

OVG Manchester:

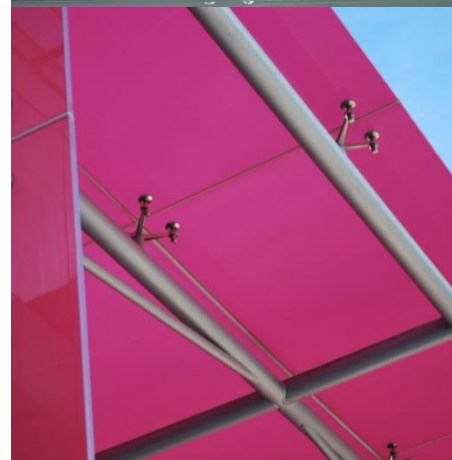
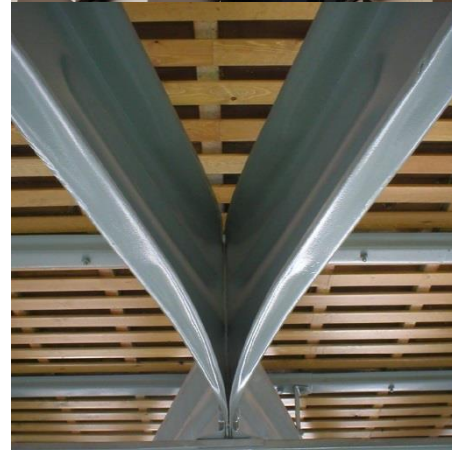
Appendix 9.2 – Highways Safety Report

OVG Manchester

Highway Safety Report

Curtins Ref: 074369-CUR-00-XX-RP-TP-001-V06
Revision: Final for Submission
Issue Date: 02 March 2020

Client Name: OVG Manchester Limited



Merchant Exchange
17 – 19 Whitworth Street West
Manchester. M1 5WG.
Tel: 0161 236 2394
www.curtins.com

STRUCTURES • CIVILS • ENVIRONMENTAL • INFRASTRUCTURE • TRANSPORT PLANNING • SUSTAINABILITY • EXPERT ADVISORY SERVICES
Birmingham • Bristol • Cardiff • Douglas • Edinburgh • Kendal • Leeds • Liverpool • London • Manchester • Nottingham



Control Sheet

This report has been prepared for the sole benefit, use, and information for the client. The liability of Curtins with respect to the information contained in the report will not extend to any third party.

Author	Signature	Date
Matt Thorley BA (Hons) MSc Senior Transport Planner		02 March 2020

Reviewed	Signature	Date
Carl Peers BA (Hons) MSc CMILT MCIHT Associate		02 March 2020

Authorised	Signature	Date
Carl Peers BA (Hons) MSc CMILT MCIHT Associate		02 March 2020

Table of Contents

1.0	Introduction	1
1.1	Background	1
1.2	Purpose of This Report	1
1.3	Structure of the Report	1
2.0	Site Location and Highway Layout	2
2.1	Site Location	2
2.2	Existing/Proposed Use	2
2.3	Surrounding Highway Network	3
3.0	Development Proposals	7
3.1	Introduction	7
3.2	Exterior Façade Proposals	7
4.0	Highway Safety	10
4.1	Introduction	10
4.2	Visibility from Public Highway	10
4.3	Accident Analysis	11
4.4	Summary	12
5.0	Comparable Sites	13
5.1	Introduction	13
5.2	Existing Examples within Manchester City Council Jurisdiction	13
5.3	Existing Examples in Greater Manchester/North-West Area	15
5.4	Other Examples of Large-Scale Advertising	18
5.5	Summary	20
6.0	Policy Context	21
6.1	National Planning Policy Framework (NPPF 2019)	21
6.2	Greater Manchester's 4 th Local Transport Plan	21
7.0	Summary	22



7.1 Summary 22

7.2 Conclusion..... 23

Appendices

Appendix A – Exterior Façade Proposals

1.0 Introduction

1.1 Background

- 1.1.1 Curtins has been appointed by Turner and Townsend on behalf of OVG Manchester Limited to provide traffic and transportation advice in relation to the exterior façade proposals at a new multi-use arena at the Etihad Campus in East Manchester. The proposals comprise the erection of digital video screens on the south and west elevations as part of an application for Advertisement Consent on the proposed arena. Additionally, the top tier only of the building will be illuminated on all sides.

1.2 Purpose of This Report

- 1.2.1 The Town and Country Planning (Control of Advertisements) (England) Regulations 2007 states that the local planning authority shall consult the highway authority where the application is visible from a highway. Safety is a key consideration.
- 1.2.2 This Highway Safety Report has been prepared to support the planning application for the development proposals. It considers the exterior façade proposals and the potential impact on the surrounding area from a traffic and transportation perspective. A key aspect of the report is the visibility of the screens from the public highway, the potential for driver distraction and a detailed analysis of the local area in terms of highways safety.
- 1.2.3 Pre-application advice has been provided by Highways Officers at Manchester City Council (MCC) in February 2019. The comments raised have been addressed in this version of the report.
- 1.2.4 Other impacts associated with the screens, including the impact to residential receptors, are addressed within the light spill chapter of a supporting Environmental Statement prepared by ME Engineers.

1.3 Structure of the Report

- 1.3.1 Following this introduction, **Section 2** of the report describes the site location and the highway network in the vicinity of the site.
- 1.3.2 **Section 3** summarises the development proposals. The visibility of the digital video screens, the potential for driver distraction and an in-depth analysis of the local area in terms of highways safety over the most recent five-year period is detailed in **Section 4**.
- 1.3.3 **Section 5** reviews similar digital advertising and video screens in Manchester and the North West.
- 1.3.4 Relevant local and national transport policy is summarised in **Section 6** and the report is summarised and concluded in **Section 7**.
- 1.3.5 It is concluded that the screens would be visible from roads where there are no underlying road safety issues and would present a low risk in terms of road safety and the potential for driver distraction.

2.0 Site Location and Highway Layout

2.1 Site Location

2.1.1 The application site is located to the north of the Etihad Stadium in East Manchester. This site is currently utilised as overflow parking for events such as football matches and concerts.

2.1.2 The site is bound by Alan Turing Way to the east, Sportcity Way to the north, the Ashton Canal and towpath to the south and Joe Mercer Way to the west.

2.2 Existing/Proposed Use

2.2.1 The application site is currently used for overflow parking; however, plans are proposed for a new multi-use indoor arena, together with supporting retail and leisure facilities, back-of-house and support functions, public realm, cycle parking, access and associated works.

2.2.2 **Figure 2.1** below illustrates the location of the site in relation to the surrounding areas.



Figure 2.1 – Site Location Plan

2.3 Surrounding Highway Network

A6010 Alan Turing Way

- 2.3.1 The A6010 Alan Turing Way extends on a north-south alignment and commences in the north adjacent to the junction with Briscoe Lane, where Hulme Hall Lane becomes Alan Turing Way. This continues for c.2km in a southerly direction towards the signalised junction with the A635 Ashton Old Road.
- 2.3.2 The highway has a straight alignment with good forward visibility. The average total carriageway width is c.17m, which comprises of 2-3 lanes in both directions, with a central reservation located between the northbound and southbound links.
- 2.3.3 Grass verges are located between the carriageway and the footpaths on both side of the carriageway, with vegetation providing a buffer between the land uses to the east and west of Alan Turing Way. This is shown in **Figure 2.2**.



Figure 2.2 – Alan Turing Way (Highway Characteristics 1)

- 2.3.4 It is noted that Alan Turing Way currently passes a variety of large billboards and other visual stimuli, such as the Etihad Stadium, English Institute of Sport and Etihad Campus, with road users aware of the different streetscape they are passing through. This is illustrated in **Figure 2.3**.



Figure 2.3 – Alan Turing Way (Highway Characteristics 2)

- 2.3.5 The highway is subject to a 30mph speed limit, and benefits from Traffic Regulation Orders (TROs) in the form of double yellow lines, ensuring that there is to be no stopping of vehicles on the carriageway.
- 2.3.6 As Alan Turing Way approaches the site from the south, vehicles travel through a signalised junction with Gibbon Street and shortly after, a signalised junction with Sportcity Way. On-site observations indicate that vehicles maintain good lane discipline likely due to the limited number of junctions and side roads.
- 2.3.7 The A6010 benefits from infrastructure including street lighting, bus stops, tactile paving and signalised crossing facilities.

A662 Ashton New Road

- 2.3.8 The A662 Ashton New Road extends along a west-east alignment and commences in the west adjacent to the junction with Every Street, where Merrill Street becomes Ashton New Road. The A662 continues to the east towards Droylsden and Ashton-under-Lyne.
- 2.3.9 Ashton New Road generally has one lane in each direction and is subject to a 30mph speed limit. The A662 also benefits from street lighting, bus stops, tactile paving and signalised crossing facilities.
- 2.3.10 The A662 Ashton New Road is illustrated in **Figure 2.4**.



Figure 2.4 – Ashton New Road (Highway Characteristics)

New Viaduct Street

- 2.3.11 New Viaduct Street extends along a south-north alignment and commences at the priority junction with Philips Park Road. The carriageway continues for approximately 600m before terminating at Bradford Road in the north. There is street lighting present along the west side of the road.
- 2.3.12 New Viaduct Street is a two-way single carriageway with some narrowing and priority control on the route associated with a railway bridge. There is vegetation present alongside and beyond the road providing a buffer between the road and adjacent land uses. This is illustrated in **Figure 2.5**.
- 2.3.13 Based on site observations, the road is very lightly trafficked.



Figure 2.5 – New Viaduct Street (Highway Characteristics)

3.0 Development Proposals

3.1 Introduction

- 3.1.1 A new multi-use arena is proposed at the Etihad Campus in East Manchester, together with supporting retail and leisure facilities, back-of-house and support functions, public realm, cycle parking, access and associated works.
- 3.1.2 This Highway Safety Report has been prepared as part of the supporting documentation for the exterior façade proposals and an application for Advertisement Consent on the proposed arena.

3.2 Exterior Façade Proposals

- 3.2.1 The proposals comprise the erection of digital video screens on the south and west elevations as part of an application for Advertisement Consent on the proposed arena. Additionally, the top tier only of the building will be illuminated on all sides.
- 3.2.2 The screens would be limited to the upper level of the building and only represent a proportion of the overall façades. Each LED video screen would measure 9m high by 33m long with a total area of 297sqm.
- 3.2.3 The digital video screens would face in a southerly/south-westerly and southerly/south-easterly direction and would be visible primarily to vehicles travelling northbound on Alan Turing Way. To a lesser extent, the digital video screens would also be visible from New Viaduct Street and other minor roads.
- 3.2.4 It is proposed that the screens would display both static images and moving videos between the hours of 07:00 – 00:00. Further details of the exterior façade proposals are provided in **Appendix A**.
- 3.2.5 **Figures 3.1 to 3.3** provide illustrative views of the proposals. Additional views and photomontages are available as part of the wider planning submission.



Figure 3.1 – Exterior Façade Proposals, Daytime View (South Elevation) from Footbridge above Alan Turing Way

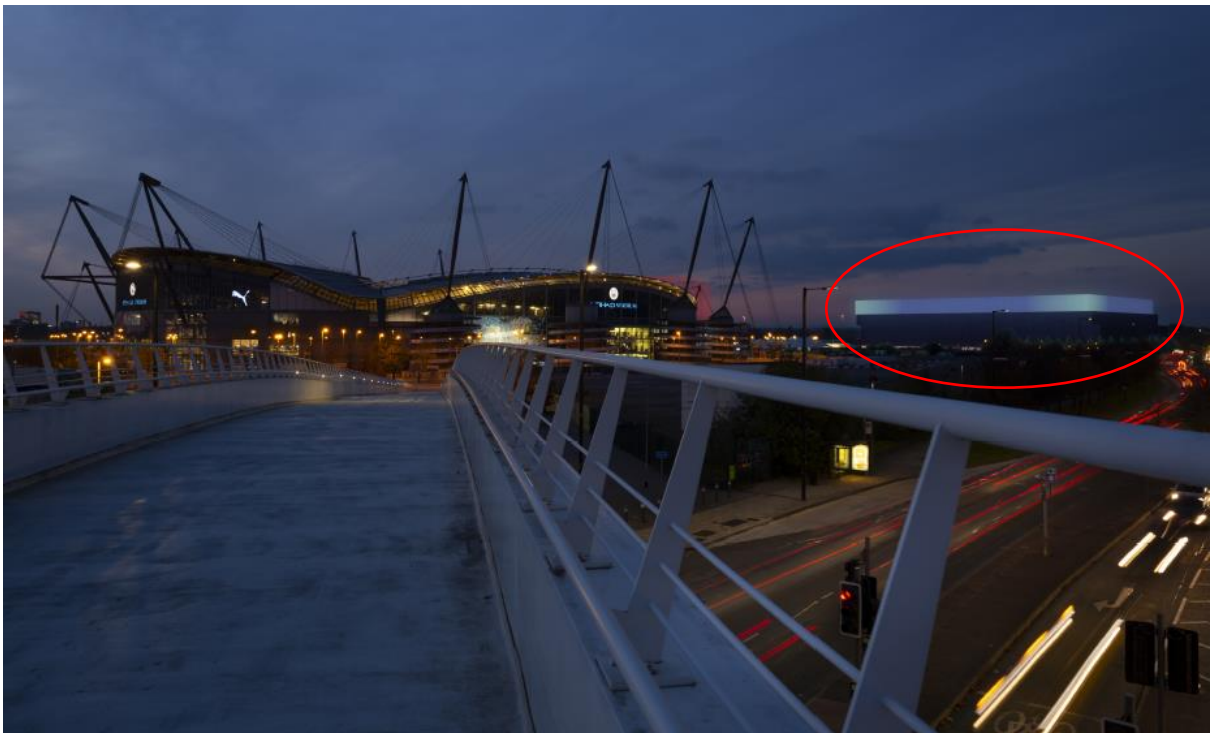


Figure 3.2 – Exterior Façade Proposals, Evening View (South Elevation) from Footbridge above Alan Turing Way



Figure 3.3 – Exterior Façade Proposals, Daytime View (South Elevation) from Ashton New Road

4.0 Highway Safety

4.1 Introduction

- 4.1.1 The exterior façade proposals would be visible to some road users in proximity of the site. A site visit was undertaken to identify the main sections of highway where it would be possible for drivers to view the digital video screens.
- 4.1.2 On this basis, it is considered that the proposals would primarily be in view of vehicles travelling northbound on Alan Turing Way. To a lesser extent, the digital video screens would also be visible from New Viaduct Street and other minor roads.
- 4.1.3 The visibility of the development proposals and the potential for driver distraction has been considered and is set out in **Section 4.2** below. An in-depth analysis of the highway safety record on the above links has also been conducted over the most recent five-year period. Further details are provided below in **Section 4.3**.

4.2 Visibility from Public Highway

- 4.2.1 The proposed digital video screens would be visible to road users travelling northbound along Alan Turing Way. As described in **Section 2.3**, the highway has a straight alignment with good forward visibility. On-site observations indicate that vehicles maintain good lane discipline likely due to the limited number of junctions and side roads.
- 4.2.2 The tree-lined nature of Alan Turing Way would provide a vegetation buffer between the highway and adjacent land uses, including the development proposals. It is considered that the screens would be visible to drivers above the trees, but generally within normal sightlines.
- 4.2.3 It is noted that Alan Turing Way currently passes a variety of large billboards and other visual stimuli, such as the Etihad Stadium, English Institute of Sport and Etihad Campus, with road users aware of the different streetscape they are passing through. Street lighting is also in place along the highway. In this context, it is therefore considered that the potential for driver distraction as a result of the proposals is low.
- 4.2.4 To a lesser extent, the screens would also be visible from New Viaduct Street and other minor roads. As described in **Section 2.3**, New Viaduct Street is very lightly trafficked. There is street lighting present along the road, with vegetation beyond that would provide a buffer between the road and adjacent land uses, including the development proposals. Traffic speeds are also anticipated to be low.
- 4.2.5 It is considered that the screens would be partly visible to drivers along New Viaduct Street above the vegetation. The screens would fall outside of the main sightline of drivers and would be primarily visible

by vehicle passengers out of the side windows of passing vehicles. Hence, the potential for driver distraction is considered to be low.

4.3 Accident Analysis

4.3.1 To establish the existing accident record on the Local Highway Network, where the proposals would be visible, Personal Injury Accident (PIA) has been obtained from Transport for Greater Manchester 'Reported Road Injury Accidents' for the most recent five years from 01/06/2015 – 31/06/2019 and supplemented with further information obtained via the CrashMap website.

4.3.2 The results of this search summarised in **Table 4.1**.

Junction/Link	Slight	Serious	Fatal	Total
Alan Turing Way (Northbound)	0	0	0	0
Alan Turing Way (Southbound)	5	1	0	6
Alan Turing Way/Ashton New Road Junction	5	3	1	9
New Viaduct Street	0	0	0	0
Total	10	4	1	15

Table 4.1 – Personal Injury Accident Data Summary for the Assessment Area

4.3.3 This shows that there has been a total of 15 accidents in the latest 5-year period available comprising 10 slight accidents, four serious accidents and one fatal accident.

4.3.4 The fatal accident occurred at the signalised junction of Ashton Old Road and Alan Turing Way, when a Heavy Goods Vehicle (HGV) hit the rear of a cyclist on approach to the junction, travelling westbound on Ashton New Road. Based on the PIA factors, it is considered that the HGV driver did not look properly when turning left. Whilst the accident is regrettable, it is not considered that any visual distractions or road layout were a contributory factor. The accident also related to vehicles travelling westbound rather than northbound towards the site.

4.3.5 The first serious accident occurred on Alan Turing Way (southbound) at the signalised junction with Gibbon Street, where a car was turning right and hit a motorcycle which was travelling straight ahead. It was noted that this occurred at night and in darkness; based on the PIA factors, it is considered that the car driver did not look properly when manoeuvring. This incident occurred out of view from the proposed development site and out of immediate view of any external distractions.

4.3.6 The second serious accident occurred at the signalised junction of Ashton Old Road and Alan Turing Way, when a car hit the front of a cyclist on approach to the junction, travelling westbound on Ashton New Road. Based on the PIA factors, it is considered that the vehicle driver did not look properly when

manoeuvring. The accident also related to vehicles travelling westbound rather than northbound towards the site.

- 4.3.7 The third serious accident in the study area also occurred at the signalised junction of Ashton Old Road and Alan Turing Way, when a motorcyclist crashed when turning right into Ashton New Road from Alan Turing Way (southbound). Based on the PIA factors, only the motorcyclist was involved, and the carriageway was noted to be wet/damp; as such it is not considered that any visual distractions were a contributory factor.
- 4.3.8 The fourth serious accident in the study area also occurred on exit from the signalised junction of Ashton Old Road and Alan Turing Way, as a motorcyclist crashed into an off-carriageway permanent object when turning left into Ashton Old Road. This incident occurred out of view from the proposed development site and out of immediate view of any external distractions.
- 4.3.9 The ten slight accidents occurred along Alan Turing Way and at the signalised junction with Ashton New Road, which is not atypical given to the type of road and level of traffic utilising these links on a daily basis.

4.4 Summary

- 4.4.1 The digital video screens would primarily be in view of vehicles travelling northbound on Alan Turing Way. To a lesser extent, the digital video screens would also be visible from New Viaduct Street and other minor roads. The links and junctions in the study area have a limited history of accidents with consideration to the busy nature of these roads. It is therefore concluded that there are no underlying road safety issues in the study area.
- 4.4.2 The Etihad Campus is already a prominent and atypical feature in the local area, yet the accident data does not suggest it has caused driver distraction related accidents in the last five-year period.
- 4.4.3 It is considered that the proposals would be a continuation of and complement the existing situation – with large scale events at the stadia and large billboards surrounding the proposed development site – with the majority of drivers familiar with the experience of driving in proximity to various visual stimuli. In addition, the wide tree-lined grass verges create a buffer between the proposed development site and Alan Turing Way. It is therefore considered that the potential for driver distraction as a result of the proposals is low and would present a low risk to road safety.
- 4.4.4 A stage 1 Road Safety Audit will be undertaken to verify the findings of the highway safety analysis set out in this report.

5.0 Comparable Sites

5.1 Introduction

- 5.1.1 Large-scale advertisements and digital screens are becoming commonplace on the road network in Manchester and beyond. They are often displayed close to major carriageways and feature prominently as modern forms of digital screens are replacing billboards as the standard form of advertising.
- 5.1.2 This section provides examples in Manchester and the North-West that are relevant to the exterior façade proposals at the new multi-use arena.

5.2 Existing Examples within Manchester City Council Jurisdiction

Advertising Panel on Axis Tower, Whitworth Street, Manchester City Centre

- 5.2.1 As part of the Axis Tower residential development located in Manchester city centre, a 29.8m x 7m screen was proposed on the northern elevation of the tower. This screen would be sited above Albion Street and would be in full view for drivers utilising Albion Street and the signalised junction with Albion Street, Great Bridgewater Street and Lower Mosley Street.
- 5.2.2 This was approved by Manchester City Council (MCC) on 20th February 2015.
- 5.2.3 Subsequently, an additional application was submitted on 25th February 2019 for additional consent to allow for moving images, animation, video or full motion images to be displayed on the existing media screen.
- 5.2.4 This is located within a prominent location with the City Centre with a variety of manoeuvres being undertaken by drivers at the above signalised junction. It was considered by MCC that the installation of moving images on this screen would not have a detrimental impact on highway safety.
- 5.2.5 The advertising screen has been operational since at least January 2019. An accident data review of Albion Street and the Albion Street/Great Bridgewater Street junction has been undertaken to assess whether there have been any changes in the number of accidents on the local highway network in vicinity of the advertising screen. This is shown in **Table 5.1**:

	Pre-Screen					Post-Screen
	2014	2015	2016	2017	2018	2019
Albion Way (north of Axis)	0	0	1	0	1	1
Albion Way/Gt Bridgewater Jcn	1	1	2	4	0	0
Total	1	1	3	4	1	1

Table 5.1 – Personal Injury Accident Data – Axis Tower Vicinity

- 5.2.6 The review of recent accident data does not demonstrate an upward trend in accidents since the erection of the advertisement screen; it is not considered that the installation of the screen and subsequent permission to show moving images/video advertisements has resulted in negative impact on highway safety.
- 5.2.7 The statistical significance of the above findings has been calculated to satisfy a request from MCC Highways. It is acknowledged that the sample size is small, therefore the analysis should be viewed as indicative only. The analysis shows that the number of post-screen accidents falls within the observed range at a 95% confidence interval level.

Installation of an 11m Free Standing LED Screen, Princess Road, Manchester

- 5.2.8 In 2014, approval was granted for a free-standing LED screen adjacent to the northbound arm of Princess Road in Whalley Range, approximately 3km to the south of Manchester city centre. Princess Road is noted to be a key route in and out of Manchester city centre, with the link very busy throughout the working day.
- 5.2.9 The signage at this location is visible to drivers in both directions, becoming visible from up to 300m or more in the southbound direction and 230m or more in the northbound direction.
- 5.2.10 MCC approved this LED screen on 24th June 2014.

LED Light Wall, Digital Arts Building at Manchester Metropolitan University

- 5.2.11 The development proposals for the School of Digital Arts (SoDA) at Manchester Metropolitan University comprised a four-storey building with an integrated LED light wall on three façades of the building to both sign SoDA from on-campus approaches and create a platform where the digital work produced by students can be displayed.
- 5.2.12 This LED light wall will be visible to drivers on Higher Chatham Street, Boundary Street West and Bonsall Street in the immediate vicinity; however, it was noted that as the light wall will be situated some distance above street level and above the main sightline of drivers, this will reduce the potential for driver distraction and not present a risk to road users.

- 5.2.13 This was subsequently approved by MCC on 14th December 2018, with the only condition being that the LED light wall should not be operational outside the hours of 08:00 – 22:00 from Monday to Friday.

The Screen @ Printworks, Withy Grove, Manchester City Centre

- 5.2.14 Located on the exterior of one of Manchester's largest entertainment venues, this large full-motion LED screen faces onto Withy Grove. The signage at this location is visible to drivers in both directions, on Withy Grove/Corporation Street.
- 5.2.15 It is noted that this location is similar to the Proposed Development setting, with various external stimuli on Withy Grove that drivers are used to navigating.
- 5.2.16 Furthermore, a planning application has been submitted for the redevelopment of the Printworks façade that will retain and enhance the existing LED screen. MCC approved this planning application for the replacement LED screen in February 2020.

The Manchester Media Wall

- 5.2.17 The Manchester Media Wall opened in 2015 and is strategically located on Trinity Way between Salford and Manchester city centre. This large media wall is visible to drivers travelling westbound on the A6042 Trinity Way.
- 5.2.18 It is noted that this is a key route in and out of Manchester city centre, particularly in the AM and PM peak hours. The site is operational, and analysis of accident data does not show any trends in the latest five-year period.

5.3 Existing Examples in Greater Manchester/North-West Area

LED Video Screen at Regent Road/Goodiers Drive, Salford

- 5.3.1 An application was submitted in 2015 for the erection of two LED displays at the corner of Regent Road/Goodiers Drive in Salford – this was approved on 11th November 2015 and is fully operational. It is noted prior to the LED screen installation; a static billboard was situated in this location.
- 5.3.2 This junction is on a major route out of Manchester city centre on Regent Road towards the M602 and requires particular attention by motorists due to lane changes associated with movements to Trafford Road, the M602 Motorway and Albion Way.
- 5.3.3 It is noted that recent site observations have shown that the LED screen now operates moving images and video advertisements.
- 5.3.4 It is understood that the LED screen was erected in 2016. An accident data review of both eastbound and westbound approaches on Regent Road has been undertaken, where the screen will be visible to drivers (approximately 100m in each direction to the screen), to assess whether there have been any

changes in the number of accidents on the local highway network in vicinity of the LED video screen.

This is shown in **Table 5.2**:

	Pre-LED Screen					Post-LED Screen		
	2011	2012	2013	2014	2015	2016	2017	2018
Regent Road (Eastbound)	1	0	1	0	0	0	1	0
Regent Road (Westbound)	0	2	1	0	0	0	2	1
Total	1	2	2	0	0	0	3	1

Table 5.2 – Personal Injury Accident Data – Vicinity of Regent Road LED Screen

5.3.5 The review of recent accident data does not demonstrate an upward trend in accidents since the erection of the LED screen, with an average of one accident per year. It is not considered that the installation of the screen and subsequent permission to show moving images/video advertisements has resulted in negative impact on highway safety.

5.3.6 The statistical significance of the above findings has been calculated to satisfy a request from MCC Highways. It is acknowledged that the sample size is small, therefore the analysis should be viewed as indicative only. The analysis shows that the number of post-screen accidents falls within the observed range at a 95% confidence interval level.

Advertising Panel at J10 M60, Trafford Park

5.3.7 On 31st July 2014, Trafford Council approved an application for a 25.5m high steel tower structure with a 9m x 6m digital advertisement panel at the central island of Junction 10 of the M60.

5.3.8 It has been noted by Highways England that this development will not impede on the future Smart Motorway signage, even with the advertisement being located at a key junction.

5.3.9 It has also been noted by the Local Highway Authority, that the siting of the structure will be seen:

“...in the context of existing views of the motorway infrastructure, and the long approach to the advert along the road will give drivers sufficient opportunity to assimilate the information”.

5.3.10 Trafford Borough Council concluded that:

“It is therefore considered that with the appropriate conditions, the advertisement and tower would not distract drivers on the surrounding highways and would therefore not pose a danger to public safety.”

‘Salford Arch’ – Advertisement at M602/Regent Rd roundabout in Salford

5.3.11 An application by JCDecaux was submitted in 2013 for a freestanding arch with an 18m x 4.5m video screen at the M602 roundabout junction in Salford, which has now been fully constructed. This was

originally recommended for approval by Planning Officers, but refused by Councillors at Salford City Council. This decision was appealed and subsequently allowed by the Planning Inspectorate on the 24th March 2014.

5.3.12 This junction is on a major route into Manchester city centre and is at the location where the A57 Regent Road, Trafford Road, Albion Way and the M602 converge. Both Regent Road and the M602 are very busy in both the AM and PM peak periods, and the junction offers various routes to other roads, requiring motorists to ensure maximum attention as they navigate the roundabout.

5.3.13 However, Highway Officers at Salford City Council have stated the following:

“There is no clear evidence that advertising structures cause driver distraction and features such as these are becoming more commonplace in the streetscape. At the current time there is not a requirement for Traffic Regulation Orders. Therefore I have no objection on Highway Grounds.”

Dual Facing Advertisements on M62 in Liverpool

5.3.14 Liverpool City Council approved an application on 15th June 2015 for two 20m high freestanding towers with dual facing LED advertising screens measuring 7.5m x 5m.

5.3.15 These are to be located in a strategic location within Liverpool at the start of the M62, near the junction of Thomas Lane and Bowring Park Road, with both signs visible to westbound and eastbound traffic.

5.3.16 The Highways Manager at Liverpool City Council approved the application and determined that the proposed displays will not constitute an unacceptable hazard to highway safety. It was concluded that there will be adequate forward visibility to the screens along the M62 and along Bowring Park Avenue in both directions.

Liverpool Media Wall

5.3.17 An application was submitted in 2012 for the erection of 206sqm full-motion LED screen on the façade of the St John's shopping centre in Liverpool city centre. This was subsequently approved and is fully operational displaying brightly coloured advertisements with both static and moving images.

5.3.18 The location of the screen is directly opposite the entrance to Liverpool Lime Street train station and is visible to motorists on the A5038 Lime Street (both directions), St George's Place (eastbound) and Skelhorne Street (westbound). It is also noted that this is a busy intersection within Liverpool city centre, with a signalised junction and various routes that can be undertaken requiring particular attention by motorists due to lane changes that may be needed.

5.3.19 It is understood that the LED screen was erected in 2012. An accident data review of both directions of travel on Lime Street, and St George's Place/Skelhorne Street has been undertaken, where the screen

would be visible to drivers, to assess whether there have been any changes in the number of accidents on the local highway network in vicinity of the LED video screen. This is shown in **Table 5.3**:

	Pre-LED Screen					Post-LED Screen					
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Lime Street (Southbound)	0	0	1	0	1	0	2	0	2	2	0
Lime Street (Northbound)	3	2	2	1	0	2	0	0	1	1	1
St George's Place (Eastbound)	0	0	0	0	0	0	1	1	0	1	0
Skelhorne Street (Westbound)	0	0	0	0	0	1	0	0	0	0	0
Total	3	2	3	1	1	3	3	1	3	4	1

Table 5.3 – Personal Injury Accident Data – Vicinity of Liverpool Media Wall

5.3.20 The review of recent accident data shows an average of 2.5 accidents per year post-LED screen, which is similar to the average number of accidents pre-LED screen. It is therefore not considered that the installation of the screen at St Johns has resulted in a material impact on highway safety.

5.3.21 The statistical significance of the above findings has been calculated to satisfy a request from MCC Highways. It is acknowledged that the sample size is small, therefore the analysis should be viewed as indicative only. The analysis shows that the number of post-screen accidents falls within the observed range at a 95% confidence interval level.

5.4 Other Examples of Large-Scale Advertising

5.4.1 There are other examples across the UK of large-scale digital advertising screens and LED lighting installations adjacent to public highways. A selection of these is provided below for reference:

- **Westfield Square, London** – this 220sqm full-motion digital advertising screen is reportedly London's largest full-motion retail screen. The screen is visible from vehicles travelling along the A219 Wood Lane and Ariel Way on the approach to Westfield Shopping Centre, as shown in **Figure 5.1**. Westfield Shopping Centre is one of the largest indoor shopping centres in the UK and the screen at Westfield Square is similar in scale to the proposed 297sqm screens in East Manchester.



Figure 5.1 – View from A219 Wood Lane/Ariel Way Approach

- **Piccadilly Lights, London** – the iconic Piccadilly Lights were upgraded in 2017 to a single 784sqm full-motion digital advertising screen, which is reportedly the largest advertising display in Europe. The screen is visible from vehicles travelling through Piccadilly Circus and various approach roads, such as the A4 Piccadilly and A4201 Regent Street, as shown in **Figure 5.2**. This is a highly trafficked location in Central London.



Figure 5.2 – View from A4 Piccadilly

- **The IMAX, Waterloo** – this 1,734sqm banner advertisement, with the latest LED lighting technology, is reportedly the largest advertising canvas in Europe. The installation has 48,000 LEDs with a dynamic and programmable lighting system. The advertisement is located close to Waterloo Station in the centre of a major gyratory in Central London. The banner and LED lighting are visible from vehicles on all approaches to the gyratory, including the A3200 Waterloo Bridge/Waterloo Road/Stamford Street/York Road, as shown in **Figure 5.3**. Both the Piccadilly Lights and IMAX installations are larger than the proposed 297sqm screens in East Manchester.



Figure 5.3 – View from A4 Piccadilly

5.5 Summary

- 5.5.1 The examples show that large-scale digital advertisements and LED screens with video, are becoming commonplace and more frequently observed by drivers. Road users are therefore becoming familiar with these stimuli on key routes.
- 5.5.2 There are various examples in Manchester and the wider North-West where large-scale digital screens are located adjacent to key carriageways, which are busier and carry more traffic on a day-to-day basis than Alan Turing Way.
- 5.5.3 As stated previously, the exterior façade proposals would be sited within an area where drivers experience various existing external stimuli. The proposals at the new multi-use arena would largely be a continuation of the existing situation at the Etihad Campus and the adjacent highway network.

6.0 Policy Context

6.1 National Planning Policy Framework (NPPF 2019)

6.1.1 NPPF sets out the current national transport planning policy and outlines the important role that transport policies have to play in facilitating development.

6.1.2 Paragraph 109 of the NPPF focuses on the refusal of development on highways grounds, which states:

“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”

6.1.3 The assessment of highway safety on the local highway network has demonstrated that the impacts of the exterior façade proposals would not be unacceptable.

6.1.4 The development proposals are therefore in accordance with the NPPF.

6.2 Greater Manchester’s 4th Local Transport Plan

6.2.1 Greater Manchester published its fourth Local Transport Plan in February 2017, setting out the plans and spending priorities of Transport for Greater Manchester, the ten Greater Manchester Councils and other key partners in the short, medium and longer term.

6.2.2 The document concentrates on two main strategic areas:

- A More Customer-Focused Transport System: Our Network Principles;
- Integration at the Heart of our 2040 Transport Strategy;
- An Inclusive Network;
- Supporting a Healthier Greater Manchester;
- Environmental Responsibility;
- A Reliable Network;
- A Well Maintained and Resilient Network; and
- A Safe and Secure Transport System.

6.2.3 It is considered that the development proposals would not adversely impact on highway safety or the local transport network within Greater Manchester. As such, the development proposals are in accordance with the general principles of the Greater Manchester LTP4.

7.0 Summary

7.1 Summary

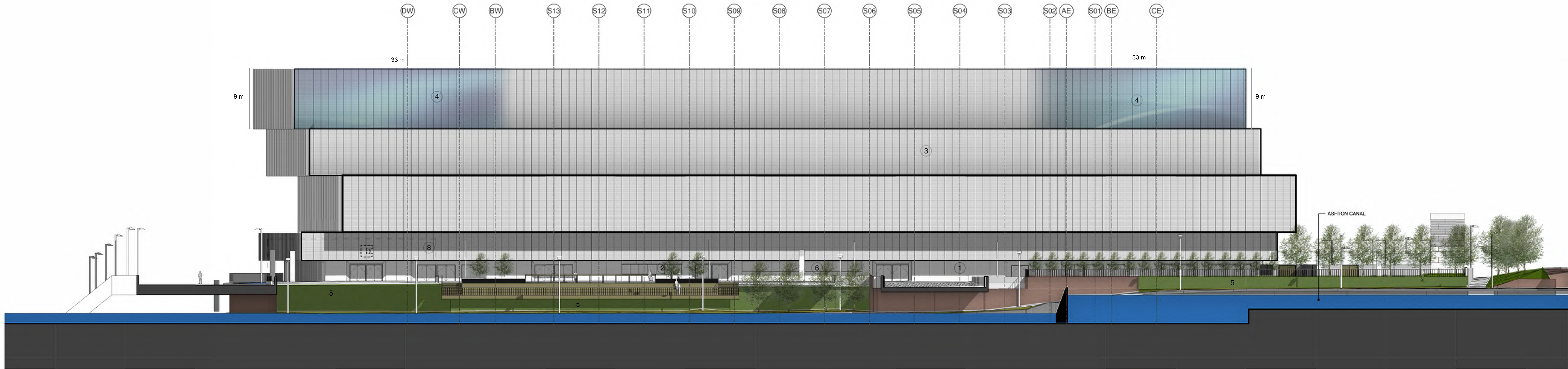
- 7.1.1 Curtins has been appointed by Turner and Townsend on behalf of OVG Manchester Limited to provide traffic and transportation advice in relation to the exterior façade proposals at a new multi-use arena at the Etihad Campus in East Manchester. The proposals comprise the erection of digital video screens on the south and west elevations as part of an application for Advertisement Consent on the proposed arena. Additionally, the top tier only of the building will be illuminated on all sides.
- 7.1.2 This Highway Safety Report has been prepared to support the planning application for the development proposals. It considers the exterior façade proposals and the potential impact on the surrounding area from a traffic and transportation perspective. A key aspect of the report is the visibility of the screens from the public highway, the potential for driver distraction and a detailed analysis of the local area in terms of highways safety.
- 7.1.3 Pre-application advice has been provided by Highways Officers at Manchester City Council (MCC) in February 2019. The comments raised have been addressed in this version of the report.
- 7.1.4 The application site is currently used for overflow parking; however, plans are proposed for a new multi-use indoor arena, together with supporting retail and leisure facilities, back-of-house and support functions, public realm, cycle parking, access and associated works.
- 7.1.5 The proposed digital video screens would be limited to the upper level of the building and only represent a proportion of the overall façades. They would face in a southerly/south-westerly and southerly/south-easterly direction and would be visible primarily to vehicles travelling northbound on Alan Turing Way. To a lesser extent, the digital video screens would also be visible from New Viaduct Street and other minor roads. It is proposed that the screens would provide both static images and moving videos between the hours of 07:00 – 00:00.
- 7.1.6 A detailed highway safety review has been undertaken for those sections of highway where the screens would be visible. It is considered that the potential for driver distraction as a result of the development proposals is low. In addition, all links and junctions reviewed have a limited history of accidents with consideration given to the nature of the roads.
- 7.1.7 It is considered that the façade proposals would be a continuation of and complement the existing situation – with large scale events at the stadia and large billboards surrounding the proposed development site – with drivers used to the experience of driving in proximity to various visual stimuli. A stage 1 Road Safety Audit will be undertaken to verify the findings of the highway safety analysis set out in this report.

7.1.8 It is also noted that digital screens are becoming more commonplace within Manchester, Greater Manchester and the North West. A review of existing examples demonstrates that the installation of large-scale digital advertisements and LED screens with video do not tend to result in a negative impact on highway safety.

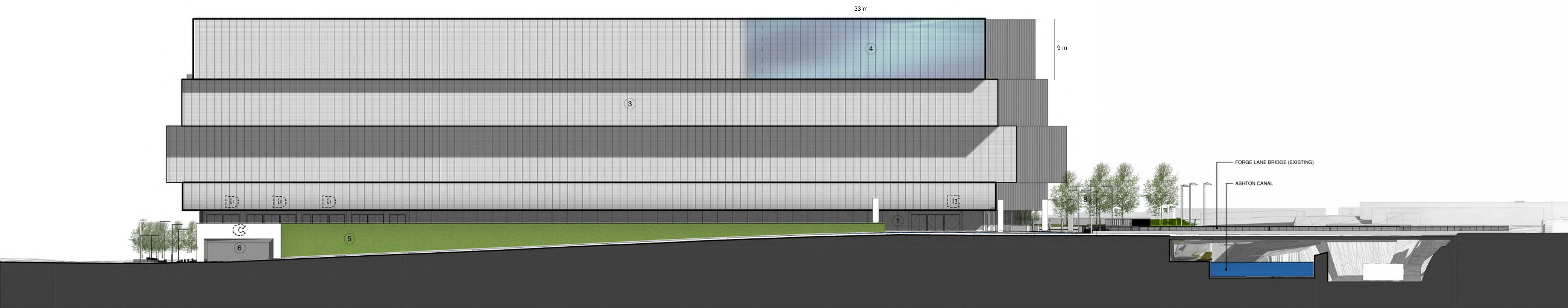
7.2 Conclusion

7.2.1 It is concluded that the screens would be visible from roads where there are no underlying road safety issues and would present a low risk in terms of road safety and the potential for driver distraction. From a traffic and transportation perspective, there are no reasons why the development proposals should not be granted planning approval.

Appendix A – Exterior Façade Proposals

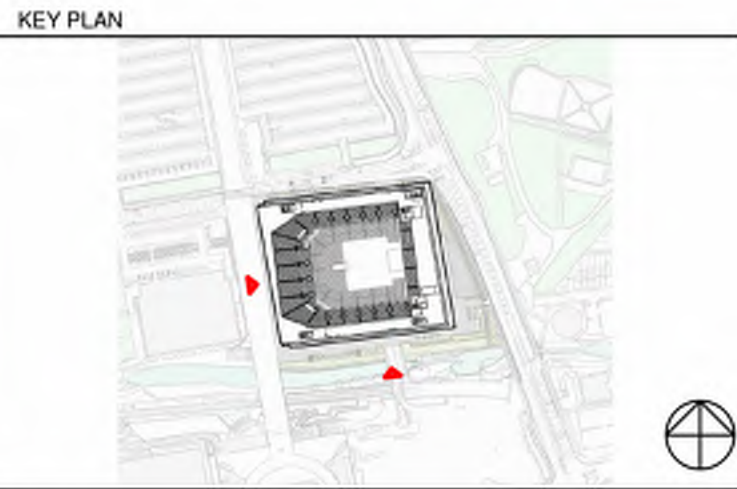


1 ELEVATION - SOUTH
1:250



2 ELEVATION - WEST
1:250

REVISIONS		
REV	DATE	DESCRIPTION
P01	29.11.2019	DRAFT PLANNING
P01	17.01.2020	DRAFT PLANNING



- FACADE LEGEND
- 1 PRECAST CONCRETE FACADE PANEL
 - 2 BOX OFFICE WINDOWS
 - 3 BLACK PERFORATED ALUMINIUM PANEL
 - 4 BLACK PERFORATED ALUMINIUM PANEL WITH LED BEHIND
 - 5 GREEN SCREEN
 - 6 UP AND OVER DOOR - FINISH TO MATCH CONCRETE
 - 7 OFFICE WINDOW
 - 8 POTENTIAL NAMING RIGHTS SIGNAGE ZONE

THIS DRAWING IS ONLY TO SCALE IF IT IS
REPRODUCED AT THE CORRECT PAPER SIZE
1:250@A0
ALL INTERNAL LAYOUTS AND USES ARE SHOWN
FOR ILLUSTRATIVE PURPOSES ONLY AND ARE
NOT FOR DETERMINATION



© COPYRIGHT. ALL RIGHTS RESERVED
THIS WORK IS COPYRIGHT AND CANNOT BE REPRODUCED OR COPIED IN ANY FORM OR BY
ANY OTHER MEANS, INCLUDING ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING,
WITHOUT THE WRITTEN PERMISSION OF POPULOUS ANY LICENSE, EXPRESS OR IMPLIED,
OF USE AND LOCATION FOR ANY PURPOSES WHATSOEVER IS REFUSED TO ANY USER.
THE PRESENCE OF IMPLIED AGREEMENT BETWEEN POPULOUS AND THE TRUSTING
PARTY.

USE FILLED DIMENSIONS IN PREFERENCE TO SCALED. CHECK ALL DIMENSIONS ON SITE
BEFORE FABRICATION OR SETTING OUT

ARCHITECT
POPULOUS®

14 BLADES COURT | DEODAR ROAD | LONDON | SW15 2NU | UNITED KINGDOM
TELEPHONE +44 (0)20 8874 7866 FACSIMILE +44 (0)20 8874 7870
ALL PRODUCTION & INTELLECTUAL PROPERTY RIGHTS RESERVED © POPULOUS 2009

PROJECT NAME
OVG MANCHESTER

DRAWING TITLE
ELEVATIONS

STATUS
DRAFT PLANNING

DATE
29/11/2019

DRAWN
GK

CHECKED
PG

APPROVED
DS

PROJECT ORIGIN ZONE LEVEL TYPE ROLE DRAWING REV
BRA-POP-XX- ZZ- DR- A- 0624 P01

This statement explains the OVG Manchester Entrance Portals, Façade & Totem LED's that require advertisement consent, which are the subject of an application for Consent to Display Advertisements, submitted in parallel with the Planning Application.

The advertising proposals are an integral part of the OVG venue, and relate to the entrance portals and LED displays located on the exterior façade and across positioned totems.

The illumination is to be adaptable and can be utilised by the city and surrounding campus for agreed events.

These serve multiple functions, providing commercial revenue through naming rights partners & paid for commercial advertising, information about current and future performances and public information.

This type of content is an integral part of any major entertainment venue, and are fully in keeping with the current and future character of the area.

The LED displays of the OVG venue act as an integral part of the design and architecture of the building, and its external appearance.

Will the building be fully illuminated?

The top tier (only) of the building will be illuminated on all sides. Additionally the podium entrance as well as the top section of each totem will be illuminated.

Times of illumination?

Subject to operational and advertising needs.

What are the occasions of use?

Subject to operational usage

Content type?

Subject to consent of advertising agreement to be developed in conjunction with client and naming rights partner and partners.

The statement has been developed taking into consideration the commercial requirements for the operation of OVG, the local context, the relevant Local Plan Policies and the two criteria which determine the acceptability of advertisement proposals; safety and amenity.

The digital content itself is not subject to planning controls, but is subject to a separate regime, size, appearance & specification which is regulated by the Advertising Standards Authority (ASA).

Façade LED Display:

Designed to sit flush into the venue facade, when activated they will display variable messaging

and content. When not activated, the black LED displays blend back into the façade.

The light emissions from the LED displays will be controlled by way of operating hours and luminance levels, which will be set out in conditions on the advertisement consent to safeguard residential amenity.

Each location and size for the LED Display has been coordinated in line with the architectural scheme. The locations have taken into consideration multiple approaches, people to provide a balanced coverage.

Do they impact on the amenity of residents and others?

No, they are in keeping with the commercial character of this site and existing and proposed uses. There are no sensitive conservation areas, heritage assets, or established residential areas to be affected by the proposals. Subject to conditions on hours of operation and light emittance levels to mitigate potential impacts on residents amenity.

Do they result in visual clutter and proliferation?

No, they are an integral, fully integrated part of the design, built into the exterior façade.

Do they obstruct architectural features?

No, they are an integral, and fundamental part of the architecture.

Do they respect the appearance, character, scale and street scene of the building/site upon which they are proposed?

Yes, they are an integral, and necessary part of the character, scale and street scene of the buildings into which they are incorporated.

Our Locations

Birmingham

2 The Wharf
Bridge Street
Birmingham
B1 2JS
T. 0121 643 4694
birmingham@curtins.com

Bristol

Quayside
40-58 Hotwell Road
Bristol
BS8 4UQ
T. 0117 302 7560
bristol@curtins.com

Cambridge

50 Cambridge Place
Cambridge
CB2 1NS
T. 01223 631 799
cambridge@curtins.com

Cardiff

3 Cwrt-y-Parc
Earlswood Road
Cardiff
CF14 5GH
T. 029 2068 0900
cardiff@curtins.com

Douglas

Varley House
29-31 Duke Street
Douglas
Isle of Man
IM1 2AZ
T. 01624 624 585
douglas@curtins.com

Dublin

11 Pembroke Lane
Dublin 2
D02 CX82
Ireland
T. +353 1 507 9447
dublin@curtins.com

Edinburgh

1a Belford Road
Edinburgh
EH4 3BL
T. 0131 225 2175
edinburgh@curtins.com

Glasgow

Queens House
29 St Vincent Place
Glasgow
G1 2DT
T. 0141 319 8777
glasgow@curtins.com

Kendal

Units 24 & 25 Riverside Place
K Village
Lound Road
Kendal
LA9 7FH
T. 01539 724 823
kendal@curtins.com

Leeds

Ground Floor
Rose Wharf
78-80 East Street
Leeds
LS9 8EE
T. 0113 274 8509
leeds@curtins.com

Liverpool

51-55 Tithebarn Street
Liverpool
L2 2SB
T. 0151 726 2000
liverpool@curtins.com

London

40 Compton Street
London
EC1V 0BD
T. 020 7324 2240
london@curtins.com

Manchester

Merchant Exchange
17-19 Whitworth Street West
Manchester
M1 5WG
T. 0161 236 2394
manchester@curtins.com

Nottingham

56 The Ropewalk
Nottingham
NG1 5DW
T. 0115 941 5551
nottingham@curtins.com