FIRE PREVENTION PLAN

The Royal Mint Ltd
EPR/KP3135KV

Prepared By:
Sol Environment Ltd

Date:
August 2022

Project Ref:
SOL_21_P049_RYM

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VERSION CONTROL RECORD			
Contract/Proposal Number:		SOL_21_P049_RYM	
Authors Name:		Sophie Rainey	
Signature:			
Issue	**Description of Status**	**Date**	**Reviewer Initials**
1	First Submission to NRW	11th August 2022	SMB

CONTENTS

1 Introduction

1.1 Introduction

This document has been prepared by Sol Environment Ltd on the behalf of Royal Mint Ltd for the operation of a WEEE Processing and Recovery Plant at their existing site in Pontyclun, South Wales.

The document provides a structured framework approach in effectively preventing potential fires associated with the processing and storage operations at the site.

This Fire Prevention Plan document (referred hereafter as the 'FPP') has been produced in accordance with Natural Resources Wales Guidance Note 16 Fire Prevention & Mitigation Plan Guidance – Waste Management (August 2017).

This Fire Prevention Plan meets the fundamental objectives of the FPP Guidance as it demonstrates that the site can:

- Minimise the likelihood of a fire happening;
- Aim for fire to be extinguished within 4 hours; and
- Minimise the spread of fire within the site and to neighbouring sites.

1.2 Structure of the Fire Prevention Plan

This FPP has been structured in accordance with the NRW Fire Prevention Plan Guidance and considers the following relevant aspects of the facility:

- Managing Common Causes of Fire;
- Preventing Self Combustion;
- Managing Waste Piles;
- Preventing Fire Spreading;
- Quarantine Area;
- Detecting Fires;
- Supressing Fires;
- Firefighting Techniques;
- Water Supplies;
- Managing Fire Water; and
- During and after an Incident.

1.3 Status of the Fire Prevention Plan

The FPP is a "live" document and will form part of the key environmental management document for the facility. All monitoring procedures, responsibilities and compliance actions will be updated as and when required.

2 SITE BACKGROUND

2.1 Site Setting

The Royal Mint Ltd intend to operate a WEEE Processing and Recovery Plant at their existing permitted facility. The facility is regulated in accordance with the requirements of the Environmental Permitting Regulations, under the conditions of the Environmental Permit (EPR/EP3135KV). Due to the site accepting WEEE the site is required to have a Fire Prevention Plan.

The WEEE Processing and Recovery Plant will process approximately 4,000 tonnes per annum of printed circuit boards and selected electronic and electrical equipment residues using the following key stages:

- De-soldering and associated scrubbing plant;
- Component / Board Separation;
- Board Shredding and Processing;
- Surface Gold Reactor and associated scrubbing plant; and
- Granulation and Separation.

The total incoming WEEE storage capacity on site is approximately 114m^3.

The location of the subject Site is shown on Figure A1, Annex A, centred at approximate National Grid Reference ST 03803 84930. The proposed site layout is shown in Figure A2.

The majority of the proposed process will take place within the existing (and former) MRB building as shown in Figure 1.2 , with the Surface Gold Reactor being located in an existing building to the east of the site.

The nearest residential receptor is located to the north-east and at a distance of 50m.

Areas of natural and unmade ground are shown on the site layout provided in Annex A.

The Natural Resources Wales flood risk map indicates that the site lies within an area where there is a low risk of flooding from rivers and the sea.

Although the site is not considered to be highly sensitive in terms of proximity, the facility has been designed to prevent and mitigate the offsite impacts associated with fire as far as practically possible.

The wind direction is predominantly from the south west.

3 FIRE PREVENTION PLAN

This Fire Prevention Plan has been developed to include an assessment of fire risk on site and the measures in place to prevent, detect, suppress, mitigate and contain fires.

This plan forms part of Royal Mints management system and sets out the fire prevention measures and procedures that will be put in place and used on site.

All staff and contractors working on site will understand the contents of the Fire Prevention Plan and what they must do during a fire.

The Fire Prevention Plan will be kept in the Site Office and all staff will be aware of where it is kept.

Regular exercises will be carried out to test how well the plan works and that staff understand what to do. These exercises will take place every quarter.

Please note, due to the nature of the wastes stored on site, self-combustion is considered extremely unlikely. The incoming wastes are coated with a fire retardant and all batteries will be removed prior to arrival on site, therefore there is a very low risk of fire.

In accordance with the Guidance, Royal Mint store the following ***potentially*** combustible waste materials:

- Waste electrical and electronics equipment (WEEE).

The following wastes relevant to the guidance are produced by the process:

- Tin Alloy;
- Ferrous Metals;
- Aluminium;
- Copper;
- Mixed Metals;
- Integrated Circuit and Surface Mount Devices; and
- Circuit Board Powder for pyrolysis.

This material will be stored in flexi bags or enclosed skips within the building.

3.1 Control of Potential Causes of Fire

The following table identifies common causes of fire and the measures that Royal Mint take to reduce the risk.

Table 3.1 Control of Potential Causes of Fire

Source of Fire	Applicability to Site and Proposed Management Controls	Residual Risk
Arson	The site is currently manned 24/7. Site access is via security. The site has secure fencing along the site boundary. Daily inspection of the site fencing and gates will be undertaken and recorded. The site is also equipped with CCTV monitoring. Any fire would be quickly identified by the sites visual inspection programme and fire detection equipment. No smoking material is allowed on site.	VERY LOW
Plant and Equipment	The site has a regular inspection and maintenance programme which will identify any electrical or mechanical machinery faults which could result in a machinery fire. All site plant and equipment is subject to regular inspection, service and maintenance agreements in conjunction with the equipment supplier's recommendations. Mobile plant will be stored in dedicated bays when not in use or in safe areas on the shopfloor as they are used on a 24/7 basis. All machinery is visually inspected as per FPP-E01 – Site Walkover Inspection. Machinery is regularly cleaned to remove any dust etc to ensure that it does not accumulate on moving parts. All relevant machinery on site has fire suppression. Site vehicles are fitted with fire extinguishers with the potential for sparks regularly being monitored by site staff.	VERY LOW
Electrical Faults Including Damaged or Exposed Electrical Cables	The risk of damaged or exposed electrical cables is controlled via a regular inspection and maintenance programme. Any fixed electrical installation on site are fully certified by a qualified electrician.	VERY LOW
Discarded Smoking Materials	Staff and visitors are only permitted to smoke off site. There is no smoking permitted on site.	VERY LOW
Hot Works	No hot works are permitted without a permit to work being issued and site management being made aware of the work. The hot works will be located at a safe distance from combustible	VERY LOW

	materials. The activity will be very closely managed and with the presence of a fire watchmen.	
Industrial Heaters	The site will have written procedures that set out the use and regular maintenance of industrial heaters.	VERY LOW
Hot Exhausts	The site has a regular inspection and maintenance programme which identifies any signs of a fire caused by dust settling on any hot exhausts and engine parts. This is carried via visual checks throughout the day as well as at the end of the working day. All inspections are carried out as per FPP-E01 – Site Walkover Inspection. Machinery is regularly cleaned to remove any dust, waste etc to ensure that this does not accumulate on moving parts.	VERY LOW
Ignition Sources	Any ignition sources on site will be kept at least 6 metres away from the stored waste on site.	N/A
Leaks and Spillages of Oil and Fuels	The prevention of fuels and oil leaking out from site vehicles will be achieved by the regular inspection and maintenance programme. If there are any leaks, the regular inspections allow this to be dealt with straight away. Spill kits are provided throughout the site. All staff are trained on how to use the spill kit as well as the procedures to carry out in the event of a spillage.	VERY LOW
Build-up of Loose Combustible Waste and Dust	The site has a regular inspection and maintenance programme which will identify any build up of wastes and dust. Machinery is regularly cleaned to remove any dust etc to ensure that it does not accumulate on moving parts. The site is inspected at least twice a day in accordance with the sites inspection procedure (FPP-E01). Any build up of waste and dust would be identified during the inspection. If any dust etc was identified then the area would be immediately cleaned (swept, blown down etc). Additionally, at the end of every shift the site is cleaned. All inspections are logged on the Site Walkover Inspection Form (Form 1 – Site Walkover Inspection). All forms are stored in the site office.	VERY LOW
Reactions Between Wastes	All waste is accepted on site in accordance with the sites Waste Acceptance Procedures. This ensures that no incompatible or unstable wastes will be accepted on site. In the unlikely event of incompatible wastes being accepted on site, wastes will be transferred to the quarantine area before removed off site.	VERY LOW
Hot Loads	Royal Mint do not receive hot loads.	N/A
Batteries and capacitors	The product will arrive with batteries removed. This will be achieved via quality check on its arrival.	LOW

3.2 Preventing Self-Combustion

3.2.1 Managing Storage Time

Royal Mint will only be accepting WEEE wastes on site. The wastes will be stored in two separate areas:

- The waste reception bay; and
- Waste in process (WIP) bay.

Waste will only be stored in the waste reception bay and WIP bay for one day.

The process wastes will be held until sufficient quantities are collected for economical transport however this will not exceed 3 months.

All storage durations on site are within the stipulated maximum storage times within Table 1 of the NRW Guidance.

Royal Mint will track all material flow through the site to ensure that the storage times specified in this plan are adhered to. All material is tracked daily and will be processed through the site on a 'first in – first out' principle.

All storage bays will be managed to ensure full stock rotation is achieved. As stated above, the wastes will only be stored for 1 day before processing. No older material will be left within the storage area.

For all incoming waste, the location in the building and the first date when the material is added is recorded on the site waste tracking system and uploaded to the company IT system.

A twice daily review of the storage area and process inventory will be made by the Site Manager in accordance with procedure *FPP-E01 – Site Walkover Inspection.*

Waste will be received and accepted in accordance with the established site waste acceptance and rejection procedures which are provided within *Annex C – Procedures*. The procedures dictate that all wastes are required to be stable, non-reactive and solid in nature.

3.3 Manage Waste Piles

3.3.1 Maximum Pile Sizes

The storage arrangements on site have been designed in accordance with Natural Resources Wales Guidance Note 16 Fire Prevention & Mitigation Plan Guidance – Waste Management. Please refer to Table 3.2 below which details the storage areas on site.

Table 3.2: Waste Storage Information				
Area ID	Description	Products stored in the area	Separation distance required from other internal storage areas as per guidance / Graph 2.	Comments
WEEE Reception	Stored in Bay 8m x 8.1m The wastes will be stored 1.5m high Approximate volume: 98.4m^3	WEEE wastes Incoming WEEE wastes predominantly stored in flexible bulk containers or bags and strapped to a euro size pallet	No separation distance required due to use of 2.5m fire wall	• All incoming waste is stored in this bay where it will be inspected prior to transfer to the WIP bay. • This bay can hold 36 pallets.
WIP Bay	Stored in Bay 4.4m x 8.1m The wastes will be stored 1.5m high Approximate volume: 53.5m^3	WEEE wastes WEEE wastes predominantly stored in flexible bulk containers or bags and strapped to a euro size pallet	No separation distance required due to use of 2.5m fire wall	• Waste is stored in this bay prior to transfer to the processing equipment. • This bay can hold 20 pallets.
Total Incoming Storage: 151.9m^3				

3.4 Prevent Fire Spreading

3.4.1 Separation Distances

Due to the use of concrete fire walls, separation distances are not required.

3.4.2 Fire Walls and Bays

The bays are constructed using 'Legio' block fire walls, ensuring a 1m freeboard at all times. The walls will offer a fire resistance period of at least 120 minutes.

Royal Mint will keep records of the material stored within the storage areas to ensure that not storage times are exceeded. All material is tracked daily and will be processed through the site on a 'first in – first out' principle.

Due to the storage arrangements and the nature of the wastes stored on site, temperature monitoring is not considered necessary. Additionally, no wastes will be stored for longer than 3 months.

In the event of a fire being detected, as long as it is safe to do so, pallets would be removed to the quarantine area where it would be cooled.

A trained site operative will carry out a visual inspection twice daily in accordance with *Procedure FPP-E01 – Site Walkover Inspection* to ensure that all areas are being managed correctly and in line with the Fire Prevention Plan.

3.4.3 Seasonality and Waste Stack Management

The materials stored on site are not subject to seasonal variation.

Royal Mint will track all material flow through the site to ensure that the storage times specified in this plan are adhered to. All material is tracked daily and will be processed through the site on a 'first in – first out' principle.

3.4.4 Monitor and Control Temperature

Due to the nature of the wastes being stored and the fact that no wastes are stored for longer than 3 months, temperature monitoring is not considered necessary.

There will be no loose piles of waste stored on site.

If waste is processed through the waste processing equipment, all waste will be cooled before storage prior to export off site.

A trained site operative will carry out a visual inspection on site twice daily in accordance with *Procedure FPP-E01 – Site Walkover Inspection* to ensure that the storage areas are being managed correctly.

Due to the storage arrangements, turning of waste is not considered necessary.

3.5 Detecting Fires

The site has the following existing fire controls for detecting a fire:

- Dedicated fire marshals;
- Manual fire alarm activation which the buildings;
- Fire / emergency protocols controlled by security;
- CCTV which is monitored 24/7; and
- Physical fire warden checks.

Any fires on site would be immediately identified. In the event of a fire, a member of staff will immediately raise the alarm and then contact the emergency services.

A trained site operative will carry out a visual inspection on site twice daily in accordance with *Procedure FPP-E01 – Site Walkover Inspection* to ensure that the Processing Building is being managed correctly and that all detection systems are working correctly.

3.6 Fire Extinguishers

Although waste is stored within a building, the nature of the operations on site and the general low risk combustibility of the waste types stored, a suppression system is not considered necessary.

There is a sufficient number of fire extinguishers located throughout the premises which are all mounted on wall brackets. A fire extinguisher schedule is kept on file to ensure that all extinguishers are regularly inspected.

3.7 Fire Fighting Techniques

The site has been designed in order to allow active firefighting.

An off-site emergency information pack will be provided in a box on the main gate into the site and contains emergency contact numbers, a site plan and copy of this FPP.

The fire access route shown on the site plan will be inspected as part of the site walkover inspections to ensure that safe access to the site for fire and rescue services and other emergency responders is always achieved. In the event that anything is blocking the route, it will be immediately flagged to the Site Manager and removed.

The sites main entrance is on the southern boundary of the site however there is an alternative entrance on the western boundary of the site. The access points will remain clear at all times and also be checked as part of the site walkover inspections.

Upon identifying or being made aware of a fire, the site manager will raise the alarm, alert all present on site to the fire and its location and alert emergency services.

The site will be evacuated in accordance with the site evacuation plan with exception of those staff involved in active fire fighting.

All staff, contractors and visitors would follow the Fire Evacuation procedure as included in Section 3.10 below.

Staff will only tackle the fire using the fire extinguishers if it is safe to do so. If not safe to do so, staff are to await the Fire and Rescue Service (FRS), who would then take the appropriate actions.

All personnel working on site will be provided training in the Fire Prevention Plan and all associated procedures and controls.

The FPP training will be provided to all new starters and temporary employees working at the site.

FPP refresher training will be carried out to all personnel at least annually.

3.8 Fire Evacuation

The site has designated fire assembly points and internal assembly points as shown on the site plan provided within *Annex A*.

Sites rules are reinforced via use of fire drills and planned response scenarios.

All personnel to follow the instructions of the Fire Marshals and the Site Manager.

A list of trained Fire Marshals is maintained and displayed on the site.

The Fire Evacuation Procedure is provided to staff, contractors and visitors which states:

- On discovery of a fire, immediately operate the fire alarm by pressing the nearest break glass call point and / or contact the Site Manager via a radio to ensure the alarm is raised;
- Fire Marshals and staff must only tackle the fire if they are trained to do so, the equipment is appropriate and if their safety or that of others is not compromised.
- Leave the building / work area by the nearest available exit / safe route and report directly to the assembly point located opposite the weighbridge.

- Leave quickly but in a calm, controlled and orderly manner. Do not detour to collect personal items;
- Do not re-enter the building / work area for any reason until authorisation has been given by the Site Manager / Fire Brigade.
- The Site Manager will assess the situation and call the Fire and Rescue Service if required.

This document is reviewed and updated annually, or sooner if required. The document details all hazards and the control measures that are in place and / or required to prevent fires.

The site has a dedicated emergency plan which is provided within *Annex D – Emergency Plan*.

3.9 Water Supplies

The site has a dedicated fire hydrant ring as shown on the site plan provided within *Annex A – Site Plan.*

The fire hydrants are connected to a mains water supply and would provide a continuous supply of water in the event of a fire.

All hydrants are easily accessible for the fire service.

3.10 Managing Fire Water

In the event of a fire within the WEEE storage areas, all fire water would be contained within the building and will be captured within the containment sumps within the building. The containment sumps consist of the following:

- Services Trench: 38m^3;
- Tandem Mill: 40.88m^3;
- Ebner Pits: 14.402m^3;
- Mill Coolant Pit: 166.26m^3;
- Cot Turner Pit: 6.3m^3.

The fire water will be removed via tanker from the on-site surface water drainage system which will transport the water offsite to an appropriate treatment facility.

Using the NRW fire water calculation guidance and based on a pile size of 70.2m^3, the site would need to supply and contain 84,240 litres of firewater. The above demonstrates that the site meets this requirement.

3.11 Quarantine Area

The site is equipped with an quarantine bay which is located adjacent to the waste reception bay.

The quarantine area has been designed to hold 82.8m^3 (8m x 6.9m x 1.5m) which is in excess of the FPP Guidance requirements.

The location of the quarantine area is identified on the site plan provided within *Annex A – Site Plan.*

3.12 During and After an Incident

During an Incident

During any fire fighting or subsequent clear up operations, any incoming wastes will be diverted to an alternative waste processing site.

In the event of a fire that may impact the sensitive receptors, the nearby residential receptors will either be contacted via phone or trained site operatives will knock on the residents' doors to make the residents aware.

After an Incident

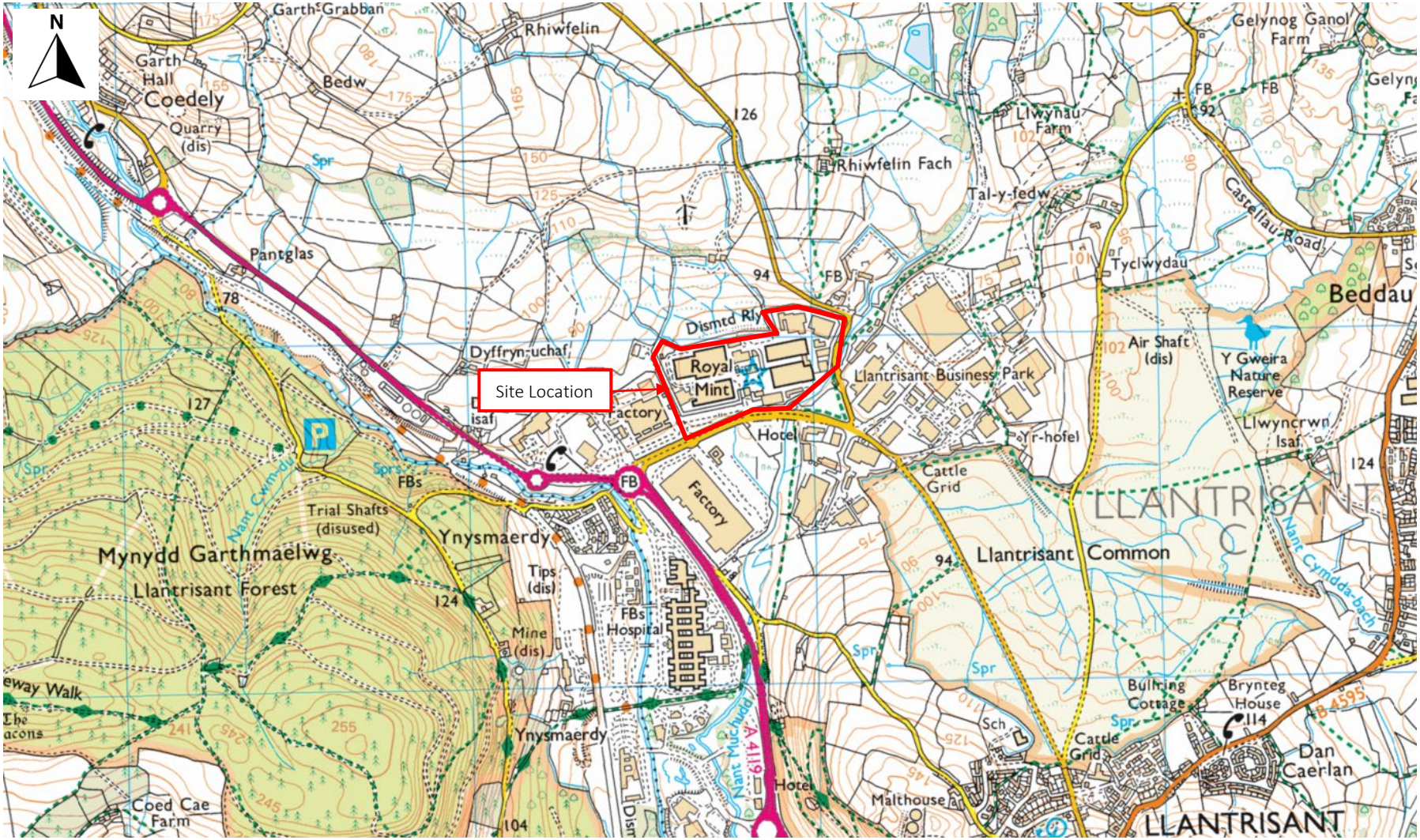
The site will be thoroughly cleaned after an incident. Any charred / partially combusted / combusted products will be disposed of an appropriate facility. It is anticipated that the clearing of combusted material will not take long, as the company are confident that any fires will be appropriately controlled and therefore will not result in significant volumes of burnt waste.

All fire water will be captured by the drainage system and transferred off site via tanker and appropriately disposed of.

All equipment will be checked for any fire damage. In the event that any equipment has been damaged, it will be removed from site and fixed / replaced as soon as possible.

This ensures that the impact to the community, infrastructure and the environment is minimal.

ANNEX A: SITE PLANS



1. Do not scale off this drawing 2. All dimensions to be confirmed on site 3. This drawing is copyright of Sol Environment Ltd 4. This drawing is to be read in conjunction with relevant consultant drawings and specifications	**Rev:**	**Date:**	**Desc:**	**Client:**	THE ROYAL MINT LTD	**Job No:**	SOL_21_PO49_RYM
	0	July 22	Original	**Project:**	PERMIT APPLICATION	**Date:**	JULY 22
				Drawing Title:	SITE LOCATION	**Drawn By:**	SOPHIE RAINEY

Drawing No:	RM01	
Revision:	0	
Scale:	NTS	

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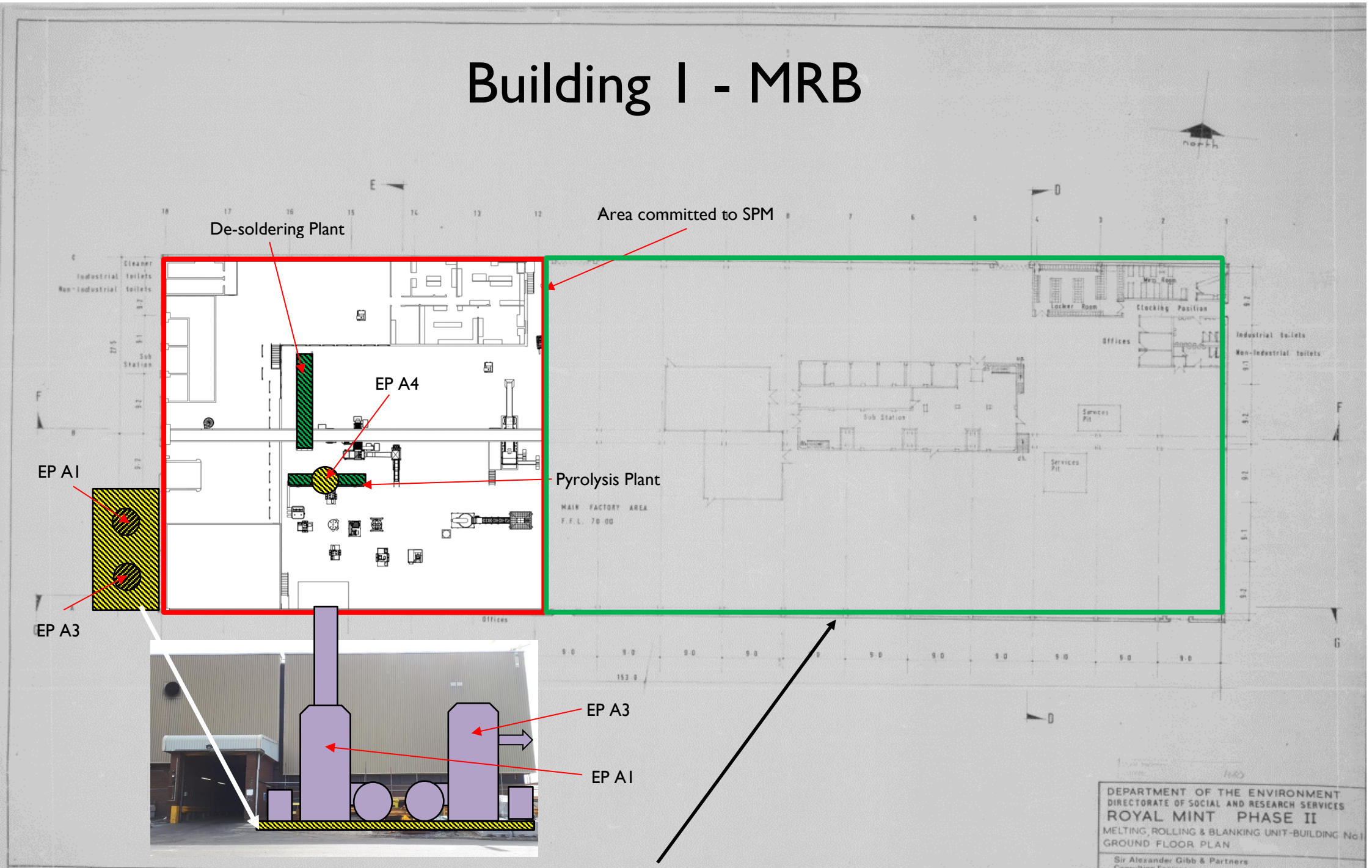
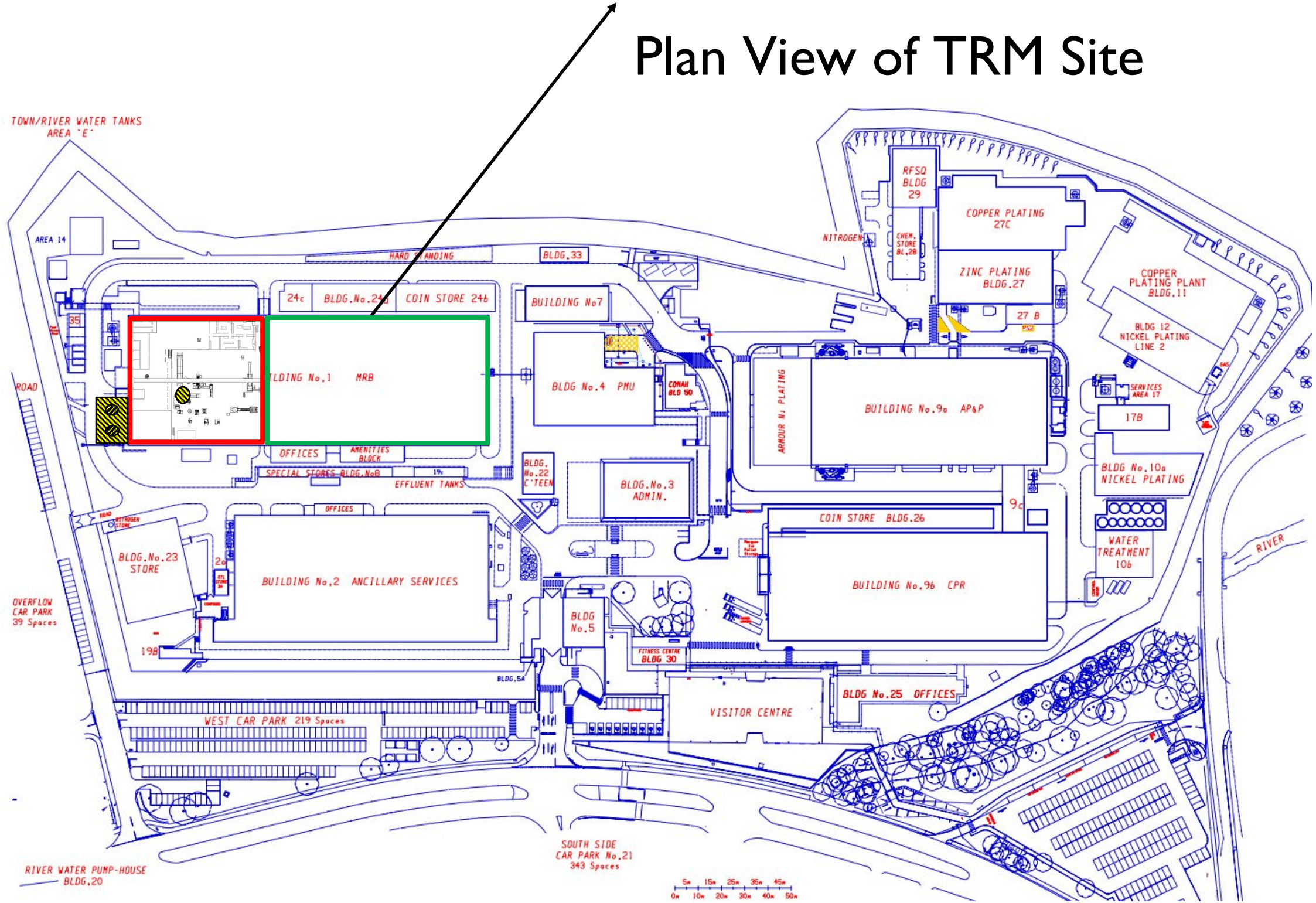
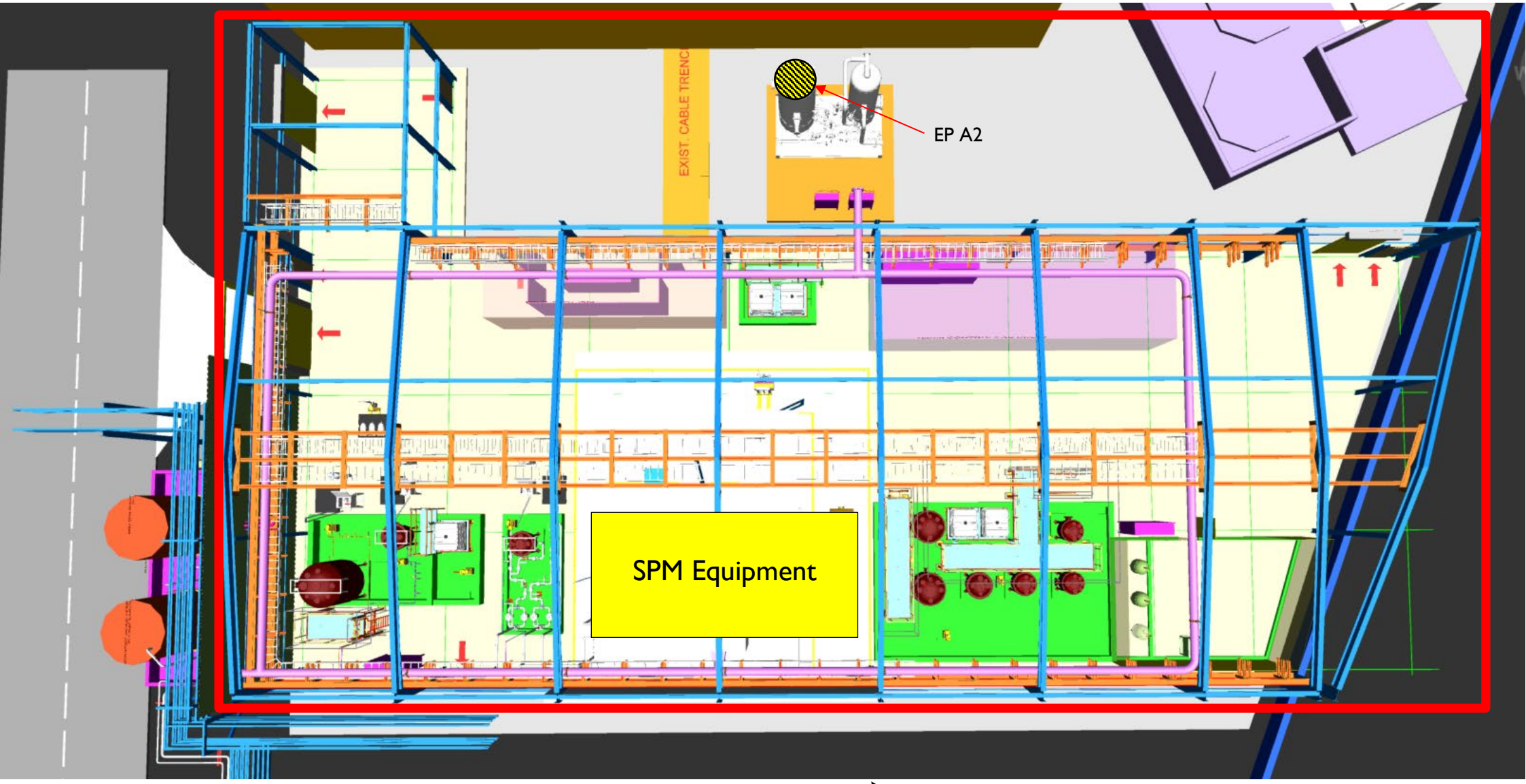
Building 1 - MRB



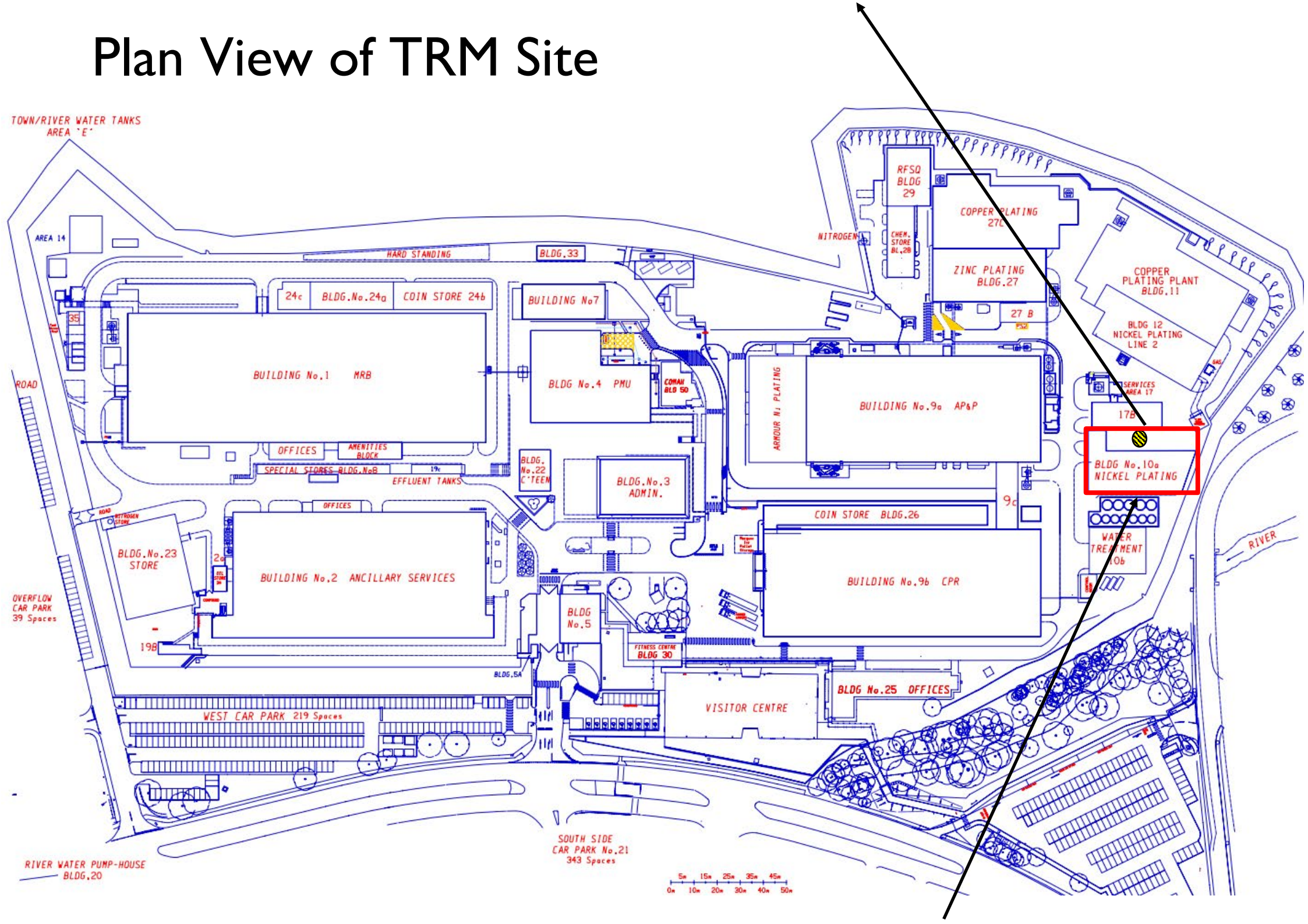
Plan View of TRM Site

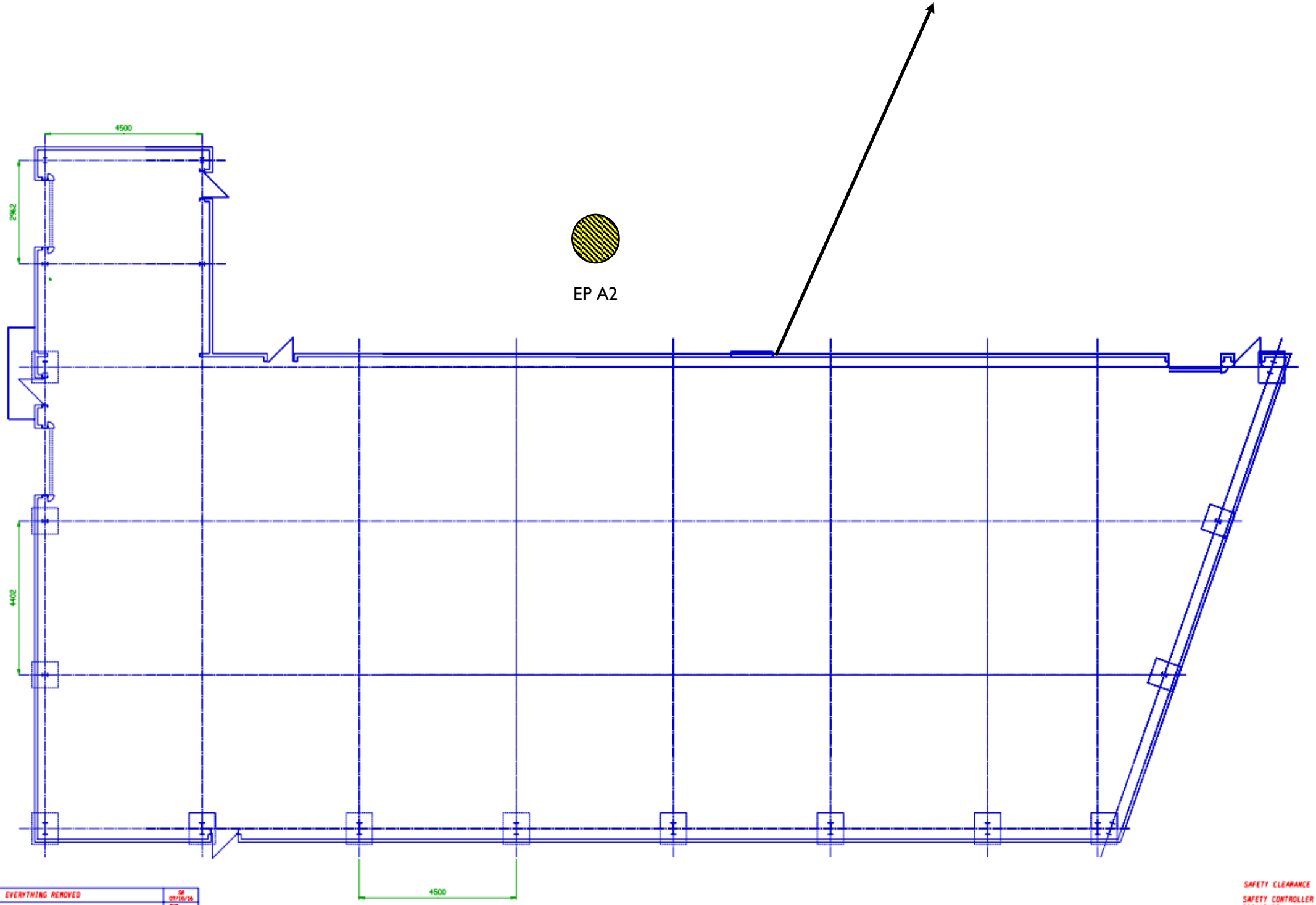


Building 10a – AP&P



Plan View of TRM Site





ISSUE	REVISION	SIG. & DATE
D	EVERYTHING REMOVED	SR 07/10/16
C	UPDATED	RWS 4/12/08
B	SCRUBBER ADDED	
A	INITIAL ISSUE	

ROYAL MINT LLANTRISANT

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SURFACE FINISH

NOTE

TOLERANCE UNLESS OTHERWISE STATED

0-50 ±0.1 50-100±0.2 100-300±0.3 300-1000±0.5 CASTINGS ±2.0 ANGULAR ±0.25°

SAFETY CLEARANCE

SAFETY CONTROLLER
SIGNATURE—
DATE:

DRWG No.HERE

SCALE 1:50

DRWG No. 90400/10/00/001-1

TITLE NICKEL PLATING -BUILDING 10A- MAIN LAYOUT

Estimated Firewall Requirements

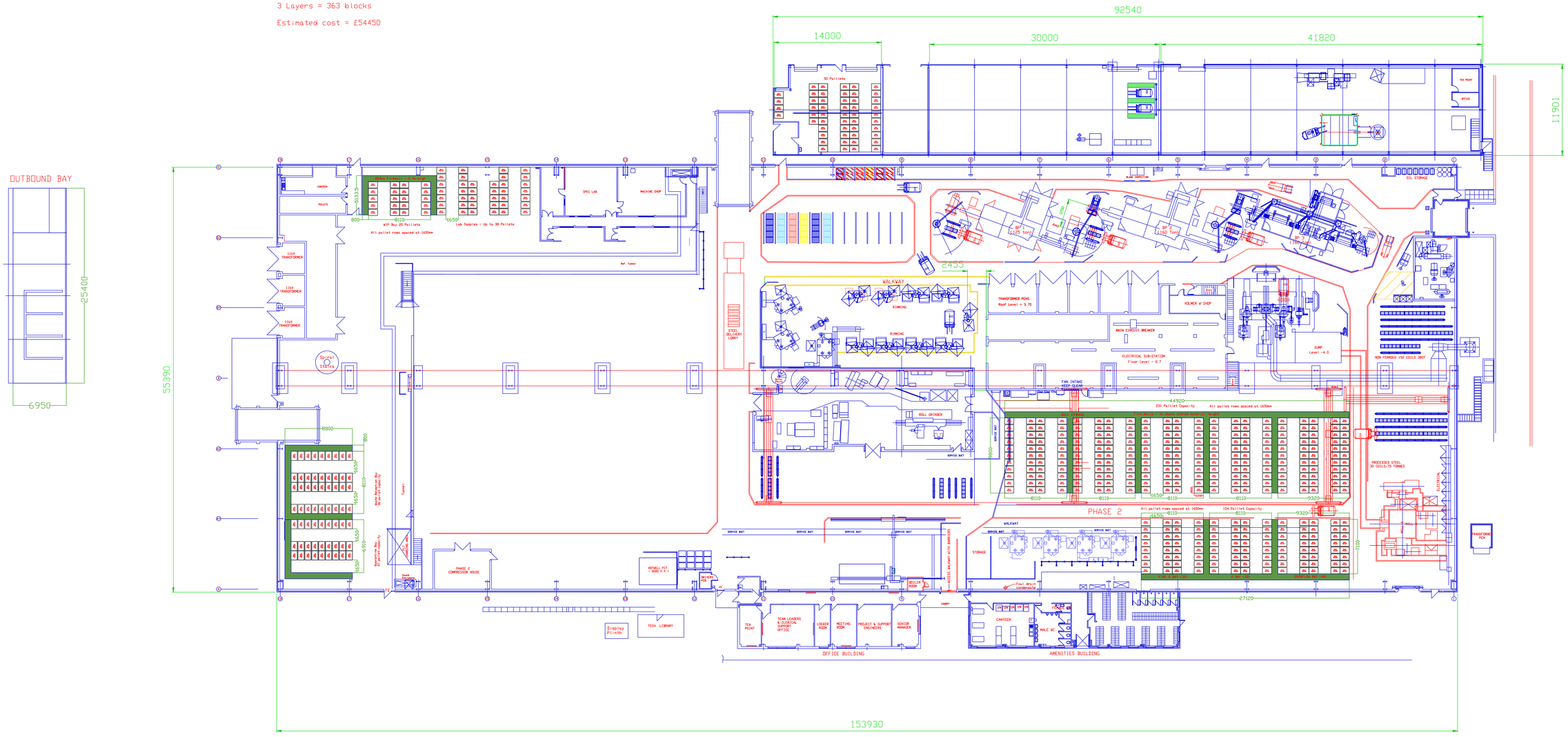
Total wall length = 193 metres (walls rounded up to nearest metre)

Block length = 1.6 metres

Blocks Required per layer = 121

3 Layers = 363 blocks

Estimated cost = £54450



ECN	REV	REVISION DETAILS	DATE	DRN	APP
-	A	INITIAL ISSUE	07/07/22	SE	
080722	B	FIRE WALLS UPSIZED TO 800mm - West Side External Buildings Shown	08/07/22	SE	
260722	C	Areas re-named and additional firewalls added to quarantine bay	26/07/22	SE	

TOLERANCE TO BS EN ISO 2281:2021 UNLESS OTHERWISE SPECIFIED

DO NOT SCALE | IF IN DOUBT ASK | ALL SIZES IN MILLIMETRES

MATL | TREATMENT OR FINISH

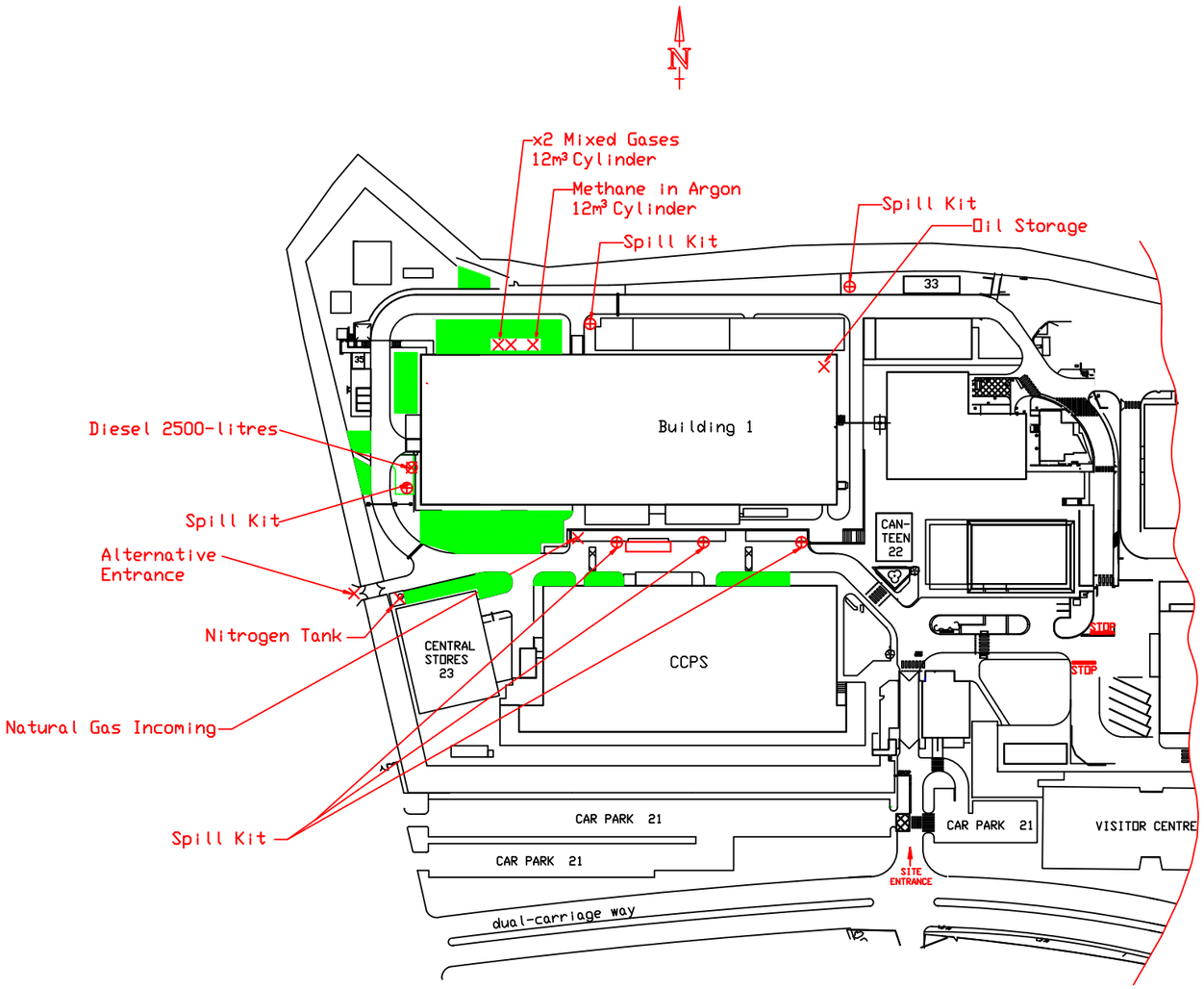
SHEET 1 of 1 | SCALE 1/200 @ A0 | DRAWN SE 07/07/2022

TITLE: MRB Overlay - SPM ground stored pallets with fire walls

DRWG No. 90400/01/00/1171-0

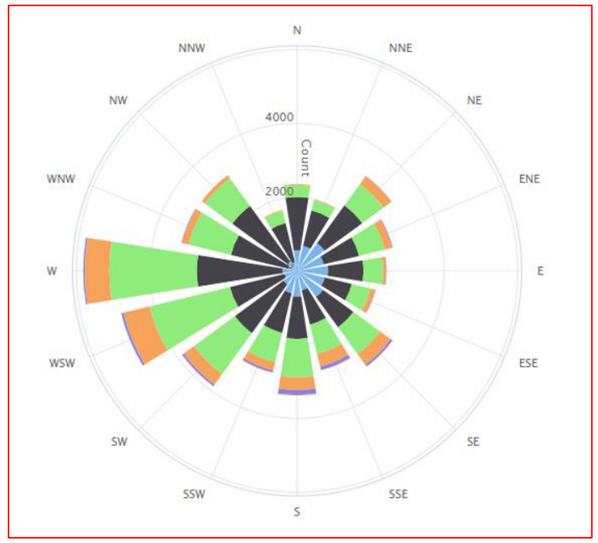
ISSUE C

DRWG. No.	DO NOT SCALE	PROJECTION	ALL SIZES IN MILLIMETRES	REMOVE SHARP EDGES AND BURRS	IF IN DOUBT ASK
90400/00/00/167-3					



Key

Made Up Ground



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TOLERANCE UNLESS OTHERWISE STATED 0- 50 ±0.1 50 - 100±0.2 100 -300±0.3 300 - 1000±0.5 CASTINGS±2.0 ANGULAR ±0.25

ISSUE	REVISION	SIG & DATE
A	INITIAL ISSUE	MP 18/07/22

SURFACE FINISH
MICROMETRE SYMBOLS ARE TO BS 1134 ,um Ra SYSTEM SURFACES MARKED THUS ✓ TO BE MACHINED TO FINISH INDICATED.

NOTE
SURFACE FINISH TO BE 3.2 OR UNDER UNLESS OTHERWISE STATED.

THREADS TO BS 3643 PT2 1966
NUTS CLASS 6H
BOLTS CLASS 6g

VOCAB No.
SEE GA

DRWG. No. 90400/00/00/167-3

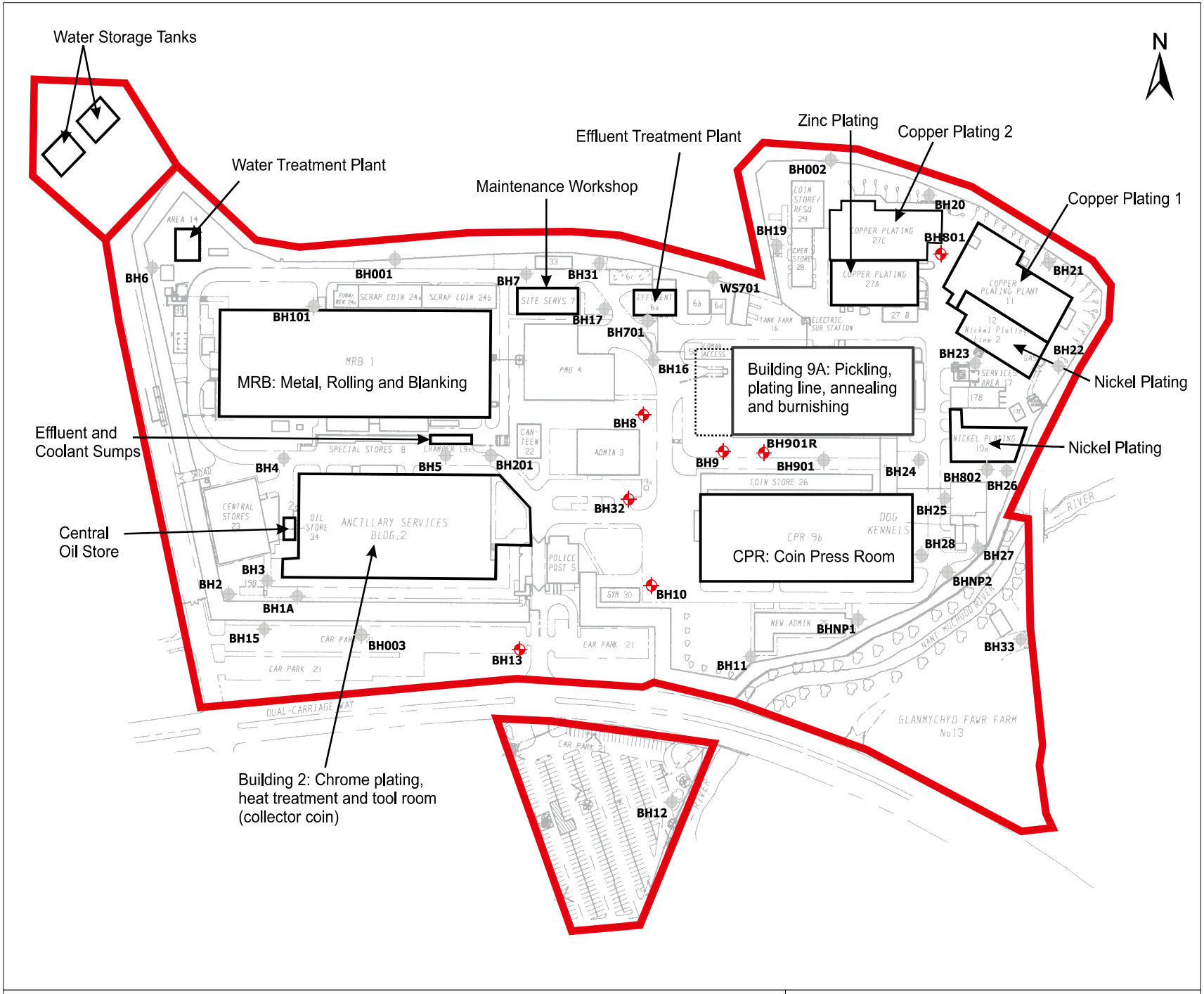
ROYAL MINT LLANTRISANT

MATL.

TREATMENT OR FINISH

TITLE Site Map West Side Waste Route Services

ISSUE. A



Legend

- Site Boundary
- Sampled Boreholes

Title **Figure 2: Additional Groundwater Monitoring Location Plan**

Site **The Royal Mint, Llantrisant Pontyclun, Mid Glamorgan, CF72 8YT**

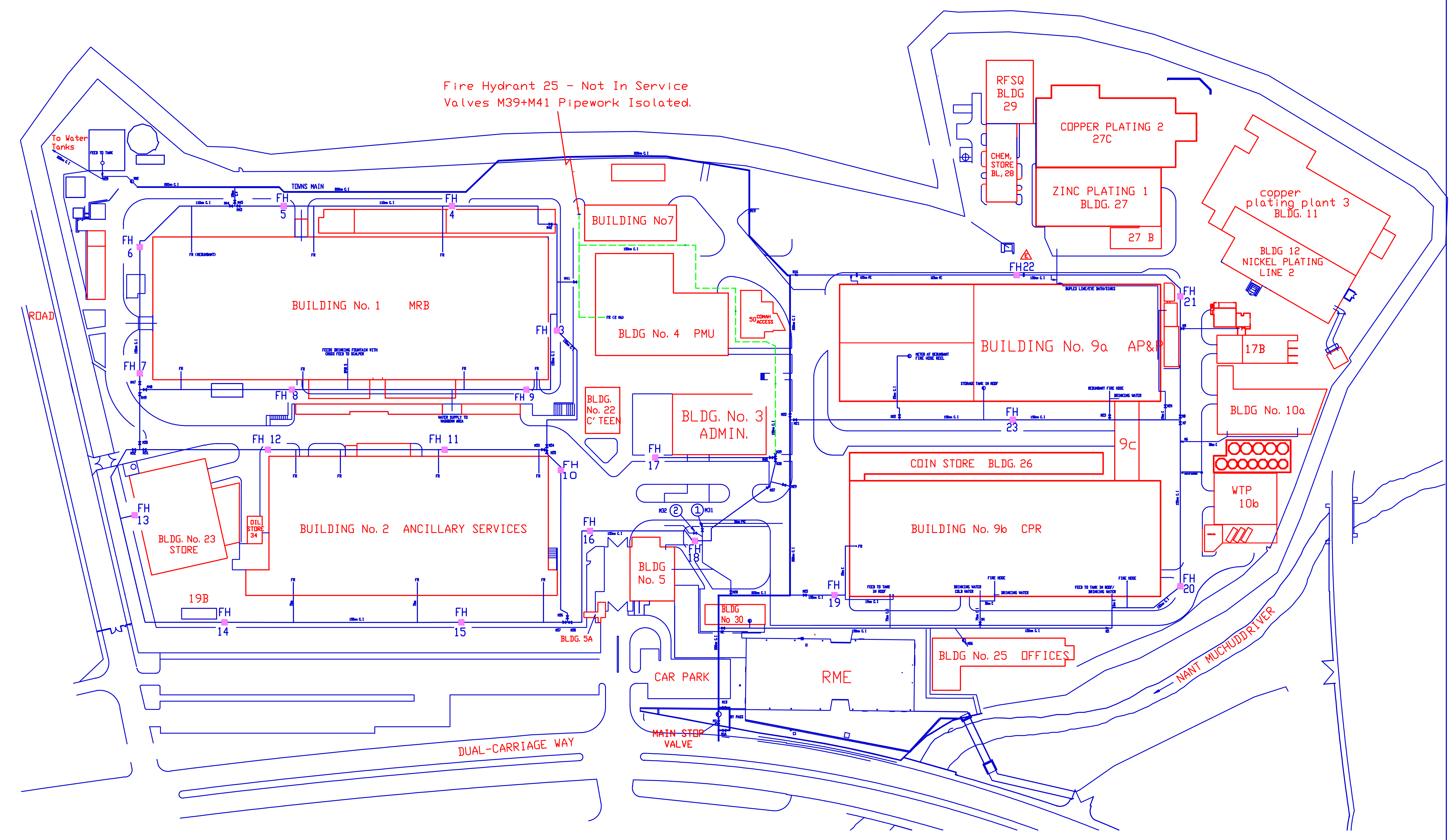
Client	**The Royal Mint**
Project No.	**1620011554**
Issue	**1**
Date	**August 2021**
Drawn by	**RH**

Scale **NTS**

RAMBOLL

DRWG No. 90400/00/10/033 -1

PROJECTION | IF IN DOUBT ASK | DO NOT SCALE | ALL SIZES IN MILLIMETRES | REMOVE ALL SHARP EDGES AND BURRS



FIRE HYDRANT/NUMBER

20 m

① REF. Stop Valve For Phase 1 Drinking Water

② REF. Stop Valve For Phase 2 Drinking Water

SAFETY CLEARANCE
Safety Controller
Signature
Date

REDRAWN/UPDATED FROM E2089/9/1

ISSUE	REVISION	SIG. & DATE
G	Isolated Pipework Highlighted	MP 07/02/22
F	FIRE HYDRANT NO. 25 Noted As - No Longer In Service	MP 07/02/22
E	FIRE HYDRANT NO. 22 RELOCATED - MOVED APPROX 5M EAST	CC 19/11/18
D	BUILDINGS UPDATED	SR 27/09/16
C	BUILDINGS UPDATED	JH 20/07/11
B	VALVES FH1 FH2 FH24 REMOVED	JH 13/05/10
A	INITIAL ISSUE	

ROYAL MINT LLANTRISANT

SURFACE FINISH: MICROMETRE SYMBOLS ARE TO BS 1134 um Ra SYSTEM SURFACES MARKED THUS ✓ TO BE MACHINED TO FINISH INDICATED

NOTE: SURFACE FINISH TO BE 3.2 ✓ OR UNDER UNLESS OTHERWISE STATED.

THREADS TO BS. 3643 PT. 2 NUTS CLASS 6H. BOLTS CLASS 6g.

~~TOLERANCES UNLESS OTHERWISE STATED 0-50 ± 0.1 50-100 ± 0.2 100-300 ± 0.3 300-1000 ± 0.5 CASTINGS ± 2.0 ANGULAR ± 0.25°~~

SEE G. A. | SCALE 1: 750 | DRWN. RHS 21/10/04 | ISSUED

DRWG No. HERE ✱ | MATERIAL | TREATMENT OR FINISH

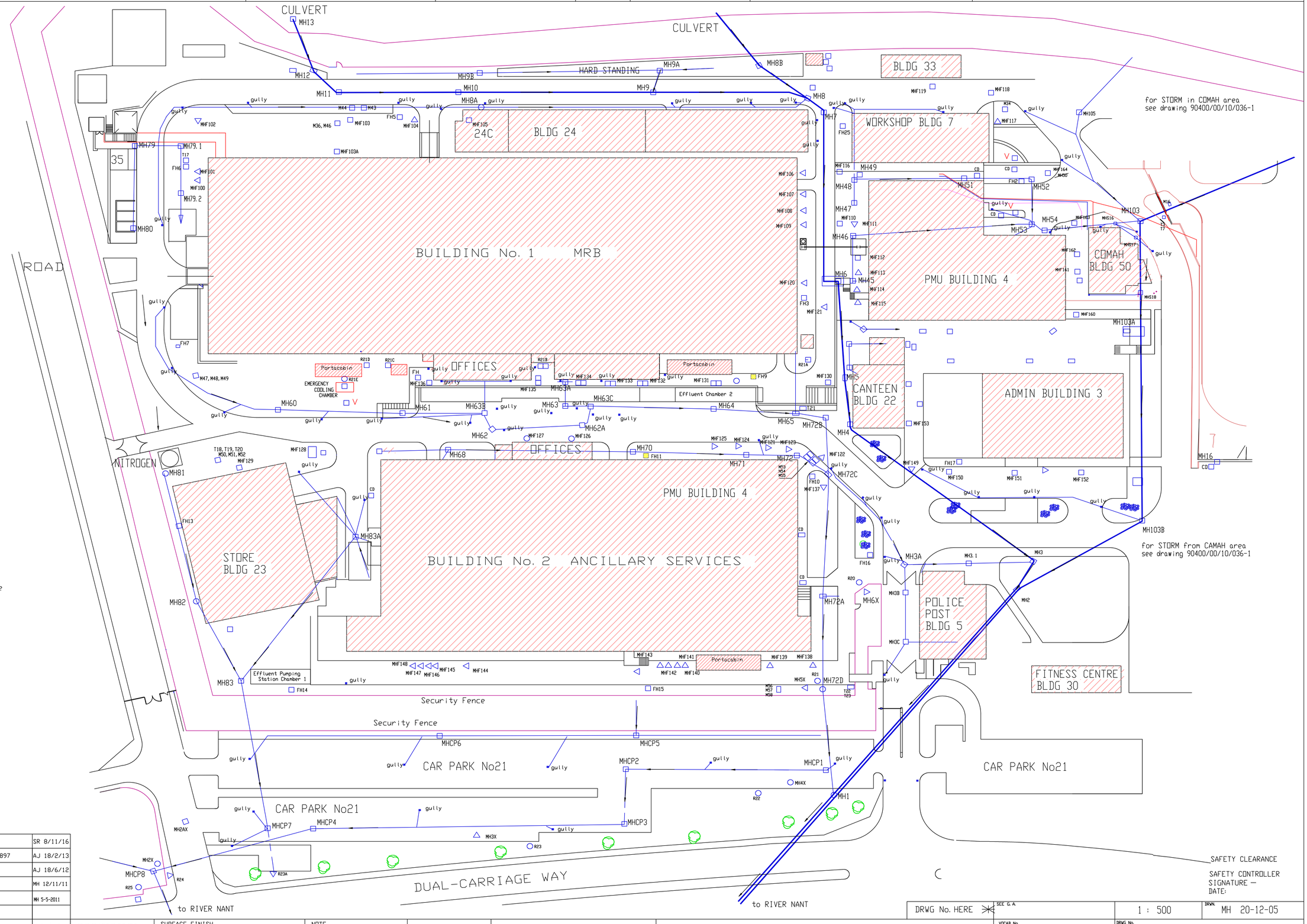
TITLE: ROYAL MINT SITE FIRE HYDRANTS

DRWG No. 90400/00/10/033 -1

ISSUE A B C D E F G

ANNEX B: DRAINAGE PLAN

DRWG No. 90400/00/10/040-1		IF IN DOUBT ASK	DO NOT SCALE	⏥ ϕ PROJECTION~O	ALL SIZES IN MILLIMETRES	REMOVE ALL SHARP EDGES AND BURRS



LEGEND

CD	Cable Duct
V	Valves
SP	Sump Pump
FH	Fire Hydrants
SW	Storm Water
MHSW	Storm Water
MH	Storm Water
MHRW	Storm Water
M1	Mains Water with Valve
T1	Towns Tank water with Valve
RV	River water with valve
MH1X	Foul
MHF	Foul
1X	Foul
RRWMH	River Return
R1	River Return

CAV
AEROSPACE

ISSUE	REVISION	SIG. &DATE
F	OLD EFFLUENT PLANT REMOVED	SR 8/11/16
E	DRAIN PATH ALTERED NW OF MRB - DC897	AJ 18/2/13
D	MH3 MH8 MH82 MH75D valves added	AJ 18/6/12
C	Main Valves and colours added	MH 12/11/11
B	Buildings updated	MH 5-5-2011
A	INITIAL ISSUE	

ROYAL MINT LLANTRISANT

SURFACE FINISH
MICROMETRE SYMBOLS ARE TO BS. 1134 um Ra
SYSTEM SURFACES MARKED THUS TO BE MACHINED TO FINISH INDICATED

NOTE
SURFACE FINISH TO BE 3.2 OR UNDER UNLESS OTHERWISE STATED

THREADS TO BS. 3643
PT. 2.
NUTS CLASS 6H
BOLTS CLASS 6g

TOLERANCE UNLESS OTHERWISE STATED
0-50 ±0.1 50-100 ±0.2 100-300 ±0.3 300-1000 ±0.5 CASTINGS ±2.0 ANGULAR ±0.25°

MATERIAL

TREATMENT OR FINISH

TITLE SITE UNDERGROUND STORM WATER OUTSIDE COMAH

DRWG No. HERE — SEE G.A.

VDCAB No.

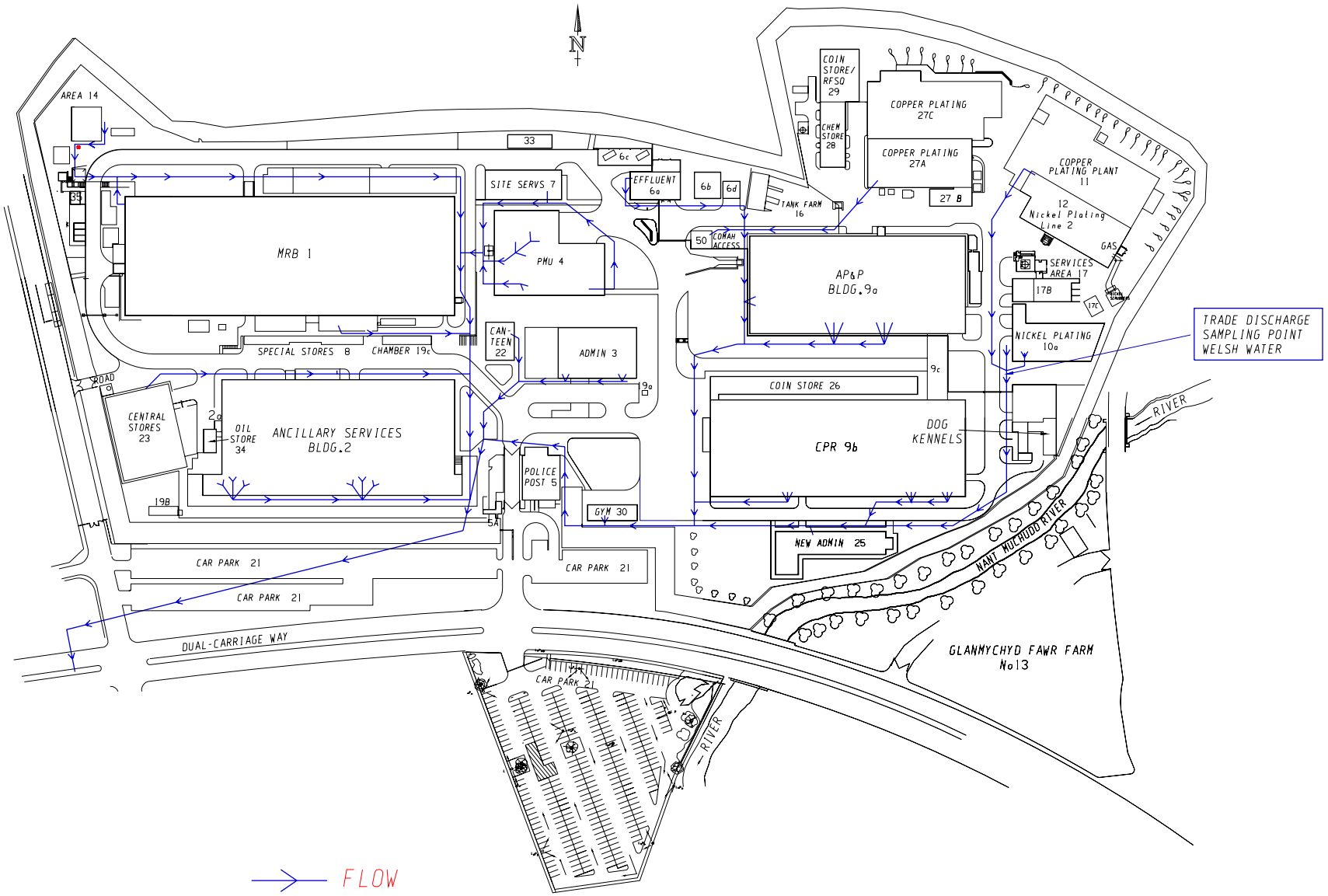
1 : 500

DRWN. MH 20-12-05

DRWG No. 90400/00/10/040-1

ISSUE. ~~A B C D E~~ F

DRWG.No. 90400/00/10/029 -3	DO NOT SCALE	PROJECTION	ALL SIZES IN MILLIMETRES	REMOVE SHARP EDGES AND BURRS	IF IN DOUBT ASK



DRWG. No. HERE *	DRWN. K.D.L./RHS 24/11/03	SCALE 1:2000

			TOLERANCE UNLESS OTHERWISE STATED ~~0 – 50 ±0.1 50 – 100 ±0.2 100 – 300 ±0.3 300 – 1000 ±0.5 CASTINGS ±2.0 ANGULAR ±0.25~~				
			THIS DRAWING IS THE SOLE PROPERTY OF THE ROYAL MINT AND MUST NOT BE WHOLLY OR PARTLY REPRODUCED WITHOUT PERMISSION.	SURFACE FINISH MICROMETRE SYMBOLS ARE TO BS 1134 um Ra SYSTEM SURFACES MARKED THUS ✓ TO BE MACHINED TO FINISH INDICATED.	NOTE SURFACE FINISH TO BE 3.2 OR UNDER UNLESS OTHERWISE STATED.	THREADS TO BS 3643 PT2 1966 NUTS CLASS 6H BOLTS CLASS 6g	VOCAB No. SEE GA
A	INITIAL ISSUE						DRWG. No. 90400/00/10/029 -3
ISSUE	REVISION	SIG & DATE					
ROYAL MINT LLANTRISANT			MATL.	TREATMENT OR FINISH	TITLE FOUL SEWER & TRADE DISCHARGE		ISSUE. A

ANNEX C: PROCEDURES

This procedure is linked to Form 1 – Site Walkover Inspection

This Site Walkover Inspection Procedure must be carried out at least twice a day.

Access Route Inspection

It is the responsibility of the **Site Manager** to ensure that the following controls are adhered to.

1. The fire access route and entrance to the site is visually checked;
2. In the event that anything is blocking the route, the Site Manager will be immediately notified and it will be cleared.
3. The site perimeter and alternative access route will also be visually checked to ensure that it is always accessible.

Machinery Inspection

It is the responsibility of the **Site Manager** to ensure that the following controls are adhered to.

4. All machinery is visually checked at least twice a day.
5. If any dust etc has accumulated on the machinery, the machinery will be cleaned immediately.
6. Additionally, at the end of every shift all machinery is thoroughly cleaned.
7. Any sign of maintenance required must be recorded on Form 1 and dealt with immediately.
8. Any signs of a fire caused by dust settling on any hot exhausts / engine parts would be identified immediately, however due to the regular visual inception and cleaning programme this is very unlikely to happen.
9. All visual inspections are recorded using Form 1.
10. The completed Site Walkover Inspection Form will be handed on to the next shift staff or security staff as appropriate. The Site Manager will inspect and file all completed forms every 24 hours.

Electrical Faults

11. During the visual inspection of appropriate electrical cables must be inspected to identify if any are damaged or exposed.
12. All visual inspections are recorded using Form 1.

13. The completed Site Walkover Inspection Form will be handed on to the next shift staff or security staff as appropriate. The Site Manager will inspect and file all completed forms every 24 hours.

Waste Storage Inspection

14. The waste storage areas will be visually checked at least twice a day.

15. The areas must be inspected along each length to enable a full 360 degree inspection.

16. All visual inspections are recorded using Form 1.

17. Any blindspots / hard to observe locations must also be inspected, as long as it safe to do so.

18. The completed Site Walkover Inspection Form will be handed on to the next shift staff or security staff as appropriate. The Site Manager will inspect and file all completed forms every 24 hours.

High Risk Observations – immediate action required

19. The following high risk observations should be recorded and actioned immediately. <u>All</u> incidents noted in a) to e) below must be notified to Site Manager immediately. In the event of fire or smoke, the local Fire & Rescue Service must also be contacted immediately.

    a) Any fires on site, small or large scale, isolated, controlled or otherwise;
    b) Any evidence of any high temperature materials (i.e. evidence of steam or smoke) from any aspect of the storage area;
    c) Any storage areas not managed in accordance with the FPP must be dealt with accordingly;
    d) Any evidence of any signs of potential vandalism or attempted vandalism (discarded materials, accelerants etc; evidence of tampering with plant and equipment);
    e) Access points / routes blocked;
    f) Any evidence of non-Royal Mint personnel / trespassers on the site at any time; and
    g) Any signs of any spillage.

Low Risk Observations

    a) Any mobile plant not parked within the plant storage area;
    b) Any dust etc accumulated on any machinery; and
    c) Any obvious damage to a boundary fence, site security equipment or company processing equipment.

Site Name		Date / Time	
Name of Person Undertaking Inspection			

Please refer to FPP-E01 – Site Walkover Inspection

Please identify what machinery / aspects of the site have been inspected, at what time and if any remedial actions carried out (e.g cleaning, maintenance):

Any evidence of external fire / vandalism, machinery or equipment fault or malfunction must be instantly reported.

Please illustrate what storage areas have been inspected and at what time:

Any evidence of self heating / self ignition, external fire / vandalism, machinery or equipment fault or malfunction must be instantly reported.

Storage / Pile Ref.	Identified Problem
Reception Bay	
WIP Bay	

Notes / Action required *(to address unsatisfactory conditions)*			
Form reviewed by: (PRINT Name)		Job Title	

ANNEX D: EMERGENCY PLAN

Procedure

THE ROYAL MINT®
THE ORIGINAL MAKER

Subject	Emergency Management Plan (SMP 4.9.2)
Reviewer	Caeli Rees
Date	01 March 2022
Version	1

Contents

1- Amendment Record

Issue No.	Page No.	Amendment Details	Amended By	Issue Date
1	All	Full document review and rewrite following fire Incident on site. Created a new SMP 4.9.2 from the original EMP version 14	C Rees	Nov 2021

2- Purpose

The Royal Mint has produced an Emergency Management Plan in accordance with its Environmental Permit requirements and the Control of Major Accident and Hazard Regulations 1999 as amended 2005 and 2015 and in line with its on-site emergency arrangements.

The plan details the actions to be followed in the event of a major accident or incident relating to health, safety and the environment. A number of Major Accident Hazard potentials and scenarios which may have an impact on health, safety and the environment have been identified. In order to manage and minimise these potential impacts a formalised Emergency Management Plan (Site Emergency Plan) has been produced.

The Emergency Management Plan has been structured in accordance within Guidance for the Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes (Version 1 – September 2004) as well as Natural Resources Wales's guidance PPG21 on incident response planning. The plan has also taken into account its emergency response planning obligations as required under the COMAH Regulations as amended 2005 & 2015 (in particular Chapter 7 of the Royal Mint's COMAH Safety Report), and with consideration to any latest published legislation requirements/guidance/ accident/incident investigation reports regarding Emergency Planning and Response.

The plan shall be reviewed at least every 2 years or as soon as practicable after an accident/incident, (whichever is the earlier) noting any changes to the plan.

The site plan includes information of relevance for dealing with major accidents and incidents that may pose a risk to health, safety and the environment.

3- Scope

This procedure is applicable to both the COMAH and non-COMAH areas of the Royal Mint site.

The flow diagrams used for the emergency procedures (within Appendices) are intended to assist in a logical approach but are not definitive or exhaustive.

The escalation route(s) shown in the flow diagrams should only be used if the emergency requires senior management support to safeguard the business.

The emergency procedures shall be kept separate from the supporting information i.e. site drawings, chemical inventory etc. and shall be kept up to date and available in the Emergency Management Plan – Details Manual (A3 File). A copy of this manual will be kept together with a copy of the Emergency Management Plan in the Building 5 Site Security and Access Control to Site. Further copies will be kept in strategic places around site, such as the Emergency Control Room located 1st floor in Building 5. These documents are readily available in the event of an emergency accident /incident.

In addition to the above, South Wales Fire and Rescue Service are in possession of the Emergency Management Plan and Details Manual which assists them with the maintenance and development of their Operational Tactical Plan for The Royal Mint. In addition to this, the Local Authority's (RCT) Emergency Planning Dept. is also in receipt of the plan and details manual.

4- Definitions

4.1 Emergency

Any hazardous or potentially hazardous situation presenting immediate or imminent danger to personnel, the environment or property.

5- References

When using this procedure, reference should be made to the latest revision of the following connected procedures, systems or legislation:

5.1 Internal Document References

EMP 3.2 - Legal Requirements and Evaluation of Compliance

EMP 3.1 - Environmental Aspects Register

SMP 3.2 - Incident Investigation and Reporting

SMP 4.9 - Emergency Preparedness and Response

SMP 4.9.1 - Testing of Emergency Preparedness and Response

SMP 4.9.3 – Emergency Management Plans

5.2 External Document References

Control of Major Accident Hazards Regulations 2015

The Management of Health and Safety at Work Regulations 1992

6- Roles and Responsibilities

6.1 EM Bronze Commander

The Emergency Management Bronze Commander fulfils the role of Operational Command during any emergency incident. They are expected to carry out the following during an incident:

- Identified by wearing **YELLOW** hi-vis.
- Develop initial METHANE message to pass to Emergency Services
- Use emergency flowchart(s) and checklist(s).
- Consult with EM Silver Commanders to gather information on the status of the incident.
- Assess the incident as soon as possible to determine the potential for it to escalate.
    - This can be done by making estimates of the quantities of materials involved and/or carrying out atmosphere or water quality measurements.
- Activating the on-site emergency plan if required (based on the above assessment).
- Evacuation of non-essential personnel to safe areas if appropriate.
- Contact the security control room and advise the duty officer of the incident and what assistance is required.
    - 3333 or 01443 62 33 33
    - Mobile: 07760 61 91 68
- Direct the isolation, shutdown and evacuation of other areas which may be affected.
- Ensure requests for appropriate key personnel is made.
- Liaising with and providing advice and information to the emergency services.
- Briefing the EM Silver Commander and others e.g. senior managers, specialists, security control room.
- Making notes as soon as possible after the incident is brought under control.
- The EM Bronze Commander shall assume responsibilities of the EM Silver Commander until a EM Silver Commander arrives to incident.

6.2 EM Silver Commander

The Emergency Management Silver Commander fulfils the role of Tactical Command during any emergency incident. They are expected to carry out the following during an incident:

- Identified by wearing **RED** hi-vis.
- Review and update METHANE message as developments occur.
- Assess and review developments regarding the incident regularly.
- Use emergency flowchart(s) and checklist(s).
- Use available tools and equipment within PECC/SECC including Incident Management Board.
- Take over control of the incident from the EM Bronze Commander.
- Consult with EM Bronze Commanders to gather information on the status of the incident.
- Confirm that the emergency services have been called out if applicable.
- Confirm all key isolations have been adequately carried out.
- Assess likely offsite impact using maps, dispersion and drainage plans etc. if applicable.
- Ensure key personnel are mobilised e.g. Environmental, Chemists, Engineering etc.
- Communicate with all of the Emergency Services, relevant Competent Authority and Local Authority, as appropriate to provide advice on effects to off-site areas.
- As incident develops determine if further business units or buildings should be shut, access restricted or evacuated to safe areas.
- Ensure an on-going record of the emergency is logged by the appropriate Emergency Control Centre personnel and kept together with any mitigating responses taken
- Give 'All Clear' when incident is over.
- Contact and inform EM Gold Commander of incident.
- The EM Silver Commander shall assume responsibilities of the EM Gold Commander until the EM Gold Commander arrives on site

6.3 EM Gold Commander

The Emergency Management Gold Commander fulfils the role of Tactical Command during any emergency incident. They are expected to carry out the following during an incident:

- Identified by wearing **BLUE** hi-vis.
- Use emergency flowchart and checklist.
- Consult with EM Silver Commanders to gather information on the status of the incident.
- Agree and take on the role of EM Gold Commander from the EM Silver Commander.
- Liaise with the Executive Board and key stakeholders.
- Arrange for all senior officers from the emergency services to be briefed as they arrive.
- Maintain a log of all actions taken and communications receioved and issued.
- Deploy crisis management team if necessary
- Following "All Clear" from EM Silver, Work through Business Continuity Plans to return business to normal operations.

6.4 Security Personnel

- Act as first responders.
- Lock down the site.
- Request attendance by external Emergency Services if necessary use METHANE messaging and inform security on main gate.
- Meet, liaise and direct Emergency Services to incident scene
- Facilitate all key site communications via the control room.
- Monitor the incident on CCTV.
- Notify EM Gold / Silver / Bronze where instructed.
- Provide on-going support to Incident Commanders.

7- Procedure

7.1 Immediate and Secondary Emergency Response Actions

7.1.1 Immediate Actions

In the event of an emergency incident on site it is everyone's responsibility to carry out the following basic immediate actions:

- Raise alarm where human safety and the environment are at risk.
- Do not put yourself or others at risk and follow the appropriate procedure(s).

7.1.2 Secondary Actions

In the event of an emergency incident on site, the secondary actions require the instigation of the appropriate emergency procedure for the type of emergency that arises as described in the following table:

Reference Number	Emergency Procedure
EP0	Emergency Response Flowchart
EP1	Safety Critical Alarms
EP2	Fire and Evacuation of Process Plants
EP3	Firewater Management
EP4	Weather Station Management
EP5	Abnormal Emissions from Sewer Treatment Plant
EP6	Spillage Response
EP7	Loss of Material to Ground
EP8	Gas Leak
EP9	Storm Water Containment System
EP10	Suspect Package
EP11	Bomb Threat Warning
EP12	Incident involving Highly Flammable Gases (Acetylene etc.)
EP13	Reacting to Fire alarms in the RM Experience
EP14	Reacting to the Site Emergency Alarm – RM Experience

Table 7.1.2 – Emergency Secondary Action Plans

Copies of these Emergency Plans can be viewed in SMP 4.9.3.

8- Appendices

8.1 List of key drawings for incident management

Below are tables outlining the key site drawings for emergency preparedness. These are available within the PECC for review.

MAIN SITE			
Drawing	**Building No**	**Drawing No**	**Issue**
Royal Mint Site Layout - 3D	Site	90400/00/00/004	D
Royal Mint Plan View	Site	90400/00/00/003	F
Fire Assembly Points	Site	90400/00/50/003	E
Incident Internal Assembly Points	Site	90400/00/50/028	H
Chemical Storage Areas	Site	90400/00/00/057	C
Firewater Containment Areas	Site	90400/00/10/044	D
Fire Alarm Panels - Building Control	Site	90400/00/50/006	G
Royal Mint Fire Hydrants	Site	90400/00/10/033	D
Stand-By Generators Main Distribution - Site Wide	Site	90400/00/10/060	E
11 KV Distribution System	Site	90400/00/10/001	N
11 KV Distribution System Schematic	Site	90400/00/10/017-1	L
Gas Mains	Site	6219 02 A	F
Royal Mint Site Plan - Gas Cylinder Storage Areas	Site	90400/00/00/044	D
DSEAR classification Area Site Plan	Site	90400/00/50/060	C
External Water Mains	Site	6219 01 A	C

Table 8.1.1 – Main site drawings

COMAH AREA			
Drawing	**Building No**	**Drawing No**	**Issue**
Comah Area		90400/00/50/018	F
Main Isolation Points		90400/09/50/034	E
Safety Critical Alarms		90400/00/50/022	F
Underground Services Foul (Comah)		90400/00/10/034	D
Underground Services River Return		90400/00/10/035	C
Underground Services Storm Water (Comah)		90400/00/10/036	F
Comah Area Underground Services Acid Lines		90400/00/10/037	C

Table 8.1.2 – COMAH site drawings

BUILDING 9A - A P & P			
Drawing	**Building No**	**Drawing No**	**Issue**
Layout - A P & P	9a	90400/09/00/001	N
A&P Layout of Process Drains	9a	90400/09/00/021	A
Main Isolation Points	9a	90400/09/50/034	D
Safety Critical Alarms – Armour 1	9a	90400/09/50/064	A
Safety Critical Alarms – Armour 2	9a	90400/09/50/063	A

Table 8.1.3 – Building 9A drawings

BUILDING 28 - CHEMICAL STORE (COMAH AREA)			
Drawing	**Building No**	**Drawing No**	**Issue**
Chemical Store	28	90400/28/00/006	C
Main Isolation Points	28	90400/09/50/034	A

Table 8.1.4 – Chemical Stores drawings

BUILDING 27 & 27C - ZINC PLATING LINE/COPPER PLATING LINE 2/TR2			
Drawing	**Building No**	**Drawing No**	**Issue**
Zinc Plating Line	27	90400/27/00/001	D
Layout - New Copper Line 2	27c	90400/27/00/031	C
Treatment Room 2 Layout	27c	90400/27/02/001	B
Main Isolation Points	27 & 27c	90400/09/50/034	A
Main Hose Reel Points	27 & 27c	90400/00/50/037	A
Safety Critical Alarms – ZP1	27	90400/27/50/025	A
Safety Critical Alarms – TR2	27c	90400/27/52/038	A
Safety Critical Alarms – CP2	27c	90400/27/52/039	A

Table 8.1.5 – ZP1, CP2 and TR2 drawings

BUILDINGS 11& 12 - COPPER PLATING 3/NICKEL LINE 2/ARMOUR LITE			
Drawing	**Building No**	**Drawing No**	**Issue**
Layout - Copper Plating Line 3	11	90400/11/00/002	F
Layout - Nickel Plating Line 2	12	90400/12/00/012	F
Main Isolation Points	11 & 12	90400/09/50/034	C
Fire Hose Reel Points	11 & 12	90400/00/50/036	A
Safety Critical Alarms – CP3	11	90400/11/50/015	B
Safety Critical Alarms – Armour Lite	11	90400/11/50/014	A
Safety Critical Alarms – NP2	12	90400/12/50/013	A

Table 8.1.6 – NP2, CP3 and Armour Lite drawings

BUILDINGS 10 A & B - NICKEL PLATING 1/WATER TREATMENT PLANT			
Drawing	**Building No**	**Drawing No**	**Issue**
Layout - Nickel Plating I	10a	90400/10/00/001	D
Main Isolation Points	10a	90400/09/50/034	B
Layout – WTP	10b	90400/10/01/007	A
Main Isolation Points	10b	90400/09/50/034	A
Gas Monitor Locations	10b	90400/10/11/003	E
Safety Critical Alarms – WTP	10b	90400/10/51/041	A
Position of E-Stops	10b	90400/10/51/035	A
Safety Critical Alarms – Penstocks	10b	90400/00/50/068	A

Table 8.1.7 – NP1, WTP drawings

BUILDING 17A & B – ACID DILUTION PLANT			
Drawing	**Building No**	**Drawing No**	**Issue**
Layout – Acid Dilution & Services			C
Safety Critical Alarms – Acid Dilution Plant			A

Table 8.1.8 – ADP drawings

BUILDINGS OUTSIDE COMAH AREA			
Drawing	**Building No**	**Drawing No**	**Issue**
Underground Services Foul (Outside Comah)	Site	90400/00/10/038	D
Underground River Return (Outside Comah)	Site	90400/00/10/039	C
Underground Services Storm Water (Outside Comah)	Site	90400/00/10/040	F

Table 8.1.9 – ADP drawings

BUILDING 1- MRB			
Drawing	**Building No**	**Drawing No**	**Issue**
Layout - MRB	1	90400/01/00/053	D

Table 8.1.10 – MRB drawings

BUILDING 2- PRODUCT SERVICES/COLLECTOR COIN			
Drawing	**Building No**	**Drawing No**	**Issue**
Layout - Operations Support/CCPS	2	90400/02/00/001	S
Chemical Storage Areas	2	90400/02/00/268	B
Isolation and Fire Points in CCPS Areas	2	90400/02/10/013	C

Table 8.1.11 – Building 2 drawings

BUILDING 9B - COIN PRESS ROOM (CPR)			
Drawing	**Building No**	**Drawing No**	**Issue**
Layout - Coin Press Room	9b	90400/09/01/002	Q
Layout - Ground floor and Roof Void CPR	9b	90400/09/01/001	C
Emergency Isolation Points	9b	90400/09/51/023	K
Emergency Lighting	9b	90400/09/11/009	D
LV Electrical Distribution	9b	90400/09/11/005	G

Table 8.1.11 – CPR drawings

BUILDING 36 – ROYAL MINT EXPERIENCE			
Drawing	**Building No**	**Drawing No**	**Issue**
Layout – Royal Mint Experience		90400/36/00/002	A
Fire Alarms		90400/36/10/002	B
Services (External Drawing)		14863-20	

Table 8.1.12 – RME drawings

8.2 Gas Isolation Points

Below are two tables outlining the key isolation points for Natural Gas for the site.

Building Number	Isolation	Point of Isolation	Impacts other buildings
1 - MRB	YES	Inside behind drying furnaces South West cold end.	
2 - CCPS	YES	Inside Tool room by East side fire door	
3 - Administration	YES	Outside building North side.	
4 - PMU	YES	Inside West side of building in Museum area	
5 - Security Lodge	YES	Outside West side of building within security gates.	
7 - Engineering Services	YES	Inside Southside Fire Exit.	
9a - AP&P	YES	Inside Gas Generating Room.	9b (CPR)
9b - CPR	YES	Inside Gas Generating Room AP&P.	9a (AP&P)
11 - Copper Plating 3	YES	Inside South East fire exit.	12 (NP2)
12 - Nickel Plating 2	YES	Inside South East fire exit CP3.	11 (CP3)
17b - Compressor House	YES	Inside dedicated room, entrance of which is south side of building 17b.	
22 - Canteen	YES	Outside West side of building by MRB steps.	
23 - Central stores	YES	Inside North wall (behind counter) access via east entrance.	
25 - New Administration (Marketing)	YES	Outside located on roadway West of building or alternatively Inside within cupboard Right Hand Side of entrance.	
27 - Zinc Plating 1	YES	Outside east side roller door.	27c (CP2) & 29 (RFSQ)
27c - Copper Plating 2	YES	Outside east side roller door at ZP1.	27 (ZP1) & 29 (RFSQ)
29 - RFSQ	YES	Outside east side roller door at ZP1.	27 (ZP1) & 27c (CP2) & 28 (Chemical Stores)

Table 8.2.1 – Key Natural Gas Isolation Points

Main Isolation Point	Location	Impact on which buildings
Line 1	Central Stores Outbuilding Number 1, West of the weighbridge.	1 (MRB), 2, 23 (Central Stores), 7 (Engineering Services), 3 (Main Admin), 22 (Canteen) and 5 (Security Lodge).
Line 2	Main isolation point is in Building 17B.	17b (Compressor House), 9a and 9b (CPR).
Line 3	In the building beside Direct Brass Plating.	29 (RFSQ), 27 (ZP1), 27c (CP2), 11 (CP3) and 12 (NP2).

Table 8.2.2 – Incoming Natural Gas Supply Isolation Points

8.3 Electrical Isolation Points

Key plant isolation points documented below

BUILDING NUMBER	POINT OF ISOLATION	ALTERNATIVE POINT OF ISOLATION	Generator Backup
9a - AP&P	Inside – Southside Sub Station (A&P building)	Isolate main intake PMU sub station.	Cannot isolate generator, may need isolation switch located outside building
10a - Nickel Plating 1	Inside	Isolation Main intake sub	NO
11 - Copper Plating 3	Outside – HV substation outside (north east wall).	Isolation (Essential) Main Intake substation, HV in CP2	NO
12 - Direct Brass Plating Plant	Outside – HV sub station (south)	Isolation Main intake substation and CP1 HV. Essential supply from CP3.	NO
17a - Acid Dilution	Outside – Main intake sub station	NONE	NO
17b - Compressor House	Inside – East side of building	Off Site isolation required	NO
27 - Zinc Plating 1	Outside – Remote building south of ZP1 & Essential from CP3	Isolation NP2 HV & CP3 HV.	NO
27c - Copper Plating 2	Outside – External CP2 substation North.	Isolation NP2 HV & CP3 HV.	NO
28 - Chemical Stores	Inside – East side of building	Isolation CP1 LV board	NO
29 - RFSQ	Outside – ZP1	NONE	NO

Table 8.3.1 – COMAH area electrical isolation points

BUILDING NUMBER	POINT OF ISOLATION	ALTERNATIVE POINT OF ISOLATION	Generator Backup
1 - MRB	Inside - Centre of building	3 Administration	YES Site services (isolation)
2 - CCPS	Inside - Centre of building	Isolation from PMU building & South Block Sub (CPR)	YES Site Services & A&P (isolation)
3 - PMU	Outside PMU	NONE	NO
4 - PMU	Inside – Underneath (Fire Protected)	Isolation A&P sub station, MRB HV substation, Building 2 substation.	YES A&P (isolation)
5 - Security Lodge	Inside – In middle of building.	Isolation from CPR (main & essential supply)	YES Site services (isolation)
7 - Site Services & Outside buildings	Outside – Isolation from PMU	NONE	Cannot isolate generator
9b - CPR	Inside - Southside Sub Station (CPR building)	Isolation Main intake substation (COMAH area), from building 2 substation HV.	YES A&P (isolation)
22 - Canteen	Outside – Isolation from PMU	NONE	NO
23 - Central stores	Outside – Isolation from building 2	NONE	YES Site Services & A&P (isolation)
25 - New Administration	Inside - CPR	NONE	NO

Table 8.3.2 – Non-COMAH area electrical isolation points

8.4 Supporting Information

No.	INFORMATION	LOCATION OF INFORMATION	RESPONSIBLE PERSON
1	Safety Data Sheets for all chemicals used on site.	A hard copy of SDS's are available at the Primary and Secondary Emergency Control Rooms. Electronic copies can be obtained via the company's SHE intranet system – http://normality/Departments/HSE/Safety%20Data%20Sheets/Forms/AllItems.aspx COSHH assessements can be found here: T:\Health Safety & Environment\Health & Safety\COSHH INFO (MSDS & RA)\COSHH RA	Site Environmental Manager
2	Inventory of chemicals on site.	Normal Inventory of all hazardous chemicals used on site are located in the Emergency Management Site Pack and are kept at the Primary Emergency Control Center. Daily email also sent to Security and SHE Team.	Site Environmental Manager
3	All relevant site wide procedures applicable to the site plan e.g. Incident and reporting procedure and Permit To Work Procedure etc. etc.	All relevant site wide procedures applicable to the site plan e.g. Incident and reporting procedure etc. can be accessed via the company's SHE intranet system – T:\Health & Safety Management System\Live H&S Documents on Normality\SMP's - Safety Management Procedures	Head of SHE
4	Asbestos Register	The Asbestos Register shall be kept in the Engineering Site Services Department.	Engineering Site Services Manager

Table 8.4.1 – Supporting Information

8.5 Internal Assembly Points

8.5.1 List of Internal Assembly Points

Building Ref	Building Name	Assembly Point	IAP No.	Phone ext.
1	MRB	Hot End Spec Lab	1	3436
		Team Leaders Office	2	3532/ 3141
		MRU canteen	25	3559
2	Ground Floor	QA Office	4	3261
	CCPS Shop Floor	New Canteen	5	3041
	First Floor	Main Training Room	6	3281
3	Ground Floor	UK Sales/Consumer	11	3009
	Ground Floor	Marketing	8	3372
	First Floor	Board Room	7	01443 623196
	Second Floor	Entire Floor	8	3577/ 3849/ 3035
4	PMU	Production Area	9	3386
		SHE Office	3	3260
5	Security Building	Upstairs Canteen	10	3621
7	Engineering Services	Main Office	12	3307
9a	AP&P	A&P Canteen	13	3039
9a	Armour 1&2	A&P Canteen	13	3039
9b	CPR	Main Office	14	3509
		Despatch Office	27	3568
10b	Water Treatment Plant	WTP Office	11	3249
11	CP3	CP3 Office	16	3460
12	Direct Brass Plating	DBP1 Control Room	26	
22	Canteen	General Eating Area	18	3572
23	Central Stores	Back Office next to Brammer	19	3476
25	Building 25	Upstairs Main Office	20	3006/ 3124
27a/b/c	ZP1 & CP2	Control Room	21	3490
29	RFSQ	Team Leaders Office	17	3404
30	Gym	Main Area	22	3622
50	BPAC	Design Office	15	3482
	Royal Mint Experience	Restaurant Area	23	3639
9b	Factory Experience	CPR Viewing Area	24	Sec radio

Table 8.5.1 – Internal Assembly Points

8.5.2 IAP Instructions - Example of standard IAP Poster displayed at all IAP'S

ON HEARING THE SITE INCIDENT ALARM:

1. IF OUTDOORS, CHECK WIND SOCKS FOR WIND DIRECTION AND HEAD CROSS WIND TO THE NEAREST SAFE BUILDING.

2. ONCE INDOORS, CLOSE ALL DOORS AND WINDOWS ON THE WAY TO THE INTERNAL ASSEMBLY POINT– DO NOT LOCK!

3. TURN OFF ALL EXTRACTION AND VENTILATION FANS IN THE BUILDING.

4. CLOSE ALL DOORS AND WINDOWS IN THE INTERNAL ASSEMBLY POINT

5. WAIT QUIETLY AT THE INTERNAL ASSEMBLY POINT FOR THE EVACUATION OFFICER OR MOST SENIOR PERSON TO TAKE A ROLL CALL.

6. WAIT FOR SECURITY TO MAKE CONTACT.

7. WHEN PHONE RINGS INFORM SECURITY OF ANY KNOWN MISSING PERSONS.

8. IF, AFTER 30 MINUTES SECURITY HAVEN'T BEEN IN CONTACT, PHONE THEM ON EXT. 3587/3333 AND REPORT ANY KNOWN MISSING PERSONNEL.

9. STAY INDOORS UNTIL DIRECTED OTHERWISE BY SECURITY OR FIRE OFFICER.

10. DO NOT USE INTERNAL PHONES UNNECESSARILY – KEEP FREE FOR URGENT CALLS.

ROYAL MINT BOMB / THREATENING CALL PROFORMA

Call Received By:				
Location:				
Caller:	Internal	External	Mobile	Payphone
Date:				
Start Time:				
End Time:				

1. Stay calm and listen.

2. Obtain as much information as possible – try to get the caller to be precise about the location and timing of the alleged bomb and whom they represent. If possible, keep the caller talking.

BE POLITE

DO NOT INTERRUPT

DO NOT PUT DOWN THE HANDSET

3. Report the incident to the Security Control Room immediately on 3333

What was said? **(Note down as accurately as possible)**	
Where is the bomb?	
When will it explode?	
What sort of bomb is it?	
What does it look like?	
What will cause it to explode?	
Who is responsible?	
Why has the company been targeted?	
What is your name?	
What is your address?	
What is your telephone number?	
What is the Code word (if any)?	

Did the caller seem familiar with the site: Yes/No

Describe Details of call (Circle any that are appropriate)				
Caller	Male	Female	Adult	Juvenile
Accent	Local	Regional	Foreign	Disguised
Language	Well spoken	Irrational	Taped Message	Read Message
Voice	Loud Soft	Rough Educated	High Pitched Low	Deep Weak
Speech	Fast Slow	Slurred Excited	Normal Obscene	Confident Stutter
Manner	Calm Rational Coherent	Nervous Irrational Incoherent	Deliberate Angry Intoxicated	Joking Hysterical Humorous
Background Noise	Quiet Office Street	Music Pub/Bar Restaurant	Countryside Road Traffic Voices	Trains Factory Airport

Other remarks/comments

Emergency Contacts							
Site Incident Commander		**Site Main Commander**		**Site Emergency Director**		**Security Control Room**	
Security Manager		**Senior Security Officer**		**Head of Business Support Services**		**Chief Executive**	

Signature: **Name (Print):**

Time: **Date:**

- The BPROC (A&P) has tank water fed hose reels by the Spaleck & Trowal finishers. These can be used for emergency shower water.
- The WTP has tank water fed hose reels which can be used for emergency shower water.
- CP3 has a tank fed water hose reel on the wall by Safed 9 which can be used for emergency water.
- All plant is fed by the river system / Braithwaite tank so we will have supply to the BPROC (AP&P) furnaces. But this needs to be closely monitored.
- Monitoring of the Braithwaite tank level is done at the digital display of the Braithwaite tank. The display should read 1.8M. This means the tank is 1.8M from the top. (This is classed as full), if the level drops to 2.2.M from the top then there is an issue with the river water supply and the Braithwaite is starting to deplete of water. (The Braithwaite tank level must be monitored and recorded every half until the water repair is complete).
- In the event of the Braithwaite starting to deplete Safed 6 Must be cooled down and switched off.
- The river system should be investigated to locate the fault.
- Safed 6 furnace temperature should be dropped to 6000C.
- Armour 1, CP2 plants are to be cooled down and must not be switched back on until the water is restored.
- Emergency fire sweeps / checks should be carried out every hour.
- All maintenance work involving plating baths / chemicals etc must be suspended whilst the mains water is off.

Fire & Evacuation of Process Plants

Issue Date:	09/03/2022
Emergency Procedure	**EP2**
Version	2
Review Date	09/03/2024

THE ROYAL MINT®
THE ORIGINAL MAKER

LEVEL 2
General Fire Incident

Actions for all

Upon discovery of possible fire event, activate Fire Alarm by using a manual call point. This assumes no automatic detection in area.

Evacuate all persons from area to External Assembly Point.

Liaise with EM Bronze Command as required. Inform them of any key information which could asist during this incident

Await "All Clear" signal from EM Bronze Commander.

Return to work area.

Escalation

De-escalation

Team Leader (EM Bronze) Actions

Gather initial information from Security and/or person who initiated alarm and develop METHANE message.

Conduct Roll-Call and ensure all from area are accounted for.

Initiate sweep of area with Security to determine if alarm is genuine or not. Ensure safety is maintained.

If alarm activation is from a fire, escalate to EM Silver Command

If alarm is not from a fire, clear alarm and issue "All Clear" to Team.

Following completion of all activities, raise incident report to highlight event.

Escalation

De-escalation

Team Leader (EM Silver) Actions

Arrange for Security to contact Emergency Services and pass on METHANE message.

Escalate to EM Gold Command.

Liaise with emergency services.
Key document and processes:
- PTW,
- COSHH,
- Wind sock locations,
- Weather station,
- Emergency Spill Response (EP7),
- Site Plans,
- Drainage,
- Tanks,
- Chemical Storage and Containment,
- Isolation points.

Once incident is under control clean up and dispose of fire damaged materials safely.

Receive "All Clear" from Emergency services. Pass clearence to EM Bronze Commander.

Emergency Type
EP2 - Fire and Evacuation

Causes:

1. Electrical fire in chemical storage areas (covered by EP3).

2. Electrical fire in non-chemical storage areas.

3. Gas leaks followed by explosion and fire.

Anticipated Consequences

1. Fire could spread between buildings and hazardous areas and could cause a major environmental impact.

2. Toxic and polluting smoke may be generated as a result of the fire breakdown products. The smoke would be dispersed and have an environmental impact on the local community.

3. Contaminated firewater run-off to surrounding land causing groundwater pollution (covered by EP3).

Actions to be taken by operator / team-leader
(listed in order of priority)

1. If a fire is detected (via the automated site fire alarm system) the fire alarm will automatically be sounded locally, which is also relayed to the Security Control Room.
2. If the automatic fire alarm system has not activated the alarm can be raised at the nearest break glass point or by ringing 3333
3. Ensure all persons are evacuated from danger area to designated external assembly point.
4. The EM Bronze or fire warden shall carry out a roll call to ensure all personnel are accounted for and have evacuated the area.
5. If it proves to be a false alarm, await 'All Clear' from the appointed responsible person.
6. If toxic smoke present sound Site Incident Alarm and move personnel into appropriate IAP's.
8. If genuine, treat as a major fire incident and follow the steps outlined below:-
   a) Security control room to call fire and rescue service and other emergency services as necessary.
   b) If safe to do so, turn off electricity/ gas supplies.
   c) EM SILVER COMMANDER to liaise with Emergency Services when they arrive on site.
   d) If the fire involves chemicals, then follow Emergency Procedure EP3.
   e) Once under control, clean up any materials that may be a hazard to the environment.
   f) Await 'All Clear' from the Fire and Rescue Service.
   g) Complete "initial" incident report - Recovery Programme, debrief meeting and initiate fire incident investigation if applicable.