



Johnson Matthey
3CR

FLUOR DOCUMENT NO:
X2JM-220-000-AUT-001-0001-00_2

DOCUMENT TITLE:
**ANNEX BUILDING AND LINK BRIDGE
DESIGN AND ACCESS STATEMENT**

JOHNSON MATTHEY DOCUMENT NO:
02-3CR-000-CSAB-DWG-1001

Client:	Johnson Matthey
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1. INTRODUCTION

1.1 PURPOSE

This document outlines the proposed works at the Johnson Matthey (JM) site in Royston to facilitate the construction of Phase II, Annex building adjacent to the existing main facilities building, connected with a link bridge at upper level, on an existing car parking area. This includes Annex complete building works, services & utilities, and interior fit outs.

Planning approval for the first revision was granted under planning reference 23/02625/FP. This DAS has been written to support amendments that have been submitted under a S73 'Variation of Conditions' application. The key amendments are:

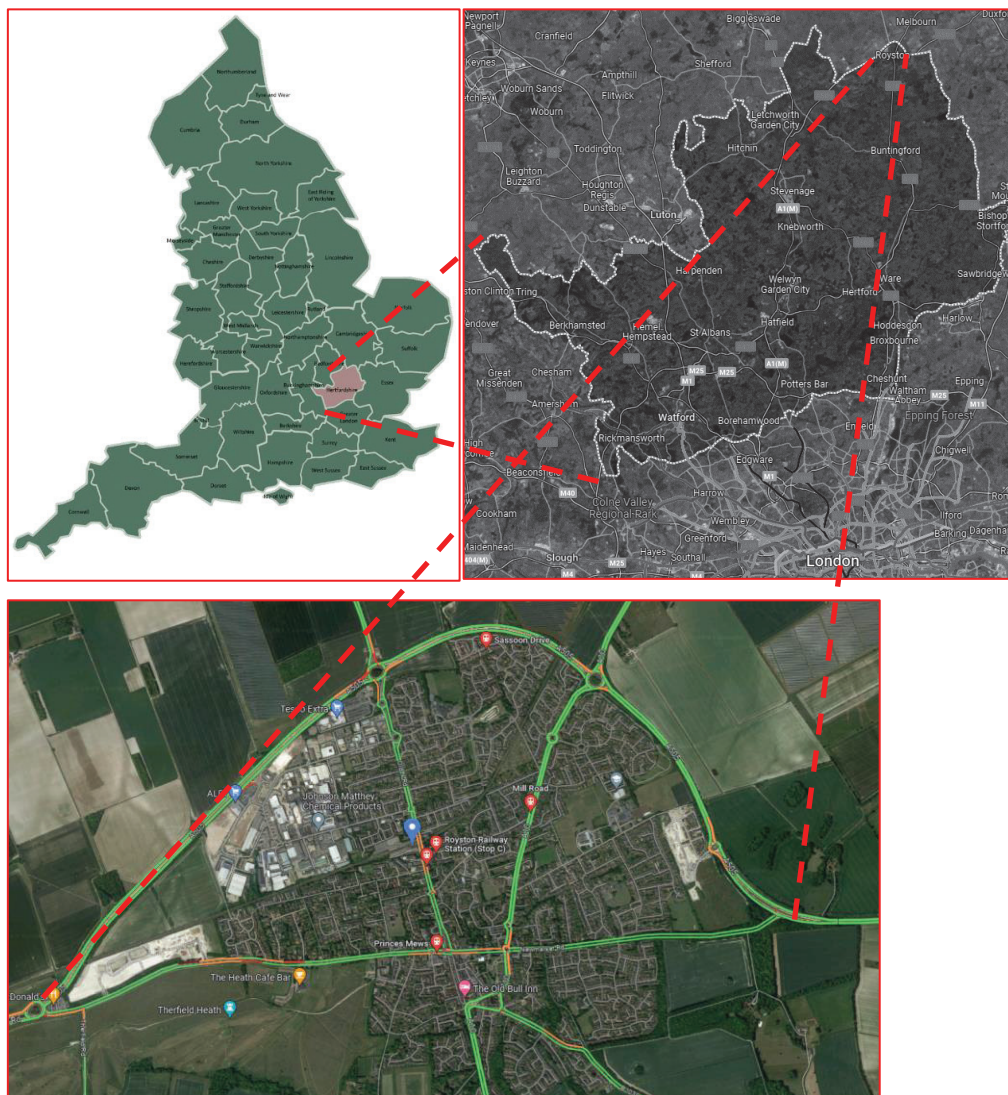
- 1) Erection of an external staircase and supporting platform to the north elevation of the 3CR annex.
- 2) Additional process-floorspace to the roof of the annex (approximately 165 sqm) and
- 3) External materiality changes, predominantly involving a grey application that is of a lighter appearance compared to the previous planning approval.

For the avoidance of the doubt, the proposed height of the building is unchanged compared to the planning permission granted under 23/02625/FP.

1.2 ROYSTON

Royston is a historic market town situated in the very northeast corner of Hertfordshire and has always historically been on the boundary of either Hertfordshire/Cambridge shire, sometimes straddling the border. The town grew up on the crossing of 2 ancient roads, now known as the A10/ Old North Road running north/south and Baldock Road/Newmarket Road running east/west. The town center and high street are located on this crossroads. The town has good transport links with the A505 to the north, linking up to either the M1 (to the west) or M11 (to the east). Royston train station is a short walk away from the town centre directly linked into Kings Cross, in as little as 35mins. There are frequent buses which cover most of the town.

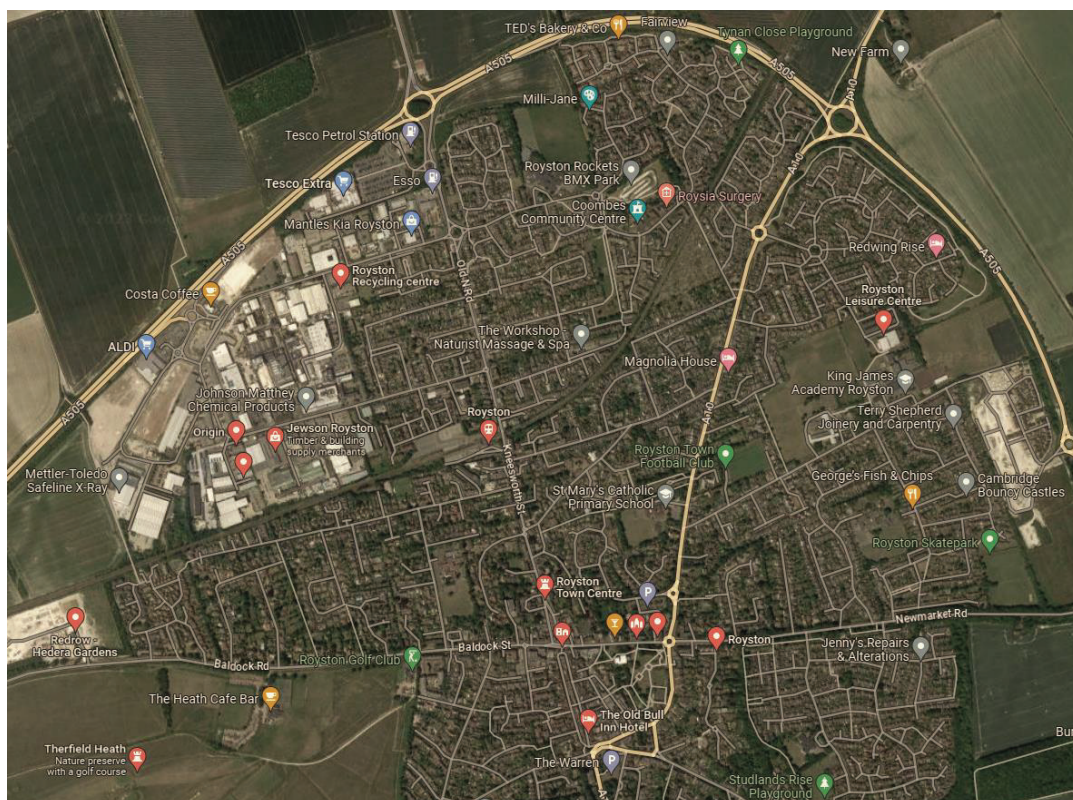
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1.3 CULTURE AND AMENITY

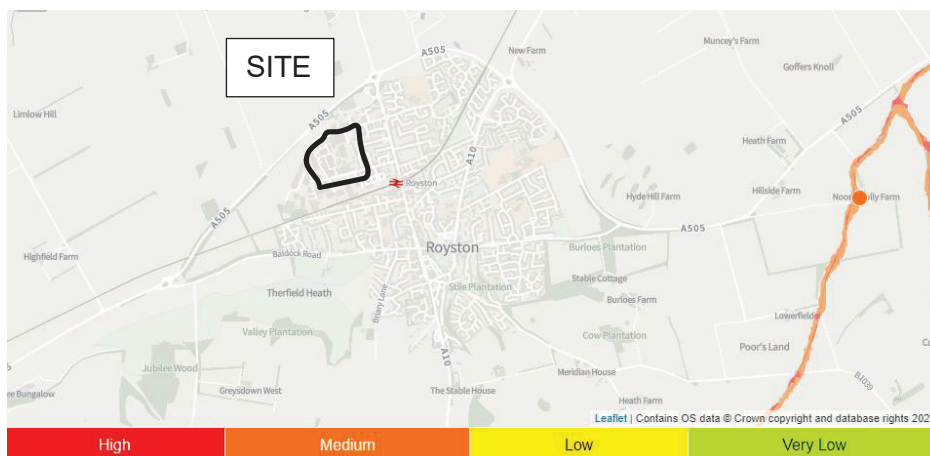
Being a historic town, Royston has several listed buildings, which are, mostly concentrated around the town centre conservation area. The majority of these are Grade II or II*, but there are four Grade I buildings (2 houses, Royston Caves, and the Church of St John the Baptist). There are numerous schools in Royston, which cater for all ages, ranges up to and including sixth form, most of which are located south of the railway line. Royston has various open spaces scattered around the town, from formal parks like the Priory Memorial Gardens adjacent to the town centre, Therfield Heath to the southwest, the BMX park to the north and several children's play areas, one of which is just outside of Royston Industrial estate.

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1.4 FLOOD RISK

According to the Environment Agency's Flood maps, the site is located outside of any coastal or river flooding zones, as illustrated on the plan shown below.



1.5 ROYSTON INDUSTRIAL ESTATE

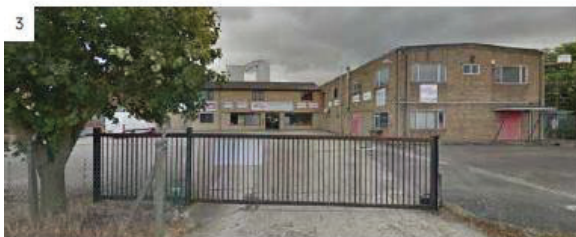
Royston Industrial Estate is situated in the northwest corner of Royston, on the wedge between the A505 and the railway line. It is a low-lying estate consisting largely of car repair/maintenance workshops and kitchen/bathroom design showrooms. There are also several small businesses, such as label makers and plastic moulders, as well as some larger insulation stockists and biotech companies. There are also several other industrial trading estates which link into the main estate, such as Jarman Road and South Close trading estates.

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1. Royston Industrial Estate - southern approach
2. Office/ laboratory building - southern boundary
3. Industrial units - southern boundary
4. Orchard Road industrial units - facing north.
5. Orchard Road industrial units - facing south.
6. Johnson Matthey site boundary - northwest
7. Biotech building - northern boundary
8. Royston Industrial Estate - northern approach

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1.6 JOHNSON MATTHEY

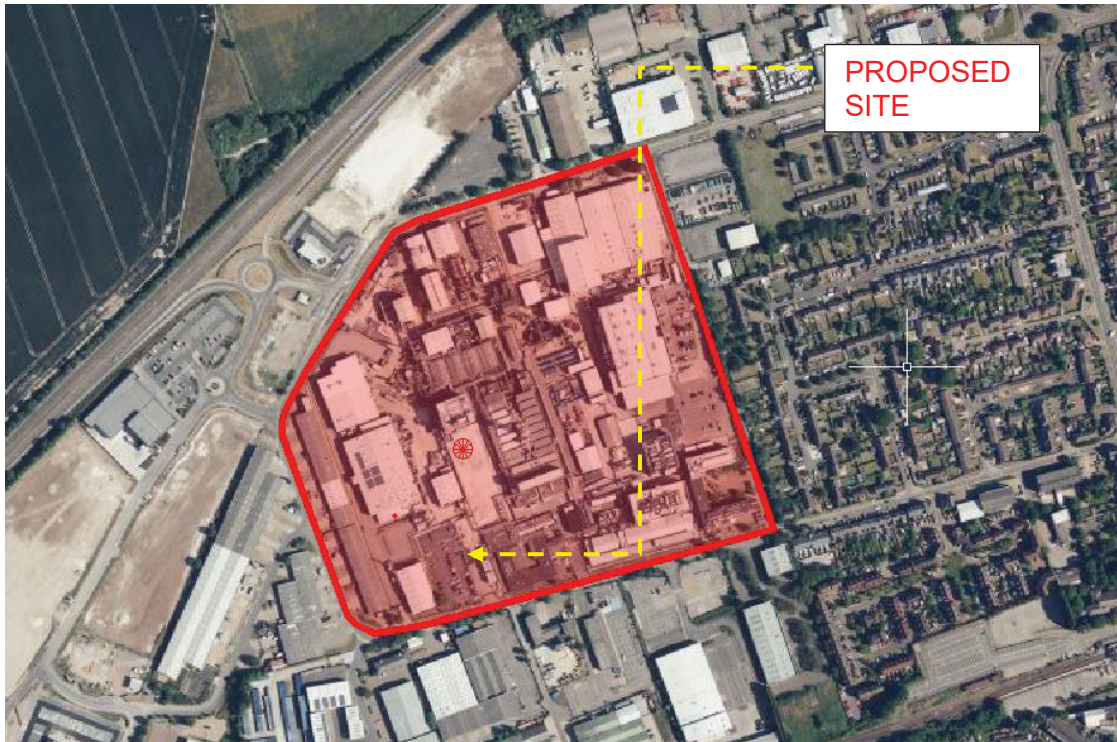
JM have been refining precious metals for 200 years, starting as gold assayers, and extracting palladium from Brazilian Gold. JM have factories in North America, India, China, Japan, and the UK, with sites in Brimsdown and Royston. JM are also leaders in several industries including recycling, environmental, automotive, pharmaceutical/medical, chemical, oil, gas and refineries. JM's Headquarters is situated at 2A Orchard Road, Royston SG8 5HE, North Hertfordshire, where the company moved in 1957, having previously been in the Hatton Garden area of London.



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1.7 FACILITY LOCATION

The Royston Site is situated to the northwest of the town, within the Royston Industrial estate and which takes up about a third of the industrial area. The primary processes which occur at the Royston plant focus on the refining of Platinum Group Metals (PGM's), and their recycling/recovery from global mining operations and spent catalysts. There is easy vehicular access from the A505 at the junction with Old North Road, and then a short drive down York Way (highlighted below). This route keeps site traffic away from the main residential areas and the town centre.



1.8 SITE CONTEXT AND ACCESS

The JM site is bounded to the south by Orchard Road, to the west by the rear of industrial units, to the north by York Way and to the east by the household waste recycling centre and the rear of residential properties access by Orchard Way. There are 18 entrances or gates giving access to the site, from Orchard Road and York Way, most of which are for deliveries, with access being heavily security controlled and monitored. Gate 3 is an unrestricted entrance and gives access to the Headquarters building.

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Gate 6 is the primary entrance/exit to/from the secure area of site for personnel and houses main security. There are areas of the complex which are outside of the secure area of the site i.e., the canteen, Environmental Health & Safety, but all visitors must still report to security to sign in. Once past security and on the secure side of site, there are a series of 'green' routes around the complex, signified by a green line, typically along the edge of roads. These routes allow employees/operatives/visitors to get around site without the need to wear PPE (personal protective equipment). When moving away from the green route, PPE must be worn. Many of these routes also have barriers along with them where vehicle maneuvering may take place.

- 1 & 1A Example 'green' routes
- 2 Gate 3 - HQ
- 3 Gate 14 - Noble metals
- 4 Gate 6 - Main security entrance
- 5 Gate 11 - Noble metals

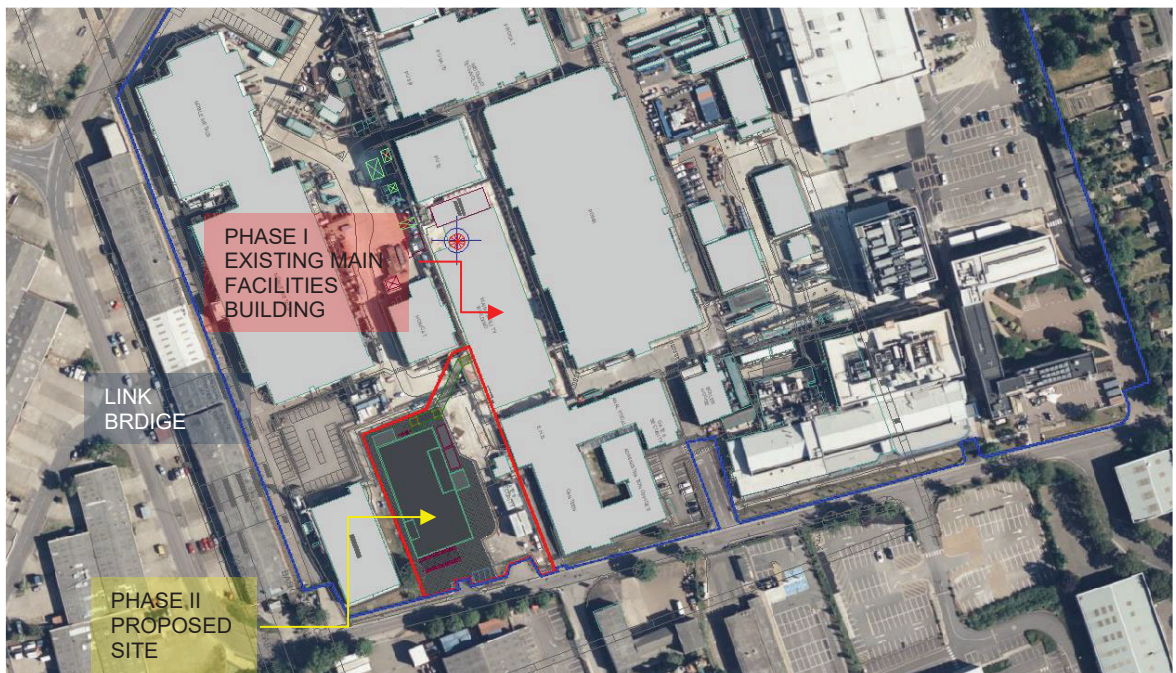


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1.9 SITE

3CR Project Phase II construction work, expected to be completed and operational later than Phase I, consists of the Annex, Link Bridge, additional utilities, and ancillaries. The proposed site selected is an existing car park opposite the Main facilities building already constructed as shown in the image below. The proposed site is surrounded by adjacent functional industrial plant. The 3CR-Annex is proposed as a new building (comprising approximate dimensions of 40 m Length x 24 m Width x 18 m Height), which is proposed to be constructed on the current Royston car park 8/9 plot. Total Gross internal area will be approximately 3000 sq mt. This building consists of three internal floors with HVAC equipment mounted on the roof. The Annex requires all building services to be installed (HVAC, plumbing, lighting, and small power etc.) and is targeted to achieve BREEAM Very Good Certification.



The site requires minor demolition and preparation work since it is a developed site. The surrounding buildings include the security gate, Homcat, Protech and main Facilities building.

1.10 PLANNING

The JM site forms a large part of the Royston Industrial Estate (RE1), which in turn forms a large part of the northwestern area of Royston. The Annex building will come under the B2 use class (General Industry) and will replace an existing car parking area. The building, as approved under 23/02625/FP, will be set over three floor levels (with the drawings labelled Level A (Ground), Level B (First Floor) and Level C (Second

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Floor). The roof level above level C will have stairwell access to service the proposed plant. A link bridge connects the annex building to the approved main facility building (as approved under planning permission 18/01764/FP, which this approved building is north eastwards of the proposed 3CR annex.

The following sections details not only the impacts from the development, which has already been approved, but also the amendments covered through the S73 application.

1.11 IMPACTS

- a) The new proposed building would serve as an annex to the existing man facilities building. As such the new process functions will be only extended. Hence, employment at the site is unlikely to change after the construction is completed, keeping the overall employment on site to what it is now. The three amendments proposed to this application would retain this relationship and not result in the annex competing with the main building.
- b) Under the previous planning application, with consideration applied to parking policy, the submission of parking surveys demonstrated that there was sufficient parking capacity within the existing surrounding car parks to support the development. A planning condition for an up-to-date travel plan was also secured. The additional floor space, in relation to planning policy, is discussed within the planning statement. To reiterate, there would be no noticeable or material change in travel patterns, or volume, associated with the site. Also, due to no change in employment, the number of journeys would not majorly alter and as referred to in paragraph d) below, there is a long direction to increase the sustainability of travel to and from the site.
- c) It is anticipated that there will be a 3-year building phase and during this period there will be a slight increase in heavy goods traffic and an increase in contractor personnel traffic.
- d) JM commissioned a Green Travel Plan in July 2013, which promotes 'green' travel such as membership of lift-share, car sharing, spaces for car sharers and reducing overall journeys. Walking and cycling to work are also encouraged, and targets are set for future years. The quantity of cycle parking on site (there are currently 8 formal cycle parking areas) is reviewed as part of the onward monitoring of staff journeys. A planning condition is already secured to planning permission 23/02625/FP for additional cycle parking, which we are content to be reapplied to any new approval.
- e) One of the amendments to this application is the addition of an external staircase and supporting platform, to the north elevation of the building. The purpose is to serve as a fire escape to the first floor of the building. Given its position, it is not readily visible from the surrounding highway, especially given the position of existing buildings. It is a subservient addition to the buildings that would not materially impact upon the building's use or appearance.

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- f) An additional amendment proposed under this Section 73 application is an update in colour to the external materials. Whilst the material type (i.e. metal composite wall cladding) remains the same as per the previous approval, the colour finish is now a lighter grey. The Planning Statement discusses the planning case further, but the light grey is considered appropriate both to the wider industrial area, as well as in reading the annex as an extension to the main MFB building.

The Construction Method Statement (Condition 3 of planning approval 23/02625/FP) has already been fully discharged under 24/00957/DOC. This information is re-provided as part of this submission. If this S73 application is approved, to avoid unnecessarily re-discharging the information, it is requested that a planning compliance condition is appended to any planning approval.

1.12 PLANNING HISTORY

There have been several small planning applications in the last few years, ranging from temporary portacabins, minor extensions to buildings, installation of extract stacks and canopy alterations, to name a few. A selection of key approvals is detailed below:

- a) The largest application in recent years was the construction of PU12 which is a 3-storey detached laboratory building, immediately north of our site. This application, 14/00708/1, was approved in May 2014 and has since been built.
- b) There is another application of note which is a change of use application for the HGV test centre to the south of Orchard Road, which JM owns. This application, 17/01234/1, looks to use the site for car parking (168 spaces), storage, and office. A conditional approval has been given in July 2017.
- c) Another recent noteworthy application was for Main Facilities building. The application 18/01764/FP, erection of 4/5 storey refinery building split into two parts; The admin block (5 storey) consisting of changing, office and admin functions, and the Process block (4 storey's) containing the refining processes, following demolition of existing Western Block building. Construction of a new storage and packing building following demolition of the existing building. Internal refurbishment of two other buildings. This application was approved in Jan 2019. The approved construction under this application is nearly complete.

1.13 PLANNING CONTEXT

We have reviewed the proposed scheme against the relevant guidance and policies in the following documents:

- National Planning Policy Framework,
- North Hertfordshire District Local Plan 2011-2031 Local Plan

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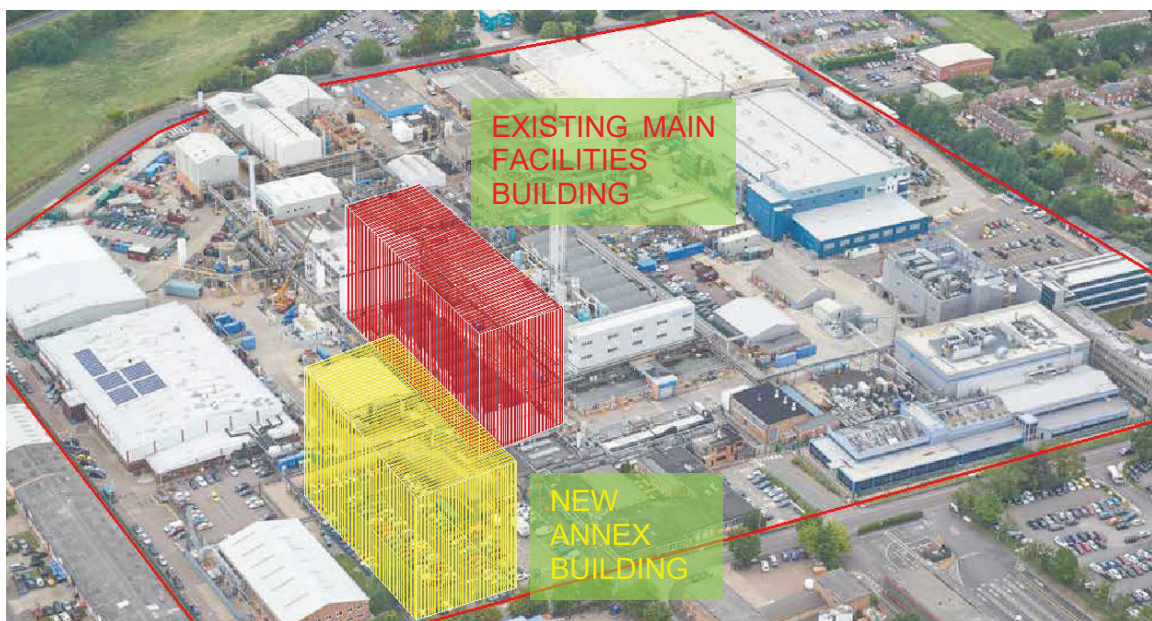
2. PROJECT OVERVIEW

2.1 3RD CENTURY REFINING – PHASE II

The 3rd century precious metals refinery (3CR) project is the result of JM's push to improve the efficiency, safety, and sustainability of their refining processes. This is the 3rd century that JM have been refining metals, hence the project name. To hit the IPA (International Platinum Group Metals Association) targets, JM needs to build a new refinery which is the key focus of this project. Phase I of this project is underway. In Phase II a new Annex building and link bridge will be built using the building concepts utilized in Phase I. The building will house the essential process and utility equipment and some general plant operational functions. For more detail on the design principles governing the 3CR Phase II building, refer to section 3.

2.2 ANNEX BUILDING AND LINK BRIDGE

The 3CR-Annex is a new building (comprising of approximate 40 m Length x 24 m Width x 18 m Height) to be constructed on the current Royston carpark 8/9 plot. It is conceived as a steel frame building with concrete slabs and roof, the same structural concept utilized for the MFB. The interconnecting MFB/Annex bridge is dog-leg configuration with a total length of approximately 45 m, a height of 18.6m and width 3m (refer to Section 3). The building will have processing equipment, control panels, electrical panels, M.C.C. etc. arranged on all floor levels. Operators will be stationed in the building. However, occupant facilities in main facilities building shall be utilized such as change rooms, washrooms, and offices. The link bridge will play an important role in enabling the operational staff to access.



3. ANNEX BUILDING AND LINK BRIDGE – DESIGN PRINCIPALS

3.1 CONCEPT DESIGN

The concept design for the Annex building is to house the extended new refining process and associated utilities inside and outside the building. The building has an insulated concrete block cavity wall base up to 5m height with only entrances/exits and fire escapes breaking the facade. Above this is a light colored insulated metal cladding with windows on the exterior of the building to get natural light into the desired areas. At first light grey insulation panel

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considered but in order to make it less imposing to the traffic and people we changed it to light grey.

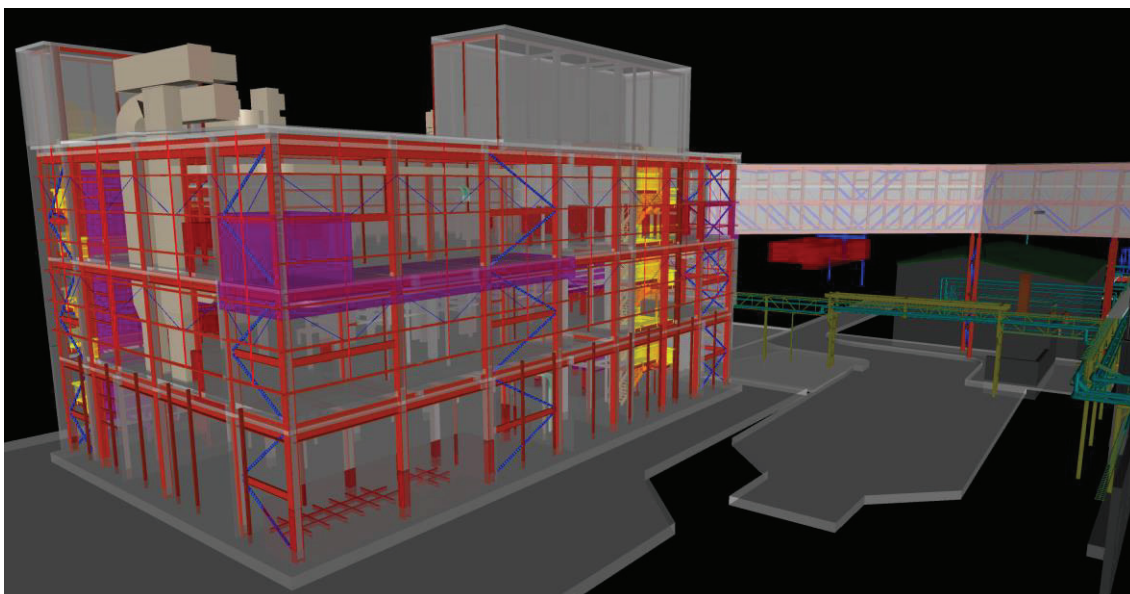
Enclosed stair blocks are arranged diagonally to provide egress from all levels. The height of the Annex building is in keeping with its surrounding context, and slightly lower than the PU12 building to the north as well as like main facilities building since, they are connected. The area of the site where the building is proposed to be located is already densely developed. The footprint of the proposed building is smaller than that of the existing MFB in the same location. The link bridge will also have similar architectural features so that new development appears as one unit.



3.2 BUILDING SCHEME

The new 3CR phase II Annex building layout is a simple functional arrangement of floors to have maximum area available for equipment, utilities with operational and maintenance movement around. The Annex Building would comprise three process floors at ground level, 6m and 12m elevations, designated as levels A, B and C, with level D being the building terrace at 18m elevation. Two internal staircases would be provided at the southwest corner and the North east side of the building, giving access to all process floors and the building roof. A goods and passenger lift would be provided at the southwest, adjacent to the staircase, providing access to levels A, B and C and D.

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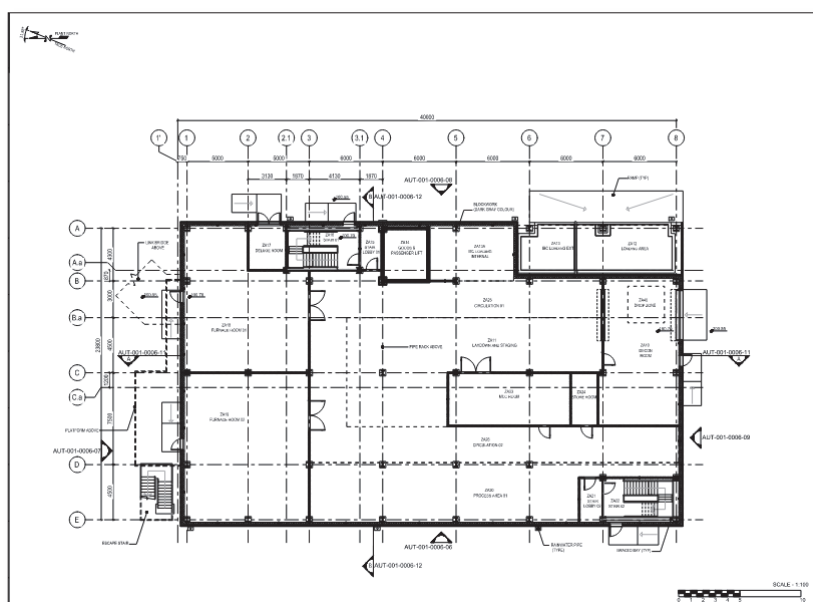
3.3 ACCESS

Employees and visitors will still need to pass through gate 6 to enter the site (see 1.8 Site context and access). Employees have access passes, but visitors will need to report to security where they will be given temporary passes. Visitors will then be escorted onto site by the members of staff they have come to visit. In this way, public access to the building is not permitted.

4. ANNEX BUILDING AND LINK BRIDGE – LAYOUTS

4.1 GROUND FLOOR PLAN – LEVEL A

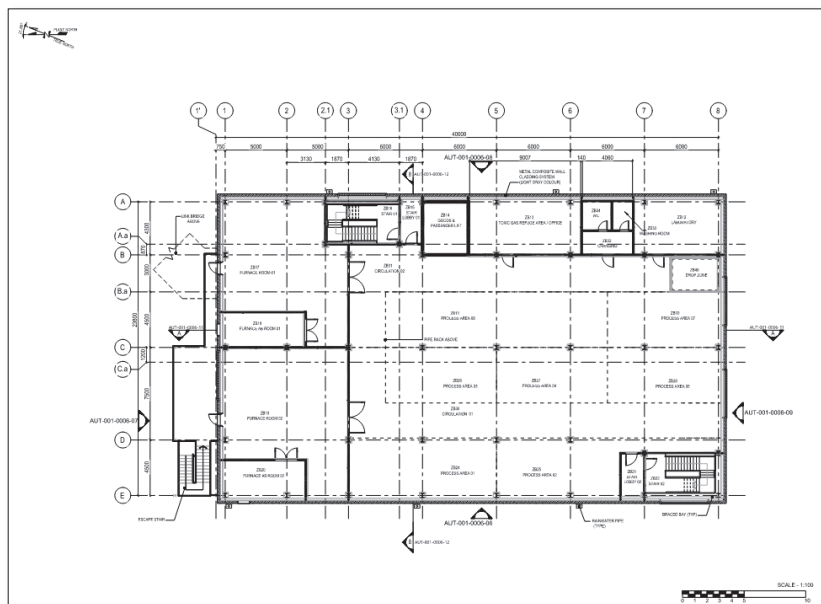
Level A comprises equipment from several process streams and reagents, with the calcination rooms located on the north side of the building. Chemical / IBC and equipment access is via a roller shutter door on the south side of the building, leading to a laydown area with access to the goods lift, decontamination room, stores, toilets, firewater pump room and MCC room.



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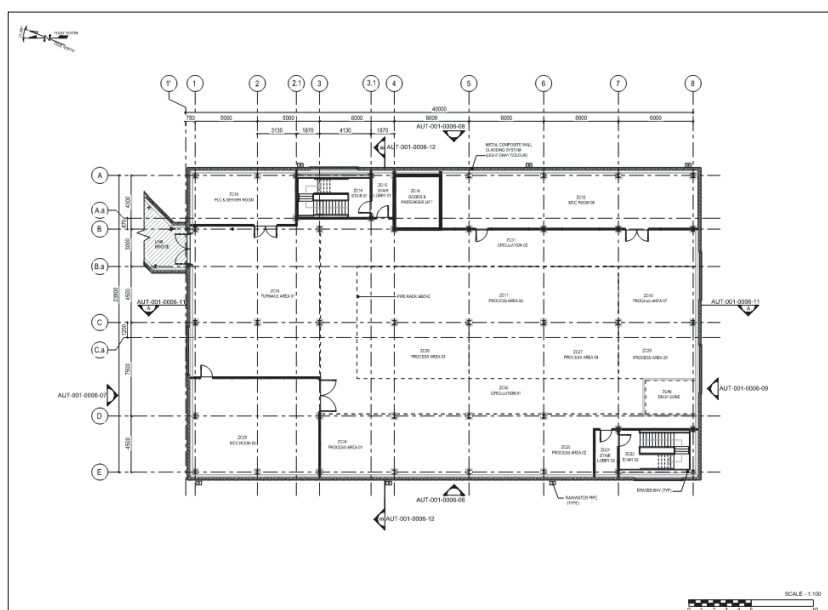
4.2 FIRST FLOOR PLAN – LEVEL B

Level B comprises equipment from process streams with process flow from south to north. Level B contains the furnace oven, which is manually loaded. The two calciners are fed from the belt filter / dryers on the floor above.



4.3 SECOND FLOOR PLAN – LEVEL C

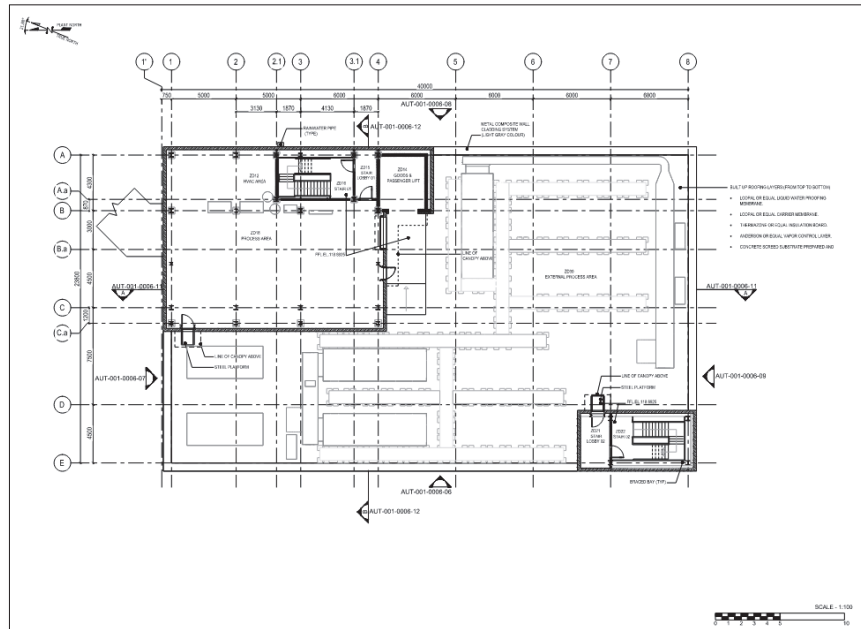
Level C comprises equipment from process streams and reagents. Level C contains belt filter / dryers located in the main process plant. An allowance for tank and the associated pumps to be duplicated in the Annex Building has been made to avoid the inventory which would be contained in the several inter-connecting pipes between the Annex Building and the MFB. Level C is linked to the MFB level D via the enclosed pipe rack and personnel accessway from the northeast corner of the building.



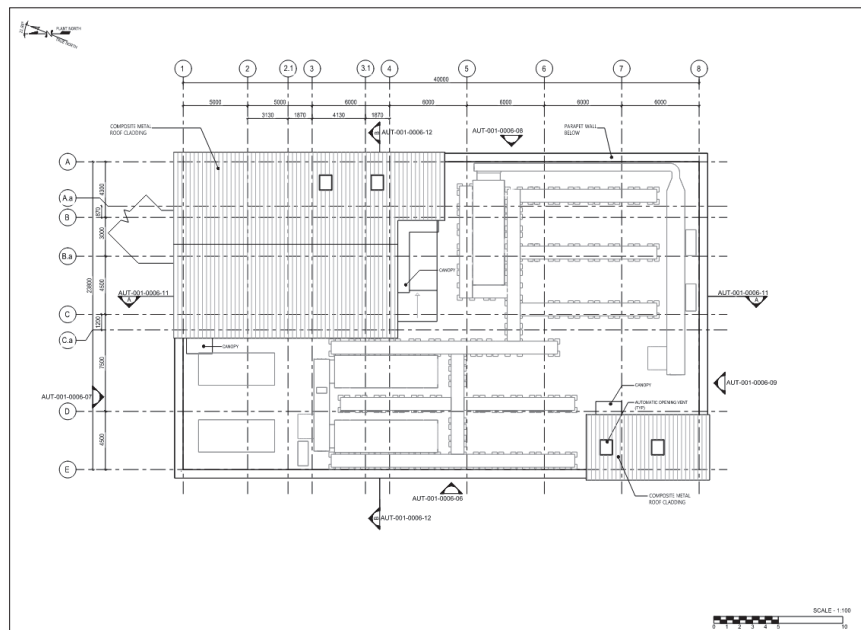
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4.4 THIRD FLOOR PLAN

Level D is used for the air handling units (AHU) with stairs and lift access at the southwest corner and stair access the east side of the building.



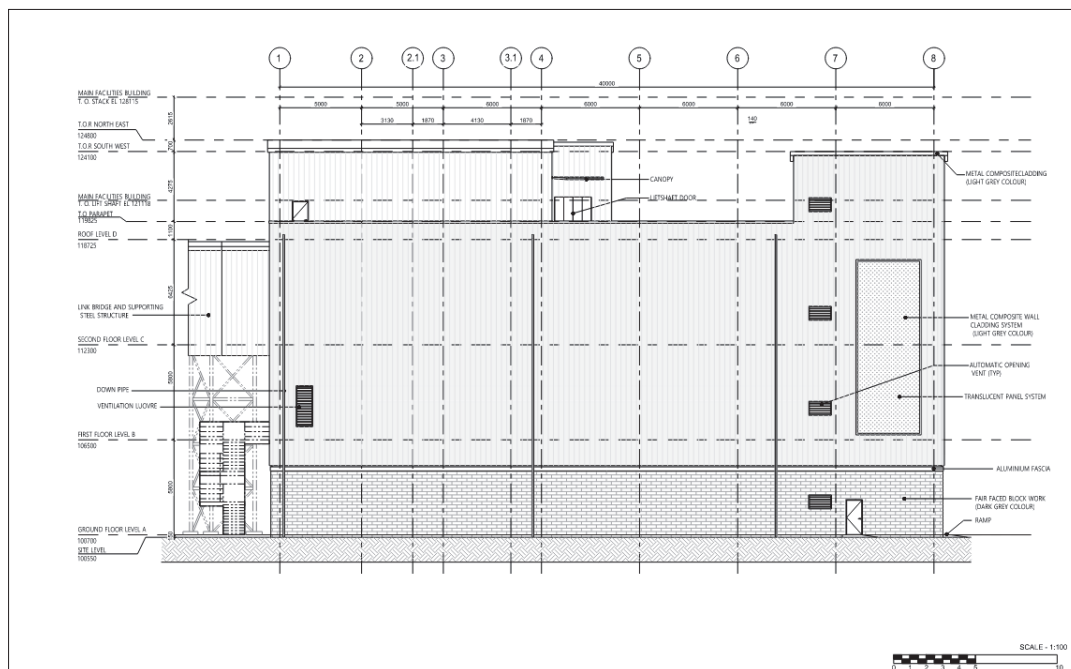
4.5 ROOF PLAN



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5. ELEVATIONS AND MATERIALS

5.1 WEST ELEVATION



5.2 EAST ELEVATION

