	MAXIMUM HOLDING	RE-ORDER TRIGGERS	ORDER DETAILS
Safegrip Plus Liquid	20,000 Litres	15,000 Litres	When the stock level falls to 15000 litres, an order to be placed for 5000 litres
Safegrip Solid Prill	6000 kgs	3,000 kgs	When the stock level falls to 3000 kg, an order to be placed for approval for 3000 kgs

- Media Suppliers:-

SUPPLIER	MEDIA	AVAILABILITY	CONTACT
Omex	- Safegrip Plus Liquid - Solid Runway De-Icer	24/7 Including PH	General Office:- Mon-Fri; 08:30 – 17:30 01526 396011 / 07970 577915 Out-of-Hours:- 01673 860961 / 07970577904 01526 396000
Peacocks	- Rock Salt	Mon – Fri 09:00 – 17:00	General Office 01292 292000
Jewson	- Rock Salt - Sharp Sand	Mon – Fri 07:30 – 17:00	General Office 01282 842000

3.4.8. WEBSITE, SOCIAL MEDIA AND COMMUNICATION:-

The Snow Co-ordinator is responsible for the Aerodrome and the responsibility for ensuring that the media and communications are maintained throughout the snow clearing activity. Passengers and the public should be kept fully aware of the state of the Airport.

A number of agreed messages are available for display on the FIDs screen and on Social Media to provide up-to-date information to customers and staff; the messages will align with the information submitted on the SNOWTAM.

The following procedure is to be followed:-

- The Airport is Snow Closed:-

Contact each of the following; advise that the Airport is snow closed and that snow clearing operations are in place; agree the next time for an update, either + 1 or 2 hours.

- a) By e-mail or telephone, Shaun Staff; Marrinan PR and Comms Ltd.;

E-Mail:- shaun@marrinanpr.co.uk

Telephone:- +44 (0) 7515 789 306

- b) By telephone, Ron Wain, Managing Director; Deep South Media

Mobile:- 07824 355523

Office:- 01202 534487

E-Mail:- ron.wain@deepsouthmedia.co.uk

Website:- www.deepsouthmedia.co.uk

- c) By telephone, Swissport Duty Supervisor; contact details listed on Internal Telephone Directory.

- The Airport is Fully Operational:-

Contact each of those listed above and update that the Airport is now open and fully operational

3.5 DETAIL OF PLAN; LANDSIDE

3.5.1 LANDSIDE INITIATION PROCEDURES:-

These procedures are divided into 3 Sections:-

- Landside Anti-Icing Procedures
- Landside De-Icing Procedures
- Landside Snow Clearance Procedures

3.5.1.1 Landside Anti-icing Procedures:-

Before making any decisions concerning the initiation of winter procedures, the Airport Duty manager is to take account of the following:-

- The latest available Weather Forecast for BOH (EGHH); Elevation 38 ft
- Any adverse Weather Warnings issued by the Met Office

ISSUE OF WEATHER WARNING	WEATHER WARNING ISSUED BY ATC TO	ACTION	COMMENT
08:00-17:00 MONDAY TO FRIDAY	– Asset Manager – Head of Technical Services – Customer Services Manager	Asset Manager to instigate Anti-Icing Procedure;	Apply pre-emptive Anti-Icing; where necessary, call-out qualified personnel to undertake winter measures
	– Swissport Duty Manager	Advise Staff / Passengers	
ALL OTHER TIMES	– Airport Duty Manager – Asset Manager – Head of Technical Services – Customer Services Manager	ADM &/or ADM to instigate Anti-Icing Procedure	CP2 staff to call-out personnel to undertake Anti-Icing measures, as required
	– Swissport Duty Manager	Advise Staff / Passengers	

On receipt of the call-out for Landside anti-Icing measures, the Engineering Team will arrive at the Airport to commence the procedures; personnel to report to the Airport Duty Manager (ADM) on arrival to establish what anti-icing measures are required.

Where anti-icing procedures have been carried out on the afternoon prior to the frost-warning period, the Engineering personnel are to inform the ADM of the occurrence to prevent unnecessary call-outs.

3.5.1.2 Landside De-icing Procedures:-

The following procedures will apply:-

- a) On receipt of the call-out for de-Icing measures, the Engineering personnel will arrive at the Airport to commence the procedures; personnel to report to the ADM to establish where de-icing measures are required.
- b) Where de-icing procedures have been carried out, the Engineering personnel are to inform the Airport Duty Manager of the relevant activity.

- c) De-icing of Landside roads, car parks and pavement areas is to be carried out after monitoring of the actual / forecast ground temperatures and actual / forecast ground conditions (i.e. damp / wet / ice etc.)
- d) If the forecast ground temperature is 0°C or below, for a period of 1 hour or more **and** there is ice accretion occurring on pavements, roads or other ground surfaces, then de-icing procedures should be initiated.

The following areas may require de-icing activity to ensure the safety of the travelling public, staff and service partners; See Appendix 6:-

- Departures Terminal approach pavements and walkways
- Arrivals Terminal approach pavements and walkways
- Car Park roads and walkways
- Main entrance roads and routes to CP2 , fuelling companies, Jets and Unit 1 areas
- West and Eastern Business Parks

3.5.1.3 Landside Snow Clearance:-

The Airport Duty manager will monitor the actual/forecast ground temperature and actual/forecast ground conditions (i.e. damp / wet / snow / ice etc.). If the forecast/actual ground temperature is 0°C or below **and** there is snow settling on exposed surfaces (roads / pavements / car parks) and de-icing procedures are not preventing the accumulation of snow, then snow clearance procedures should be initiated.

In the event that the above occurs when the Landside Snow Team are not in attendance at the Airport, the Airport Service Operatives (ASOs) are to be requested to commence immediate snow clearing of the Landside passenger areas.

The Security Supervisor is responsible for activating the Landside Snow/Ice Team. If for any reason this cannot be achieved, the following persons should be called in order until an answer is received:-

- Asset Manager
- Customer Service Manager
- Head of Technical Services

The Security Supervisor is to ensure that during the normal security patrols of the Airport, Security staff monitor the actual conditions of the surfaces both Airside and Landside. If they become aware of accretion of ice or similarly hazardous conditions, they are to notify their Supervisor immediately, who is to relay any such warnings to the ADM.

All call-out actions are to be noted in the Security Log, together with times of calls and anticipated response times. When required, the call-out of the Landside Snow/Ice Team and MT Fitter is to be facilitated using the mobile telephone numbers listed in the Emergency Call-Out List. These contact details are for internal and security distribution only; not for general distribution.

Call-outs should always be acknowledged by those being called and members of the Landside Snow/Ice Team are to report their arrival on site to the Duty Security Supervisor.

ROLE	NUMBER
Asset Manager	Telephone Numbers as detailed on the Emergency Call-Out List
Customer Service Manager	
Ground Services Co-ordinator	
Building Services Co-ordinator	
Airport Duty Manager	

- a) When responding to a call-out the members of the Landside Snow/Ice Team are to, within 10 minutes of the initial call, telephone the 24-hour Security Telephone (01202 364186) and acknowledge that they have received and are responding to the call-out. In addition, they are to provide an estimate of their arrival time at BOH.
- b) The receipt of acknowledgement of call-out by the Snow/Ice Team (GSU) with their estimated arrival time is to be passed to the Security Supervisor, who is to then relay this information to the ADM or ADM.
- c) On arrival at BOH, the members of the Landside Snow/Ice Team are to advise the Security Supervisor (Sierra 2) by radio call or by telephone (Ext 186) that they are on site; this should be a first action prior to commencing clearance duties.

3.5.2 AIRPORT DUTY MANAGER

- a) The role of the Airport Duty manager is to co-ordinate the information available concerning the prevailing / forecast winter conditions and in light of the available information, assess and initiate the best course of action, utilising suitably qualified staff drawn from the Landside working team members.
- b) When notified of forecast / actual conditions that require their attention, the ADM is to correlate the information required and assess what actions should be taken in accordance with this AOI. This may necessitate the initiation of the call-out of staff to man the Snow/Ice Team.
- c) The ADM, with consideration of all the information available to them, is to make their best judgement of requirements to meet the Landside anti-icing, de-icing or snow clearance needs
- d) The duty ADM will be clearly displayed at the information desk with the telephone number on which they can be contacted.
- e) The ADM is to liaise with the Airport Snow Co-ordinator (ASC) to ensure any issues Landside, which have the potential to impact on the safe movement of passengers and staff, deliveries and any other aspect of Airport operations, are communicated effectively.
- f) The ADM will maintain an accurate record of measures taken and remaining winter measures stock to ensure that decisions are taken to conserve this use most efficiently.

3.5.3 LANDSIDE SNOW PLAN:-

- a) When required, the Landside Snow Plan will be initiated by the ADM.
- b) The Landside Snow Plan is to be employed in such a manner as to maximise the efficiency of materials, equipment and manpower, whilst bearing in mind the operational requirements of BOH.
- c) Landside surface inspections will take place by trained staff to determine if clearance is required and this decision will be made by the ADM in co-operation with those staff.
- d) Based upon the information provided, the ADM will instigate the measures required to maintain the Airport operation. If necessary, consultation may take place with the Head of Technical Services or Air Traffic and Operations Manager. Heads of Section are to make available as many personnel as possible to the ADM to assist with the clearance.
- e) Outside normal working hours, contact the following persons in order of priority:-
 - Asset Manager
 - Customer Service Manager
 - Head of Technical Services
 - Air Traffic and Operations Manager

Call-out of further personnel to be co-ordinated with the Airport Snow Co-ordinator.

3.5.4 LANDSIDE SNOW CLEARANCE PRIORITIES:-

The ADM is to clear snow and ice as per the prioritisation of areas detailed in Appendix 5. Emphasis will be placed on prioritising those areas most trafficked by passengers and staff and their proximity to the Airport Terminal buildings as shown on the drawing:-

- Area 1 Departures Terminal Pavements
- Area 2 Arrivals Terminal Pavements
- Area 3 Car Park route to Departures and Arrivals Terminals
- Area 4 Main entrance roads and routes to CP2, fuelling companies, Jets, Unit 1 areas Other Areas West / East Business Parks.

Where snow drifts or snow banks occur, it may be necessary to use an excavator to remove accumulations. The excavator may be used in conjunction with the high-sided tipper trailers for bulk snow removal.

Due to the layout of the Terminal Building and its surrounds, BOH Terminal based staff will be required to take action to prevent or clear ice/snow on entry/exit routes, with special attention being paid to fire exit routes and walkways. This will include the spreading of Rock Salt grit in Landside areas and the spreading of Urea and/or airside grit in Airside areas. In addition, snow clearance by hand may also be required. These operations should be carried out under the direction/co-ordination of the ADM.

3.5.5 LANDSIDE VEHICLES AND EQUIPMENT:-

The following vehicles and equipment available for Landside winter procedures include:-

The towing of the salt spreader will be carried out by the Nissan Xtrail, FL 256 (primary vehicle) or in extreme situations by the VW Touareg, FL 308 (secondary vehicle). The MT Supervisor holds spare keys to FL 308 and this vehicle will only be used if the primary vehicle is unavailable.

If additional / replacement equipment is required, this can be supplied as follows:-

ITEM	SUPPLIER	AVAILABLE FOR HIRE PLANT	CONTACT NUMBER
1H	Dampney	Tractor & Road Brush	07831 146217
2H		JCB Loading Shovel	
3H		Tractor & Vacuum Sweeper	

Hand held equipment includes:-

- Turbocast 300 Grit Spreader; Held in by ADM on Apron
- Snow Shovels
- Brooms
- Grit Dispensers; located at strategic points (Monitored and Maintained by Engineering)

This equipment and PPE will be held in the Landside Winter Store.

3.5.6 LANDSIDE SAFETY:-

- Personal Protective Equipment (PPE):-

Individuals are responsible for the maintenance and use of the correct PPE appropriate to the task, including equipment operation and handling of materials. PPE must be worn where appropriate and safe systems of work employed at all times.

PPE includes:-

- Gloves (for use with chemical/abrasive materials)
- Face Masks (for use with chemical/dusty materials)
- Goggles/Eye Protection
- Hi Visibility Clothing
- Foot Protection
- Head Protection

All Landside activities are to be carried out in accordance with all designated Landside safety measures. Prior to commencement of activities, equipment operators are to be aware of the following:-

- a) The importance of the ground surfaces and ground fixed equipment:- Care must be exercised to avoid damage to these fittings.
- b) The locations of parked cars and equipment and the expected movements of passengers, staff and service partners during the period of Landside activities.

- c) Care must be exercised to avoid damage to vehicles /equipment, both from Vehicle/equipment movements and the materials being applied.
- d) Grit spreaders are to be used in such a manner as to not present a hazard to members of the public or staff. In addition, they are not to be used close to parked vehicles.

3.5.7 LANDSIDE MEDIA:-

- Media Holding:-

MEDIA	MAXIMUM HOLDING	RE-ORDER TRIGGERS	ORDER DETAILS
Landside De-icer Rock Salt	10 Tonnes	7 Tonnes	Minimum stock level will be 7 Tonnes; when the level falls to 7 Tonnes, an order to be placed for required Tonnes to restore holding to 10 Tonnes

- Media Usage:-

ITEM	MATERIAL	COMMENTS
1	Sharp Sand	For Landside use only; May be used to provide additional traction/grip <i>Hand application only</i>
2	Rock Salt	For Landside use only; May be used for anti-icing and de-icing requirements <i>Automated spreading to be constantly monitored to ensure a consistent application</i>
3	Ice Breaker	May be used for Landside areas in small quantities to enhance ice dispersal in areas adjacent to the Terminal Building Not to be spread on dry, ice free surfaces due to the possibility of it causing a slip hazard <i>Automated spreading to be constantly monitored to ensure a consistent application.</i>

These materials should be used in accordance with these instructions and PPE appropriate to the associated COSHH assessments.


3.6 POST SNOW CLEARANCE INSPECTIONS

During the process of snow clearance and de-icing activity, it is possible that essential equipment may become unserviceable or surfaces damaged. In order to ensure that repairs can be instigated at the earliest opportunity, a full and detailed inspection of Landside Areas is to be carried out as soon as ground conditions are suitable to permit an effective inspection being completed.

The inspection will be conducted by 2 members of the Engineering Team who will conduct a slow and detailed inspection of all areas where snow clearing activities have taken place, logging all damage and any areas where ground surfaces appear to be damaged or failing.

On completion, this report is to be submitted to the Asset Manager (AM), who will prioritise the report items and ensure that all items, that could have an impact on safety, are repaired as a matter of the highest priority. The remaining items are to be incorporated into the routine maintenance program.

APPENDIX 1A

	SNOW CLEARANCE REPORTING FORM
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DATE:-		TIME (L):-		REPORTER:-	
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COMPLETED FORM TO BE PASSED TO ATC FOR SNOWTAM ISSUE

CLEARED RUNWAY LENGTH (D):- ("Full" or Length in m)	
--	--

SNOW BANKS (J)	DIST FROM EDGE	M	DIST FROM EDGE	M	DIST FROM EDGE	M	SNOW BANKS (J)	
	HEIGHT *	CM	HEIGHT *	CM	HEIGHT*	CM		
NOT CLEARED	DEPOSITS (F)		DEPOSITS (F)		DEPOSITS (F)		NOT CLEARED	
08	CLEARED WIDTH (E)	M	CLEARED WIDTH (E)	M	CLEARED WIDTH (E)	M	26	
	THRESHOLD	DEPOSITS (F)		DEPOSITS (F)		DEPOSITS (F)		
		BREAKING ACTION (H)		BREAKING ACTION (H)		BREAKING ACTION (H)		
NOT CLEARED	DEPOSITS (F)		DEPOSITS (F)		DEPOSITS (F)		NOT CLEARED	
SNOW BANKS (J)	HEIGHT *	CM	HEIGHT*	CM	HEIGHT*	CM	SNOW BANKS (J)	
	DIST FROM EDGE	M	DIST FROM EDGE	M	DIST FROM EDGE	M		

* REPORT HEIGHT ONLY IF 10 CM OR MORE

[Letters in Brackets refer to the SNOWTAM Form for ATC use]


REPORTER'S SIGNATURE:-		ROLE:-	
CO-SIGNATURE:-		PRINT NAME:-	

LEGEND:-

DEPOSITS	
OBSERVATION	CODE
Clear & Dry	Nil
Damp	1
Wet or Water Patches	2
Rime or Frost Covered (depth less than 1mm)	3
Dry Snow	4
Wet Snow	5
Slush	6
Ice	7
Compacted or Rolled Snow	8
Frozen Ruts or Ridges	9

BREAKING ACTION	
ESTIMATED CONDITION	CODE
Good	5
Medium / Good	4
Medium	3
Medium / Poor	2
Poor	1
Unreliable	9

APPENDIX 1B

	SNOW CLEARANCE REPORTING FORM (COMPLETED EXAMPLE)
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DATE:-	4 DEC 14	TIME (L):-	06:40	REPORTER:-	JACK FROST
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COMPLETED FORM TO BE PASSED TO ATC FOR SNOWTAM ISSUE

CLEARED RUNWAY LENGTH (D):- ("Full" or Length in m)	Full
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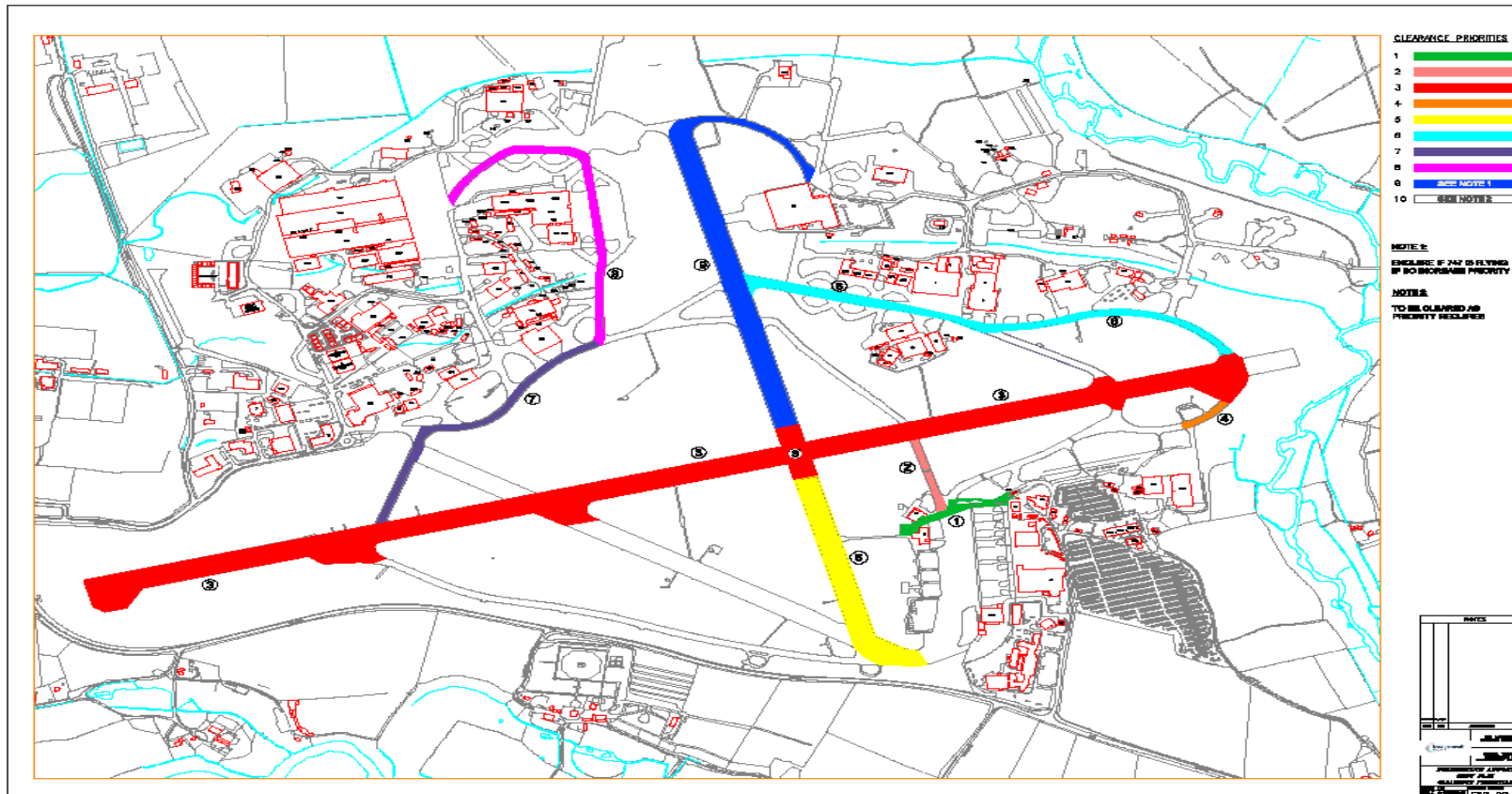
SNOW BANKS (J)	DIST FROM EDGE	5 M	DIST FROM EDGE	5 M	DIST FROM EDGE	- M	SNOW BANKS (J)
	HEIGHT *	10 CM	HEIGHT *	- CM	HEIGHT*	- CM	
NOT CLEARED	DEPOSITS (F)	6	DEPOSITS (F)	6	DEPOSITS (F)	1	NOT CLEARED
08 THRESHOLD	CLEARED WIDTH (E)	30 M	CLEARED WIDTH (E)	35 M	CLEARED WIDTH (E)	35 M	26 THRESHOLD
	DEPOSITS (F)	2	DEPOSITS (F)	2	DEPOSITS (F)	1	
	BREAKING ACTION (H)	3	BREAKING ACTION (H)	3	BREAKING ACTION (H)	4	
NOT CLEARED	DEPOSITS (F)	6	DEPOSITS (F)	5	DEPOSITS (F)	5	NOT CLEARED
SNOW BANKS (J)	HEIGHT *	- CM	HEIGHT*	- CM	HEIGHT*	- CM	SNOW BANKS (J)
	DIST FROM EDGE	3 M	DIST FROM EDGE	4 M	DIST FROM EDGE	4 M	

* REPORT HEIGHT ONLY IF 10 CM OR MORE

[Letters in Brackets refer to the SNOWTAM Form for ATC use]

REPORTER'S SIGNATURE:-	Jack Frost	ROLE:-	Fire Officer
CO-SIGNATURE:-	Mike Snow	PRINT NAME:-	Mike Snow

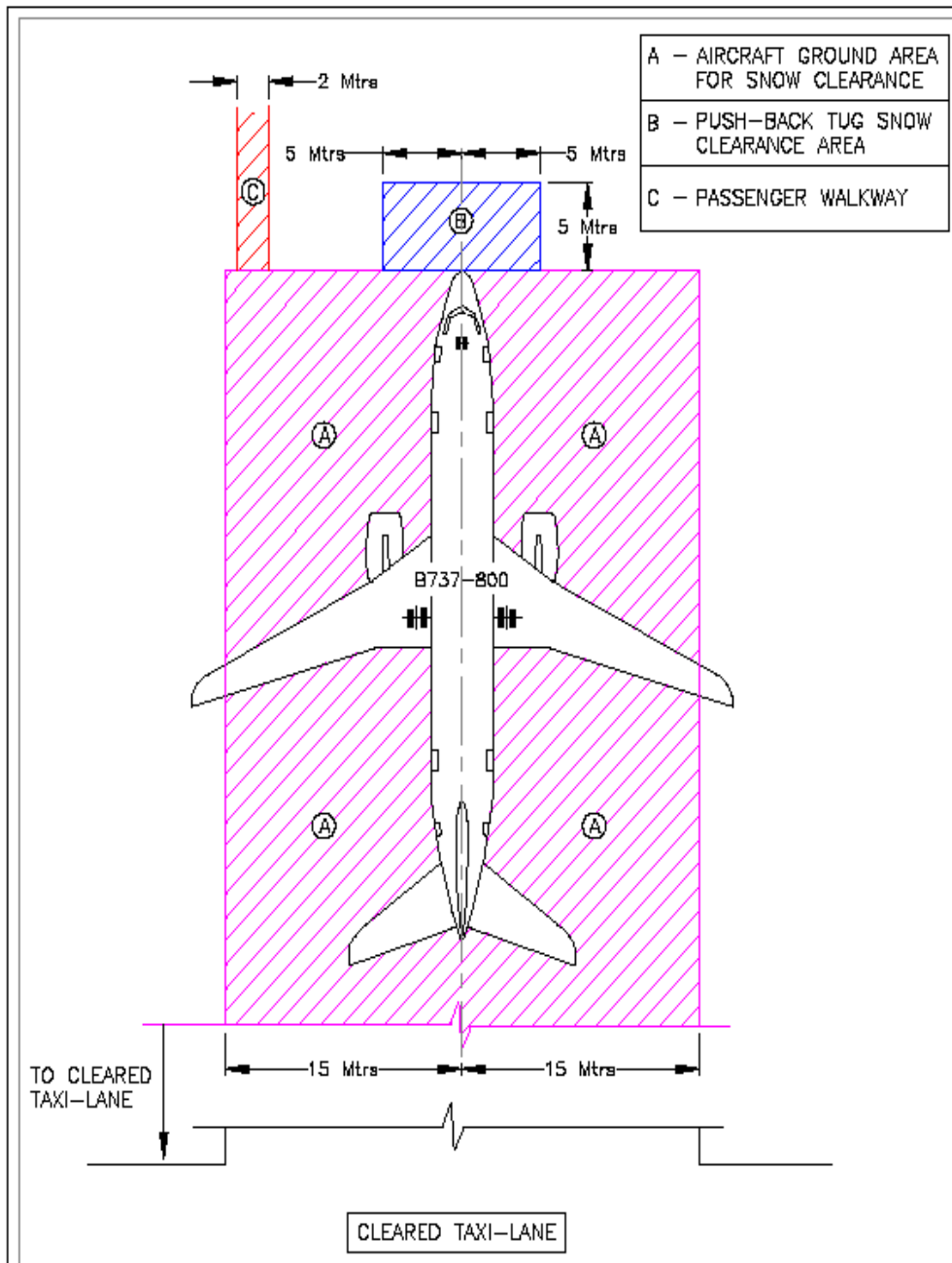
APPENDIX 2 AIRSIDE SNOW CLEARANCE AREAS




APPENDIX 3 APRON CLEARANCE



APPENDIX 4 APRON STAND CLEARANCE AREA



<i>APRON STAND CLEARANCE</i>		 ROB GOLDSMITH MANAGING DIRECTOR
DRAWN <i>ASF</i> SCALE <i>NTS</i> CAD PLOT <i>AutoCAD</i>	DRAWING NUMBER E21-3	

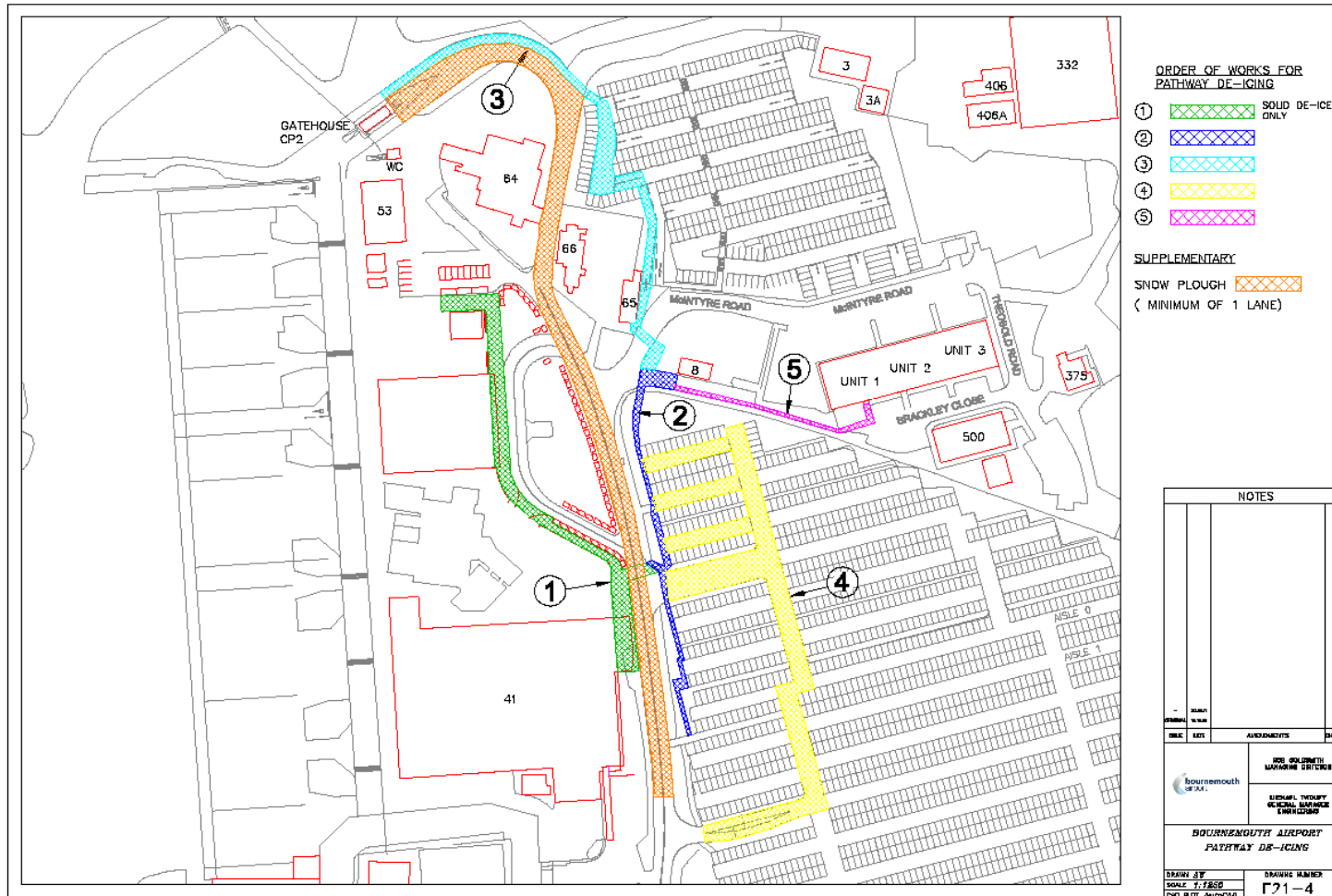
APPENDIX 5 SNOW CLEARING VEHICLES AND EQUIPMENT

ITEM	FLEET NO	PLANT	EQUIPMENT	REFERENCE
1	TRA 001	John Deere Tractor	Fitted with Bunce Mikro Sweeper / Blade – FL233 <i>or</i> Bunce Mikro Sweeper Brush / Blade	AOP 12; 56 AOI 7; 12; 13
2	TRA 002		Fitted with Bunce Mikro Sweeper / Blade – FL233	
3	TRA 003	Ford Tractor	Fitted with Bunce Mikro Sweeper Brush – FL195 or for Landside use, Teagle Spreader-FL174/2	
4	TRA 005	Massey Tractor		
5	GSU 001	Honda Quad	Fitted with 3 m boom sprayer 90 litre	AOP 56 AOI 7; 12; 13
6	PLA 001	Johnston Sweeper	Road Sweeper	AOP 11; 56 AOI 7; 12; 13
7	PLA 002	Johnston Sweeper		
8	PLA 004	Caterpillar		
9	CAR 001	VW 4 x 4	Toureg Snow Co-ordination Vehicle	
10	CAR 002	Nissan 4 x 4	XTrail for towing Romaquip + Snow EX	AOP 25; 56 AOI 7; 12; 13
11	SNO 001	Bunce 2.15m	Snow blade and brush; fits to tractor front	AOP 12; 56 AOI 7
12	SNO 002	Bunce 3.0m		
13	SNO 003	Bunce 2.15m		
14	SNO 004	Bunce 3.0m		
15	SNO 005	Teagle	Twin-disc Prill spreader; fits to rear of tractor	
15	SNO 006	Romaquip	Rock salt spreader; tow with Nissan XTrail	
16	SNO 007	Glasdon	Turbocast push Prill spreader front	AOP 56 AOI 7
17	SNO 008			
18	SNO 009			
19	SNO 010	Snow Ex	Mini Pro 60 kilo small tow spreader front	AOP 12; 56 AOI 7
20	SNO 013	Sicard	Snow rotating brush / blower front	AOP 21; 56 AOI 7
21	SNO 014			

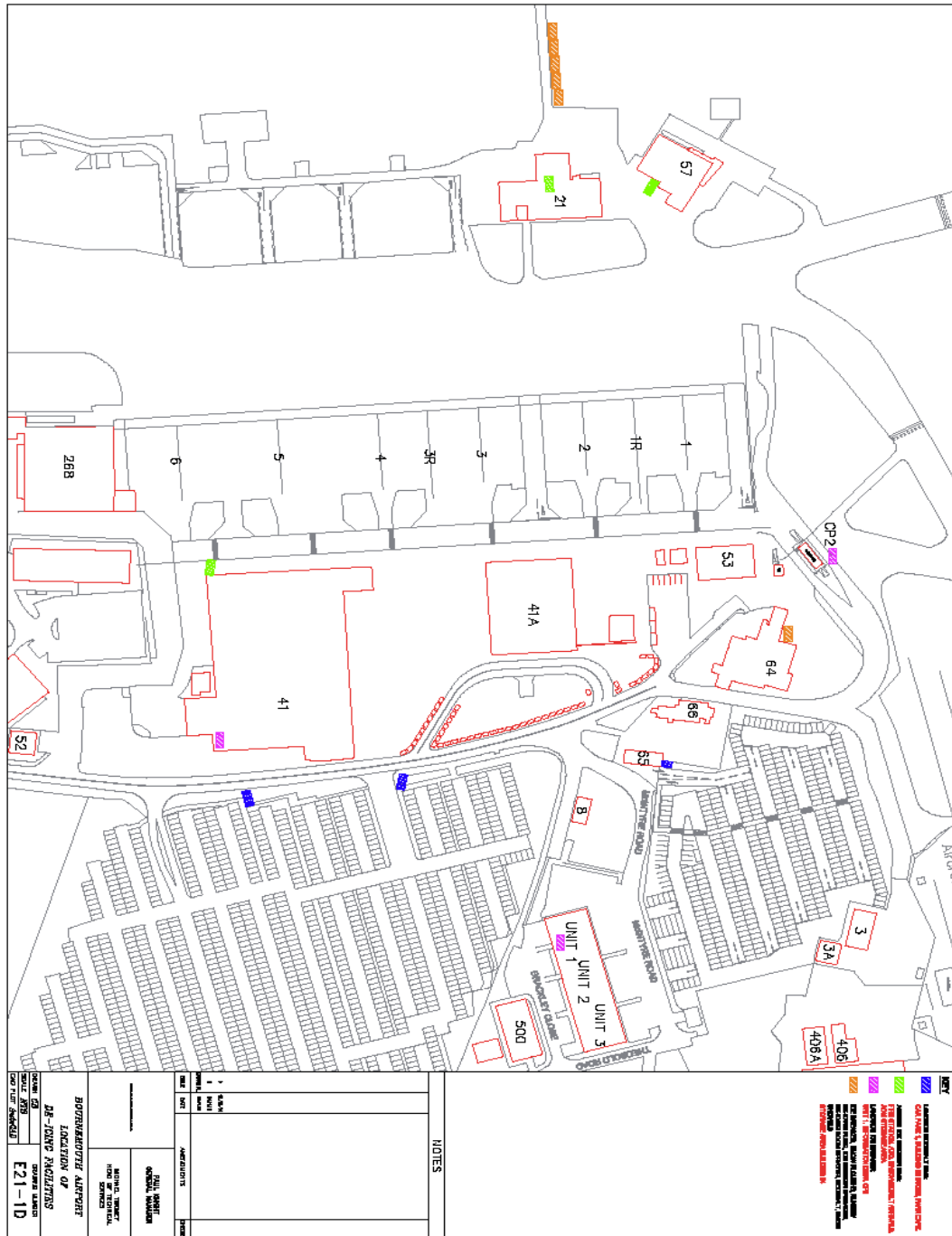
AIRSIDE USE ONLY

LANDSIDE USE ONLY

APPENDIX 6 LANDSIDE SNOW CLEARANCE PLAN



APPENDIX 7 STORAGE LOCATIONS OF DE-ICER MEDIA



ANNEX A RUNWAY ASSESSMENT MATRIX

REF:- CAP 1168; UKGM3

DEPTH	WATER	SLUSH	SNOW (WET)	SNOW (DRY)	COMPACTED SNOW (ANY DEPTH)	ICE / RIME	FROST
>19MM	FLOODED	STOP	STOP	STOP	WARMER THAN -15C; MEDIUM -15C & COLDER; GOOD TO MEDIUM	POOR	N/A
>13MM ↑ 19MM	FLOODED	STOP	STOP	STOP			
>3MM ↑ 13MM	MEDIUM TO POOR	MEDIUM TO POOR	MEDIUM	MEDIUM			GOOD
0MM ↑ 3MM	GOOD	GOOD	GOOD	GOOD	REFER TO CAP 1168 FOR CAUTIONARY NOTE		GOOD
DRY	THE RUNWAY IS NOT AFFECTED BY WATER, SLUSH, SNOW, ICE OR FROST						

