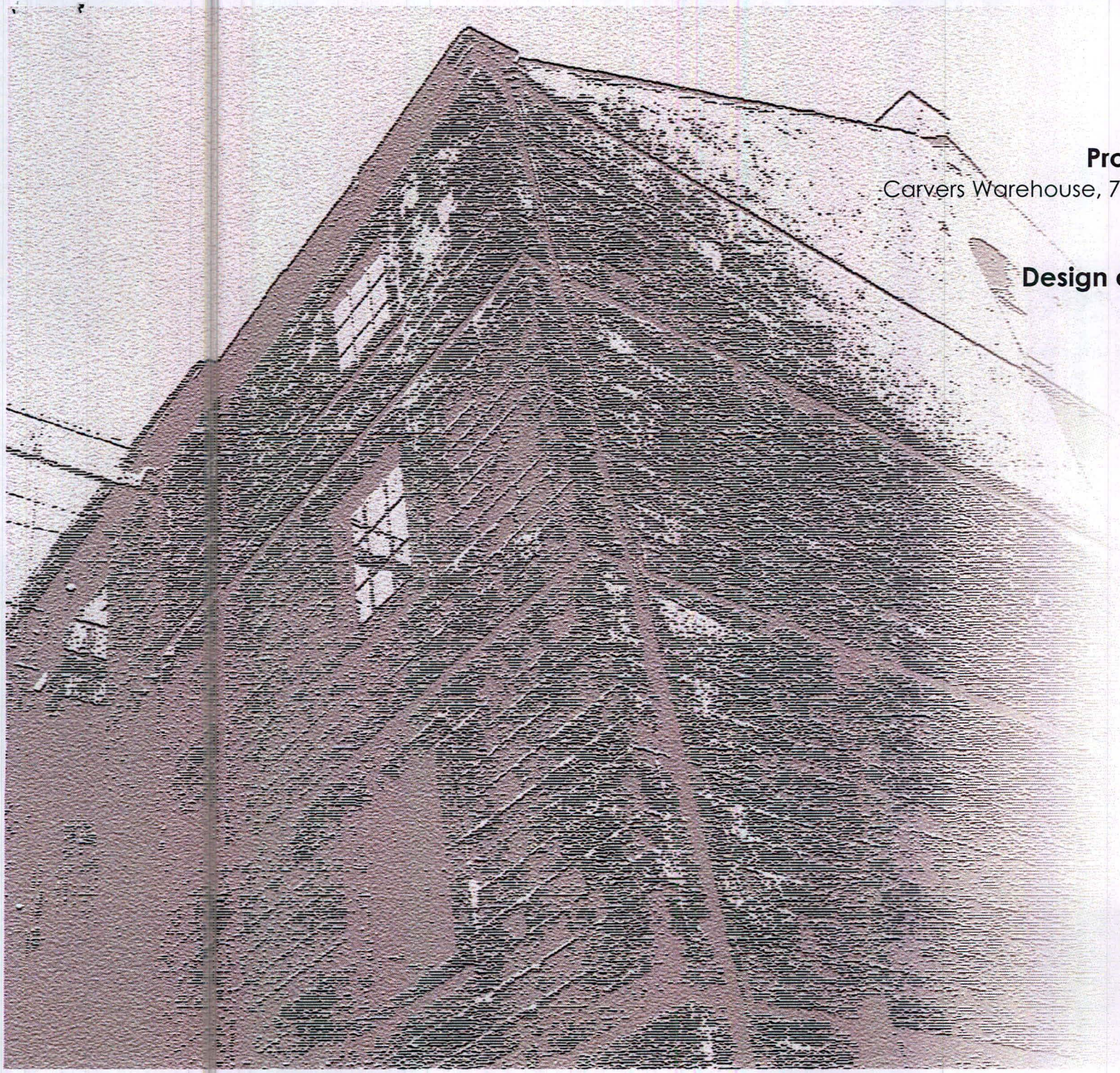

Proposed Radio Antenna

Carvers Warehouse, 77 Dale Street, Manchester

PPS 5 Statement & Design and Access Statement

Client: Town Centre Securities Ltd

Date: 09/01/2012

Job no: 12014 Rev A

PLANNING AND
BUILDING CONTROL
30 MAR 2012

THE HARRIS PARTNERSHIP

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THE HARRIS PARTNERSHIP

1.0 Introduction

This Design and Access Statement has been prepared by The Harris Partnership Ltd (Architects).

The requirement for Design and Access Statements has arisen in response to the need to promote better quality and more sustainable design in development – an objective embedded through PPS1: Creating Sustainable Communities (2005).

The purpose of this statement is to describe in detail the site and surroundings, relevant design policy and guidance where appropriate, and the concepts and principles behind the proposals to provide a single radio antenna installation to the Carvers Warehouse site which is a Grade II listed building.

To comply with the requirements set out with regard to applications for Listed Building consent, consideration of the Government Guidance in PPS 5: Planning for the Historic Environment must also be considered. This PPS requires that all applicants provide a level of information that is proportionate to the significance of the asset and the potential impact upon that significance of the proposals. This is to ensure existing historical, technical and architectural significance of the building are considered where necessary to allow for a considered decision to be made on the proposals. Should any original building fabric be altered, removed or concealed details of these works and how the proposal will impact the building are required with relevant policies being referenced.

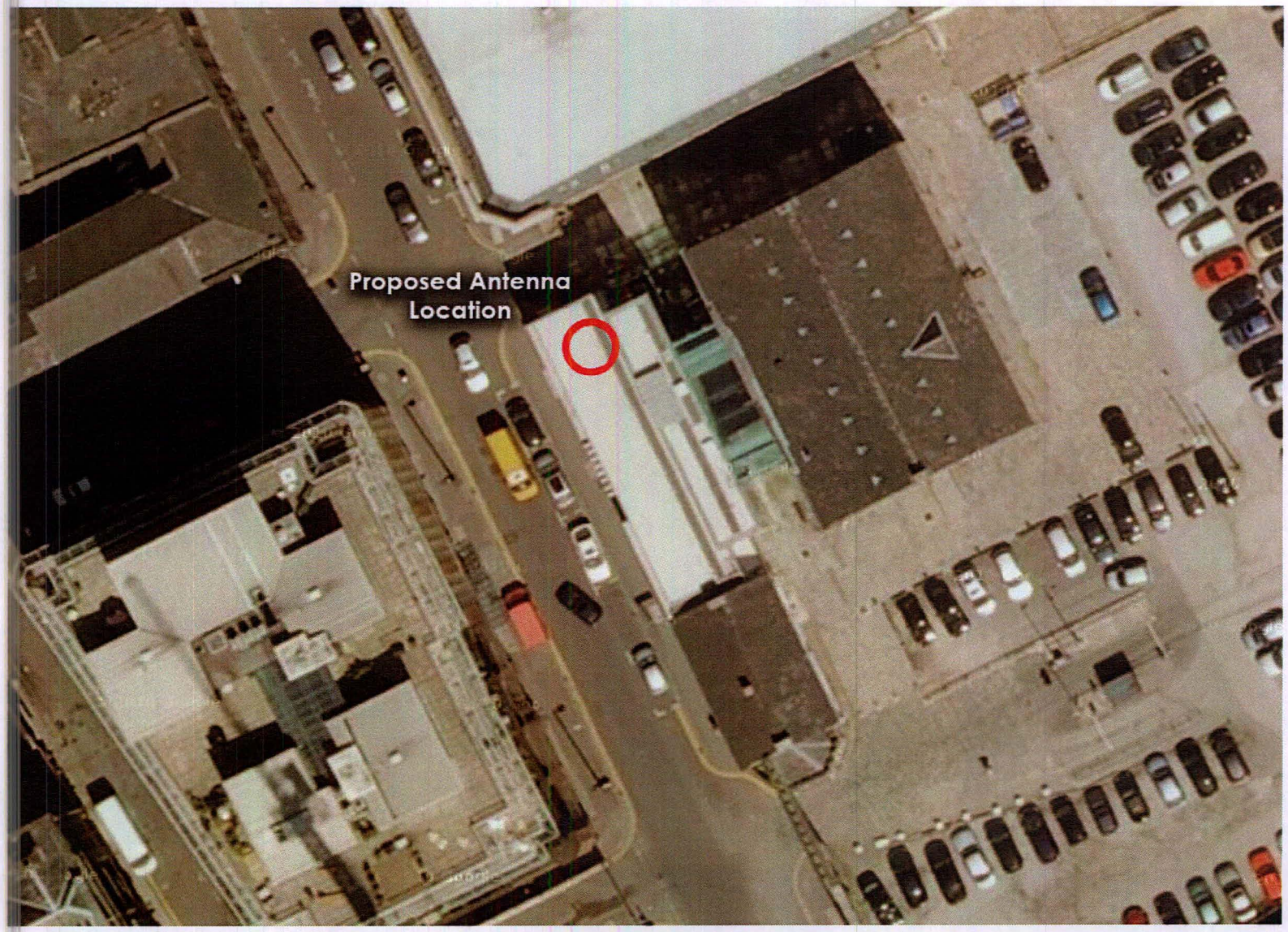
2.0 Site Location and Surroundings

The site is located within the Northern Quarter, Manchester City Centre a historically rich area of the city with numerous fine examples of mills and warehouses. Constructed throughout the 19th and early 20th century during Manchester's industrial past these buildings make up a high proportion of built form in the area.

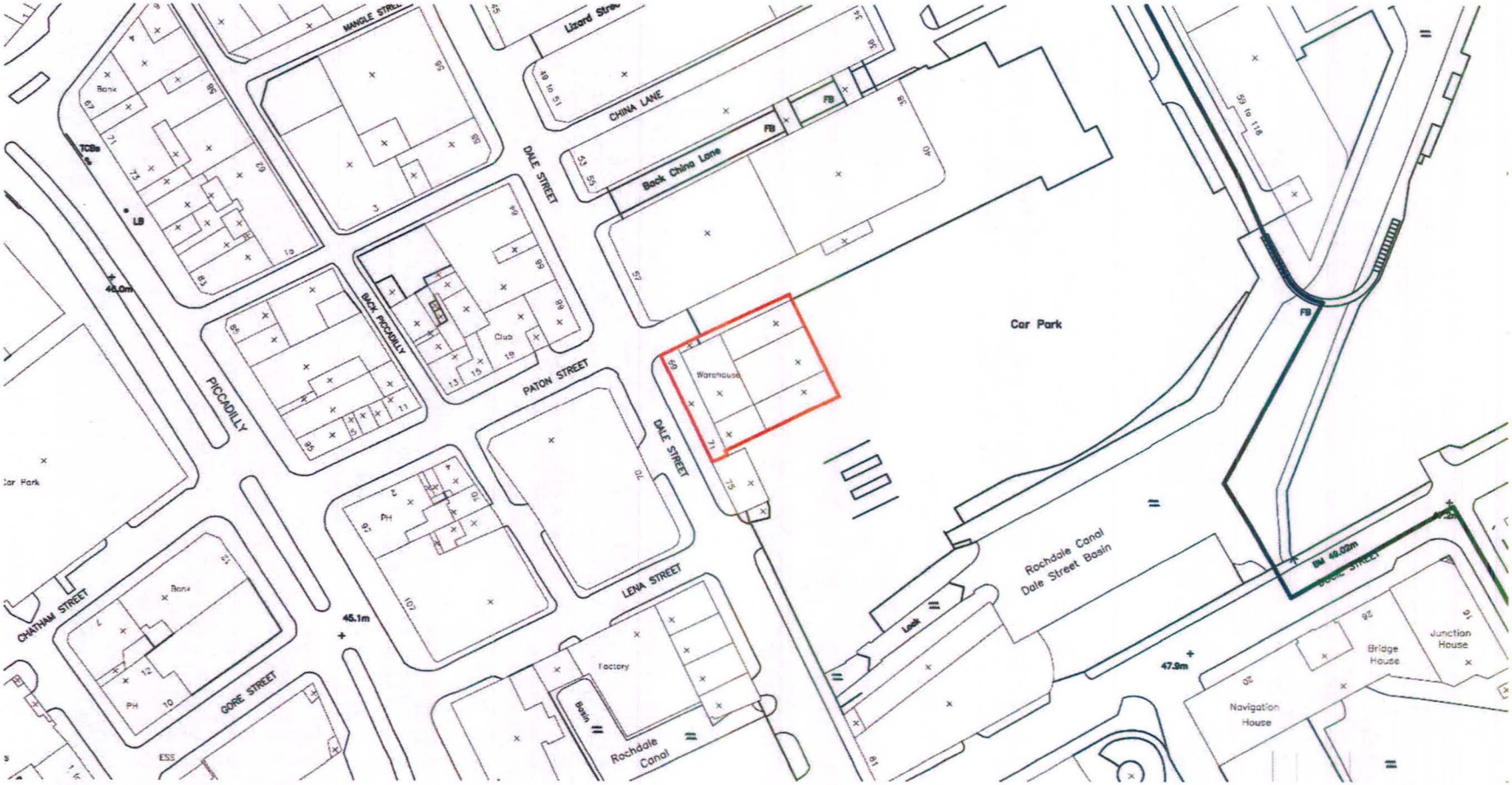
The subject building of this application is located directly adjacent to the Stevenson Square conservation area which itself consists of numerous listed buildings, the property Carvers Warehouse (Dale Warehouse) is on Dale Street. The historical element is set back from the road. The elevation to Dale Street is presented as a contemporary addition with the remaining three elevations restored with minor changes.

The elevations facing to the south and east overlook a temporary surface car park and the Dale Street Basin (Piccadilly Basin). The adjacent property to the south west is 75 Dale Street which is a Grade II listed, 2 storey white rendered property currently in use as offices. To the North a 6 storey residential building Industry House, 57 Dale Street is also listed. To the west another residential building, Piccadilly Lofts, 70 Dale Street which is a 7 storey building with more recent additions at its rear of which only the historical fabric is listed. Beyond 75 Dale Street to the west is a new discount hotel currently under construction which is 12 storeys high and faced in dark grey/blue brick.

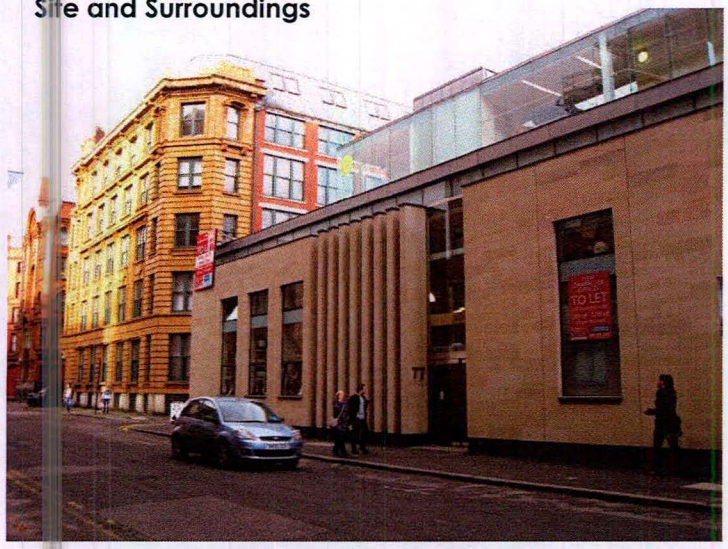
2.1 Site as existing – Aerial photo (Fig 01)



2.2 Site Location [Fig 02]



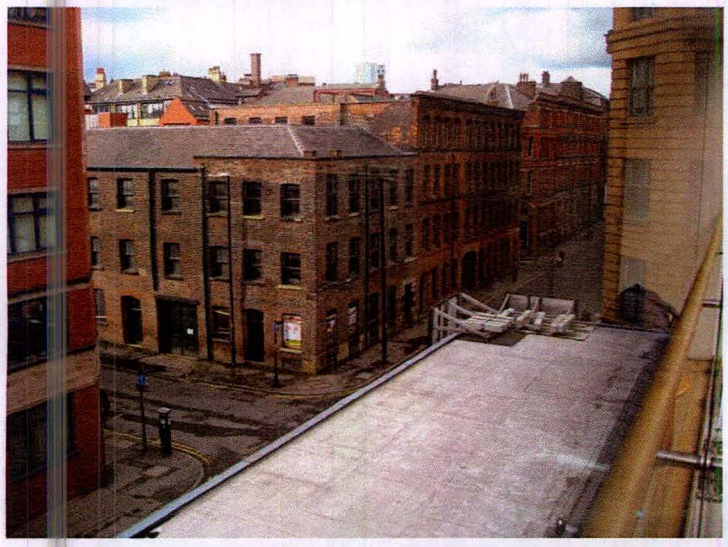
2.3 Site and Surroundings



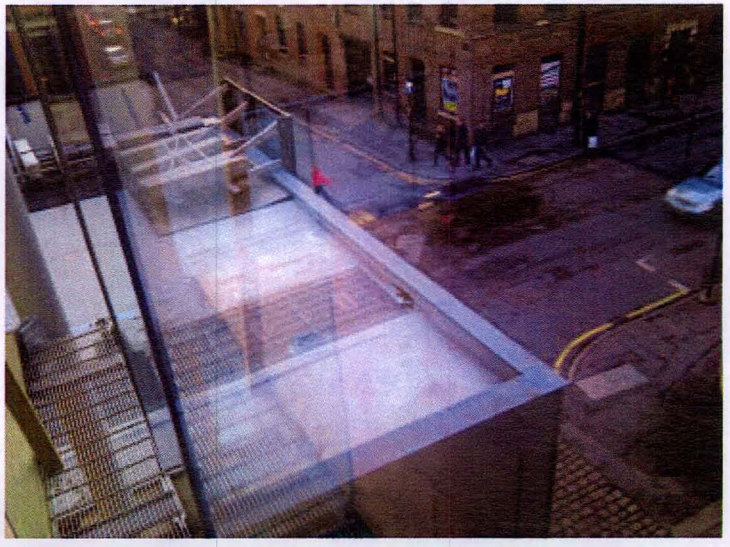
VIEW 1 – Dale Street Elevation (Fig 03)



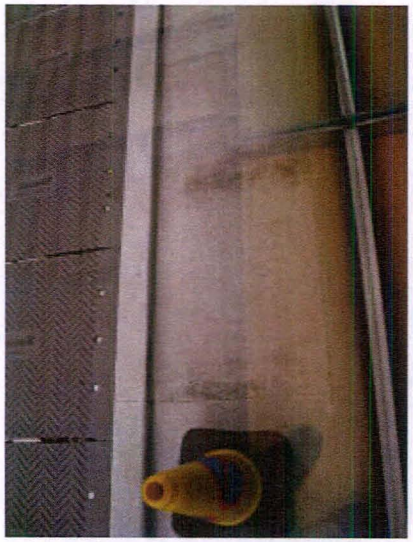
VIEW 2 – Dale Street / Paton Street Junction (Fig 04)



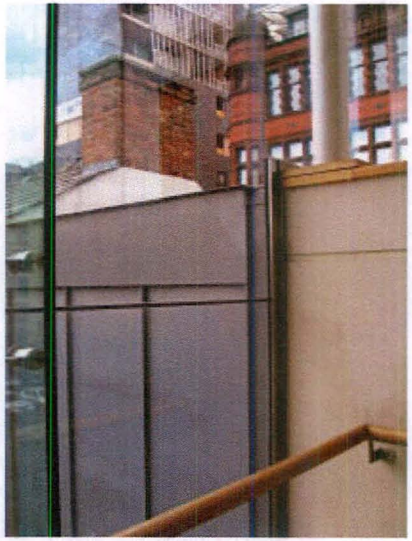
VIEW 3 – Flat roof over first floor meeting rooms (Fig 05)



VIEW 4 – Proposed antenna location (Fig 06)



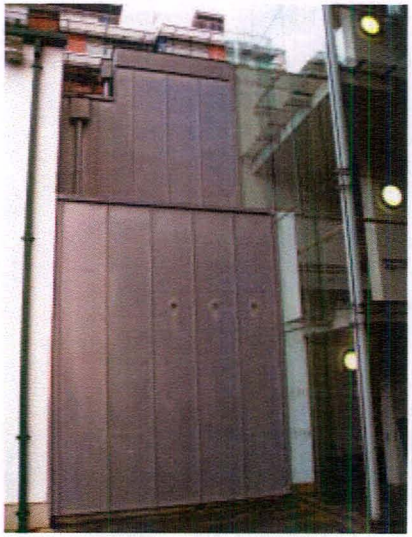
VIEW 5 – Cable route (Fig 07)



VIEW 6 – Cable route (Fig 08)



VIEW 7 – Dale St / Paton Street from 19 Paton Street (Fig 09)



VIEW 8 – Cable route (Fig 10)



VIEW 9 – Paton St (Fig 11)



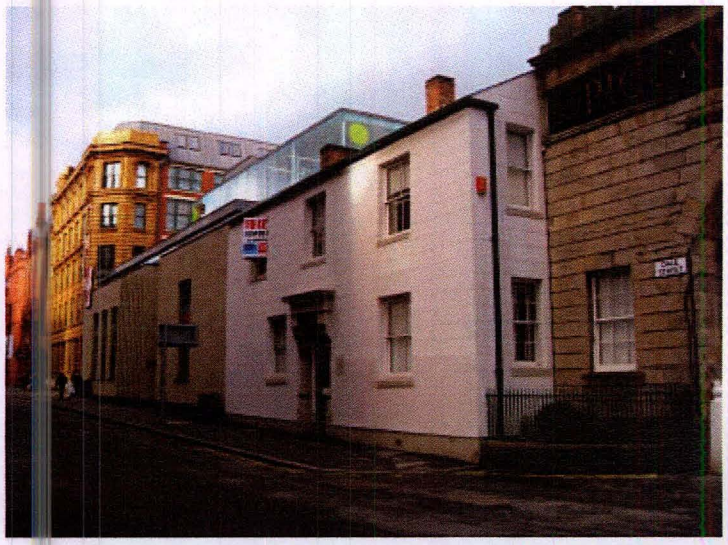
VIEW 10 – Paton St elevation of Carvers Warehouse (Fig 12)



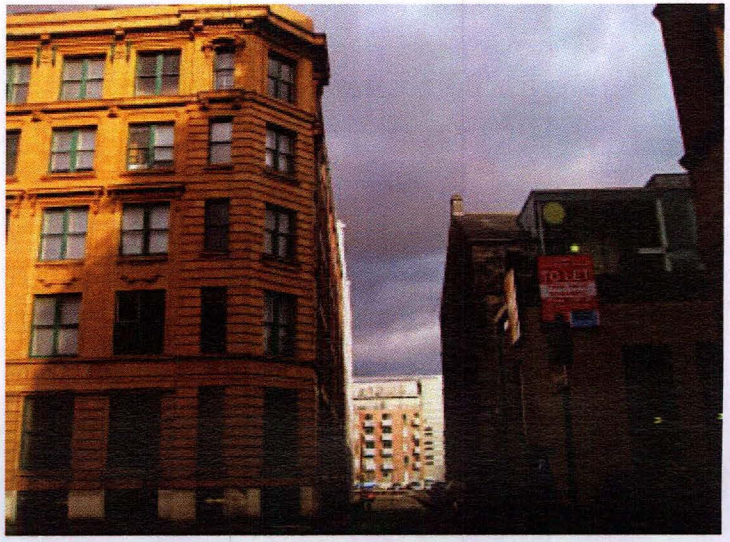
VIEW 11 – Industry House (1913) (Fig 13)



VIEW 12 – Horrocks, Crewson & Company Warehouse (1899) (Fig 14)



VIEW 13 – 75 Dale Street (early C19) (Fig 15)



VIEW 14 – Industry House along Paton Street (Fig 16)

3.0 Concept analysis

Prior to the preparation of this application alternative options and methods have been considered. This has involved input from the service provider and the Landlord who manages the building. This process is to ensure a solution which is not detrimental to the existing fabric of the building or its value as a heritage asset while still enabling the required functional end result to provide a radio antenna.

Following the above the most appropriate proposal has been progressed involving the submission of this application for planning and listed building consent.

A key requirement is to site the proposed radio antenna in a location where it will have clear line of sight to Piccadilly Tower while requiring minimum or no works on the historic building fabric.

These requirements allow us to identify locations giving clear views to Piccadilly Tower which is essential to enable the system to operate. These included three zones, one fixed to the original stone building fabric at eaves level on the North West corner of the building, secondly at high level near the ridge line again fixed to the stone building fabric and lastly on the flat roof at second floor level of the 4 story extension which contains ancillary meeting rooms.

4.0 The Process and Design Principles

General Design Principles

The following key principles for the proposal has been identified from an assessment of the site and surroundings, an evaluation of issues and opportunities, consideration of planning policies and Local Authority guidelines.

The Scheme

4.1 Use

The radio antenna is required to provide suitable data connectivity not provided by the local wired network in the area. This will ensure that the current use of the building as modern office space is marketable to tenants and continues to be in the future as occupants demand greater online connectivity and flexibility. This is one part of Town Centre Securities ongoing commitment to maintain and assure this heritage asset remains in use which is key to ensure its long term future.

4.2 Amount

The proposal is to provide a 300mm x 300mm square radio antenna which requires a clear line of sight to the Piccadilly Tower as detailed previously. The proposal includes a 1.2m high support and associated base approximately 1m x 1m which is weighted down as opposed to fixed through any walls or through the roof.

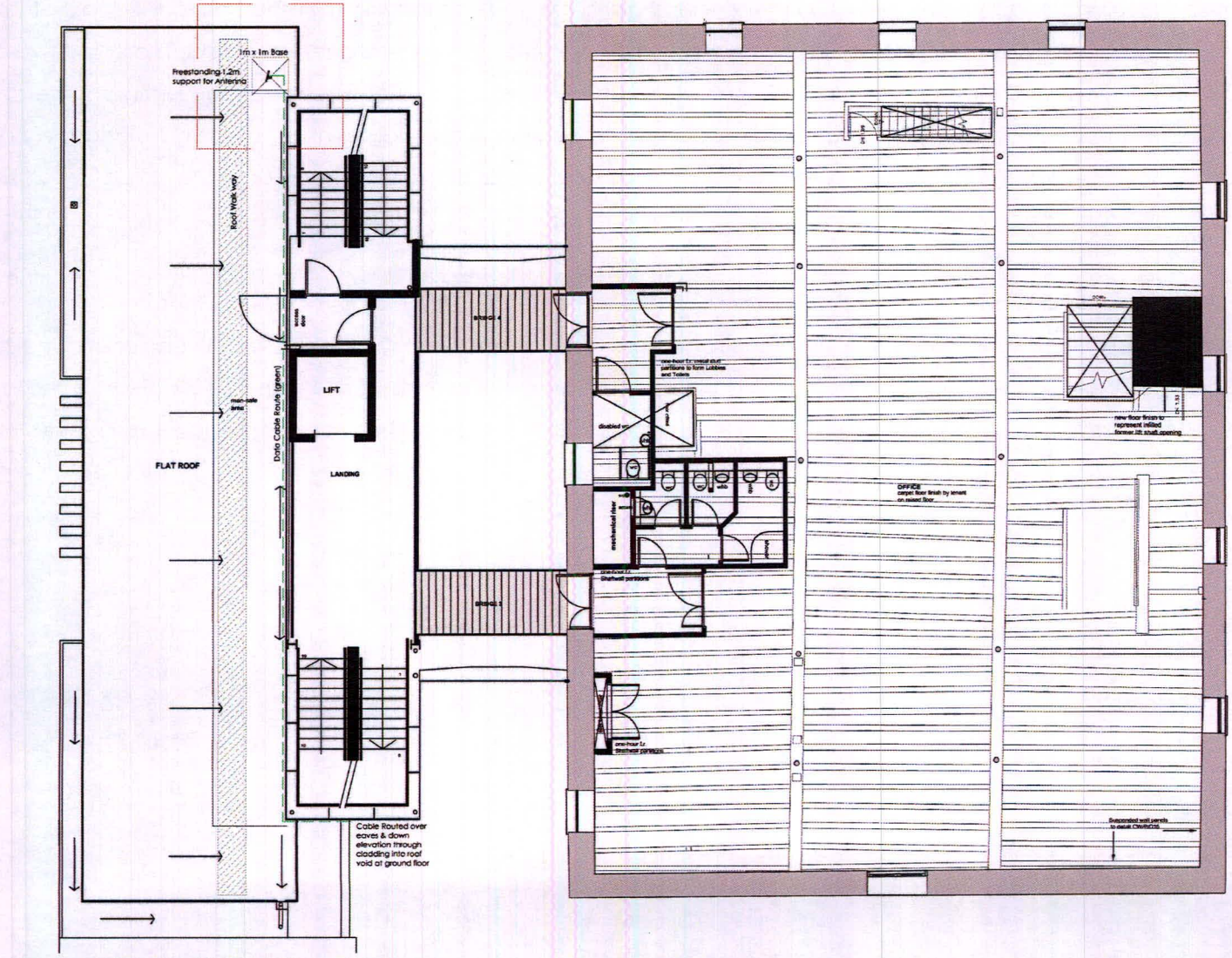
The method for installation alone allows this proposal to be easily removed in the future with no adverse impact to the building fabric old or new. The works required internally are very minimal with the single line of cable routing through a false ceiling above a kitchen and disabled toilet to the central distribution hub all within the modern extension.

4.3 Layout

The antenna itself we propose to locate on the flat roof of the part 2 part 4 storey contemporary addition to the building completed in 2003. The location is such that it is concealed from views at ground level along Dale St and is in a location where it is only visible from the adjacent apartment building Industry House on upper floors and from within the modern glass fire escape stair at only second and third floor levels. The location has been determined as a result of a number of requirements and also considerations of the context.

The flat roof was deemed the most suitable option as it omits any need for physical alterations to the historic building fabric. The flat roof location also allows the antenna to be weighted down as opposed to permanent fixings. The data cable is to be routed along the back of the up-stand on the flat roof concealing it from view so as not to impact existing elevations. The only location where the cable will be visible is at the side entrance on the face of the grey zinc metal cladding as shown in Fig 08 and Fig 10. Here the cable laps over the eaves and is routed through the external wall at approximately 3m above ground level into the roof void above the kitchen and disabled toilet where it is connected to the buildings network hub. See drawing 12014 – 102 for further details.

4.4 Plan as proposed [Figure 17]



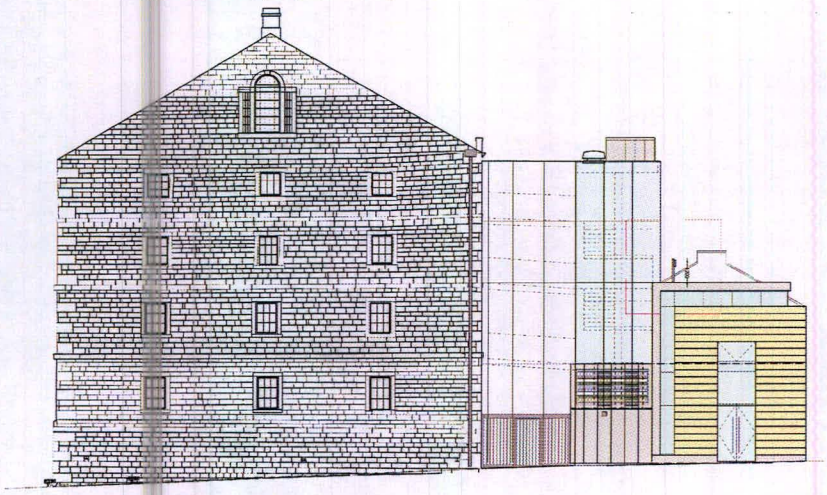
INTERNAL SECOND FLOOR LAYOUT & ROOF PLAN

4.5 Scale and Appearance

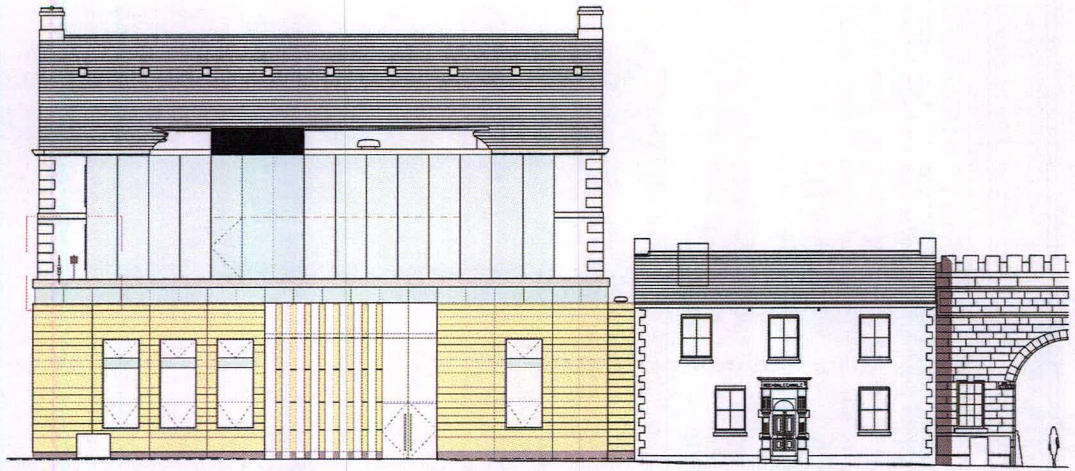
The radio antenna is small in size at only 300mm x 300mm square making it a minor proposal in comparison to the scale of the building elevation. It is to be mounted on a 1.2m high support with a flat base weighted down by concrete blocks. There are two elevations which it may be viewed from as shown on the supporting drawings. These however do not reflect the true setting of the antenna on site which will be hidden from views at ground level along Dale Street itself and the adjacent private road along the north of the building. The photographs within this document as shown in Fig 04 show views of the relevant corner of the building and Fig 06 from inside the glass escape stair looking out onto the flat roof.

The palate of materials used on the building extension is a mix of sandstone and clear glass which has due to its thickness a slight green tint. The eaves are in stainless steel with the flat roof a light grey membrane system. The plant enclosure and link to the adjacent 75 Dale Street are finished in a grey metal zinc cladding system. It is proposed that the radio antenna and associated support and base are finished in a light grey to match the finish of the flat roof given that this is the backdrop against which it will predominantly be viewed.

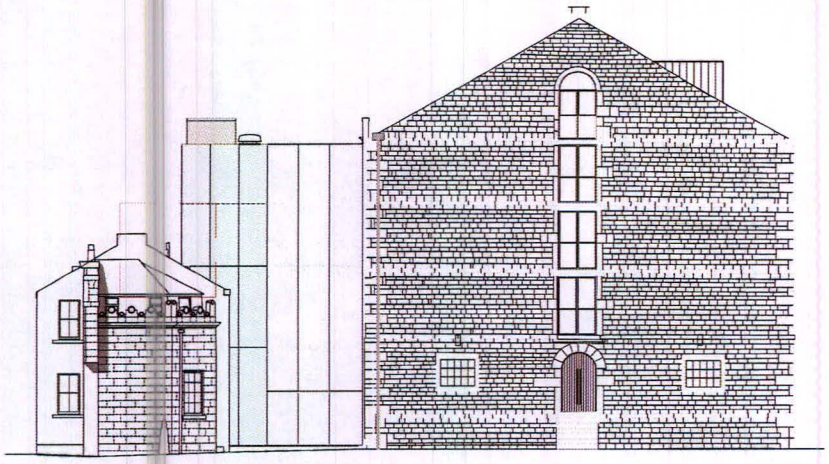
4.6 Elevations [Figure 18]



PATON STREET ELEVATION



DALE STREET ELEVATION



COURTYARD (PICCADILLY BASIN) ELEVATION

4.7 Landscape

There are no landscaping proposals or any landscaping affected by this application.

4.8 Access

There is no access or access related issues affecting this application. Existing roof access is retained as existing.

4.9 Vehicular and Transport Links

Transport and vehicle links are not considered relevant for this application.

4.10 Security & Secure By Design Considerations

The proposal is not affected by secure by design considerations.

5.0 PPS 5 : Planning for the Historic Environment

The requirements of suitable documentation to enable consideration of the application for planning and listed building consent require the consideration of aspects relating to PPS 5: Planning for the Historic Environment.

As stated some of the surrounding buildings a number of which form part of the Stevenson square conservation area are also listed. These are 57 Dale Street a 6 story residential building called Industry House (1913). Carvers Warehouse (1806) by William Crossley constructed as a warehouse building serving the adjacent canal network. Piccadilly Lofts, 70 Dale Street is a modern addition from the 1950's and ties into an existing multi-story building the former Horrocks, Crewson & Company Warehouse (1899) which is listed and of a similar period to Industry House. The other adjacent property 75 Dale Street (earlier C19) the former Rochdale Canal Company office is of a more domestic appearance than any of the surrounding buildings. It is again a more recent addition than Carvers Warehouse constructed around early 19th Century.

Industry House is a mix of red brick with the front elevation faced with buff faience. It is a simplified Baroque style and associated detailing returning both corners fronting Dale Street. A frieze with gold-coloured lettering 'Fred W. Millington Ltd' is inlaid on the elevation which fronts Dale street. The rear and service sides of the building are in red brick with large sash windows and roof lights to the attic spaces. These secondary elevations face the adjacent Carvers Warehouse and position of the proposed radio antenna. A limited number of these apartments look out over the flat roof and will therefore be able to view the antenna although its impact will be negligible given the materials, colour and size of the proposal in this context.

Piccadilly Lofts is in a mix of red sandstone and red brick lay in bands. This appears as a simplified Baroque style similar although more simplified than the adjacent 107 Piccadilly. It has been converted to apartments by the addition of the 1950's brick and stone extension to its rear which provides two additional floors at the roof level which step back from the brick/stone façade. Views of the proposed radio antenna are likely from the upper floors of the 1950's extension although much less so from the right hand side elevation of the listed building which faces Dale Street. The impact is negligible given to the position and scale of proposal.

The property to the south 75 Dale street is limited to 2-storeys and of a much more domestic scale than the surrounding buildings having no direct line of sight or relationship to the proposed antenna. The fabric of this building is a white scored render and slate tile roof with sash windows forming an almost symmetrical elevation to Dale Street.

Carvers Warehouse a Grade II* listed building is acknowledged as the oldest surviving warehouse in Manchester and the only one constructed of stone. Dating back to 1806 it has recently been refurbished and received a new frontage which is of a contrasting contemporary style using a simple palate of materials. The form this takes is a 2 story stone clad block forming the entrance and ancillary office/meeting room spaces with a café at ground. This element is physically separated from the historic stone warehouse by a 4 story glass atrium which covers a series of bridges resulting in the new addition having minimal contact with the historic fabric. Internally the building retains the bare stone walls and majority of the original timbers with cast iron columns. Given the sensitive approach the previous development has taken we have approached this in the same format by developing the proposal to allow it to be sited in a concealed area requiring no work to the existing building fabric. The 4 story glazed link separates the newer flat roof area where the antenna is proposed from the original stone warehouse so only areas of the glazed fire escape will have direct views of the antenna. This can be demonstrated in the preceding photographs Fig 06 and Fig 12.

The national heritage list for England provides the following description of Dale Warehouse (presently referred to as Carvers Warehouse) which was last updated in 1994.

Canal warehouse, including subterranean water-wheel; now store and display rooms. 1806, by William Crossley (dated on keystone of window in north gable), with waterwheel of 1824; altered. Watershot coursed squared sandstone with ashlar dressings and slate roof. Rectangular plan on north-south axis, with shipping holes in rear (east) wall and water-wheel next to south end. Four storeys over a basement, the former front on the west side (now mostly covered by wooden sheds etc) apparently symmetrical, 1:3:1 bays, the centre projected slightly; basement plinth, quoins, bands on 4 levels, moulded cornice, parapet over projected centre; windows with raised sills and plain surrounds (now mostly blocked with brick), and at ground floor of south end a segmental-headed loading doorway with gudgeon of former wall-crane to left. Roof has small skylights, gable chimneys. North gable wall has 3 windows on each floor and Venetian window to attic with lettered keystone (not legible from ground), this and 2 windows immediately below all with original small-paned glazing (others with altered glazing). South gable wall (present entrance front) has central round-headed doorway to raised ground floor, one rectangular window each side, and a full-height round-headed loading slot above the door, with loading doors to each level including attic (but that at 1st floor concealed by signboard), all with wooden sills and the top under a hoist-canopy. Rear has 2 semicircular shipping holes in centre, a round-headed doorway to the left, 4 windows on each floor above, and small gable on roof over left-hand windows. INTERIOR: 2 rows of cast-iron columns with unusual integral struts to long fish-bellied plates carrying timber beams, the lower half of the columns octagonal in section and those on the upper floors with integral flanges for longitudinal shuttering; subterranean wheel-pit parallel to south wall containing 16-foot breast-shot water-wheel (by T.C.Hewes) with hub-mounted gearing and remains of wooden spokes and wrought-iron and wooden buckets, formerly used to drive hoists both in this building and in a former warehouse to the south (via line-shaft through tunnel which mostly survives beneath car-park). (Manchester Region Industrial Archaeology Society: 1989-).

6.0 Sustainability – Environmental Standards Statement

6.1 There are currently no issues relating to sustainability in relation to this application.

6.2 Statement as to whether equipment will meet ICNIRP guidelines and commentary on cumulative effect. (provided by manufacturer)

1. Ceragon

The recommended ICNIRP maximum exposure guidelines for frequencies in excess of 10GHz are 50 Watt/sq m for occupational exposure and 10 Watts/sq m for general public exposure. What these mean in terms of safe distances for any particular installation will depend upon the power level set in the radio and the gain of the antenna. However if you are looking for a general rule that will work with normal powered RFUs and usual antenna sizes, I calculate conservative minimum distance figures of 2 metres for occupational working (i.e. wireless engineers) and 5 metres for the general public (i.e. everybody else). These are of course in the direction of the main beam. To the side and rear, there is no issue and if the dish is mounted at least 3m above the roof surface then all areas will be at safe exposure levels.

2. Infinet

Below 10GHz, ICNIRP safe exposure levels are calculated in terms of specific absorption rates (SAR). The safe occupational level is 0.4Watts/kg for the whole body and 10Watts/kg for head/trunk, whilst for the general public it is 0.08W/kg for the whole body and 2W/kg for head/trunk.

Since the maximum power output of an Infinet radio is 0.2 Watts, it is not possible to reach the whole body exposure levels at any distance from the radio.

To reach the maximum head exposure levels for the general public, the entire radio power would need to be concentrated into only 0.1kg of body surface.

So we can say that a 1 metre exclusion zone is more than adequate for both public and occupational exposure.

7.0 Conclusion

The proposal considers the requirements and constraints of the building and site particularly the impact a proposal of this type can have on historic buildings such as Carvers Warehouse including its surroundings. The options considered and ruled out as less favorable approaches have resulted in the most appropriate solution being brought forward which also has minimal impact on the existing building and its value as a Heritage asset. The location and extent of the proposals has been carefully considered with all efforts to minimize its impact having been the key concerns throughout.

With careful consideration of all the above and supporting documents, it is considered that planning permission should be granted.