

SUPPLEMENTARY INFORMATION FORM

1. Site details

Site Name	Borras Road SW	Site Address	Northbound Footpath at Borras Road, Wrexham LL12 7EG
NGR	E: 334419 N: 350947		
Site Number	Ref 93215	Site Type ¹	SW (Low Capacity)

2. Pre-Application Check list

Site selection

Was a local planning authority mast registering available to check for suitable sites by the operator or the local planning authority?	Yes	
if no explain why		
Was the industry site database checked for suitable sites by the operator?	Yes	
if no explain why		

Annual Area Wide Information to local planning authority

Date of information submission to local planning authority	N/A
Name of contact	N/A
Summary of issues raised:	

Pre-application consultation with local planning authority

Date of written offer of pre-application consultation	24/01/2017
Was there pre-application contact	Yes
Date of pre-application contact	07/02/2017
Name of contact	Matthew Phillips
Summary of outcome/Main issues raised	
Raised points about siting, visual impact, and requested coverage plots. These points are addressed in this document and the Supporting Statement.	

¹ Macro or Micro

Ten Commitments Consultation

Rating of Site under Traffic Light Model			Red
Outline Consultation carried out:			
Letters and plans to Highways Department, Ward Councillors and 3 Voluntary Consultation Notices were placed in Borrass Road to notify the nearby residents.			
Summary of outcome/Main issues raised:			
Highways department confirm that the footpath is adopted and that they have no driver's sightlines or pedestrian safety concerns with the equipment being sited at this location. No other responses have been received.			

School/College

Location of site in relation to school/college (include name of school/college)
Rhosnesni High School is over 450m away from the proposed site.
No predicted impact.
Summary of outcome/Main issues raised
N/A

3.0 Proposed Development

The proposed site
The proposed site is to be located on:
Northbound footpath at Borrass Road, Wrexham LL12 7EG.
The proposed 15m street works installation with shrouded antenna will be located on the existing public footway.
Enclose map showing the cell centre and existing sites within the cell and adjoining cells
Map below

Type of Structure (e.g. tower, mast, etc):
Description: 15m high slim streetworks pole with shrouded antenna.

Overall Height:	
Height of existing building (where applicable)	N/A
Equipment Housing	
Length (see proposed equipment schedule on drawings)	metres
Width (see proposed equipment schedule on drawings)	metres
Height (see proposed equipment schedule on drawings)	metres
Materials (as applicable)	
Tower/mast etc – type of material and external colour	Grey Ral7035
Equipment housing – type of material and external colour	Fir Green Ral6009

Reasons for choice of Design

No opportunities for using an existing buildings or structures presented itself within the defined search area (this proposal is being used to replace existing infrastructure). A shrouded column design such as this has been chosen to be visually less intrusive than an open headframe at this location.

View from southbound footpath looking onto site



International Commission on Non-Ionizing Radiation Protection Declaration attached (see below)* International Commission on Non-Ionizing Radiation Protection public compliance is determined by mathematical calculation and implemented by careful location of antennas, access restrictions and/or barriers and signage as necessary. Members of the public cannot unknowingly enter areas close to the antennas where exposure may exceed the relevant guidelines. When determining compliance, the emissions from all mobile phone network operators on or near to the site are considered. To minimise interference within its own network and with other radio networks, EE (UK) Ltd and H3G (UK) Limited operates its network in such a way the radio frequency power outputs are kept to the lowest levels commensurate with effective service provision As part of EE (UK) Ltd and H3G (UK) Limited's network, the radio base station that is the subject of this application will be configured to operate in this way. All operators of radio transmitters are under a legal obligation to operate those transmitters in accordance with the conditions of their licence. Operation of the transmitter in accordance with the conditions of the licence fulfils the legal obligations in respect of interference to other radio systems, other electrical equipment, instrumentation or air traffic systems. The conditions of the licence are mandated by Ofcom, an agency of national government, who are responsible for the regulation of the civilian radio spectrum. The remit of Ofcom also includes investigation and remedy of any reported significant interference. The telecommunications infrastructure the subject of this application accords with all relevant legislation and as such will not cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest.	Yes	
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Frequency	GSM 1865.5-1846.5 MHz
Modulation characteristics ²	GMSK & QPSK
Power output (expressed in EIRP in dBW per carrier) To minimise interference within its own network and with other radio networks, EE operates its network in such a way that radio frequency power outputs are kept to the lowest levels commensurate with effective service provision. As part of EE's network, the radio base station that is the subject of this application will be configured to operate in this way.	56 dBm
Height of antenna (m above ground level)	14.9m (to top)

² The modulation method employed in GSM is GMSK (Gaussian Minimum Shift Keying) which is a form of Phase Modulation.

The modulation method employed in UMTS is QPSK (Quad Phase Shift Keying) which is another form of Phase Modulation.

5.0 Technical Justification

Enclose predictive coverage plots if appropriate, e.g. to show coverage improvement. Proposals to improve capacity will not generally require coverage plots.

Reason(s) why site required e.g. coverage, upgrade, capacity

The requirement for a replacement mobile phone base station in this area of Wrexham is the result of the existing site (CLY0001) having to be decommissioned. CLY0001 has a total height of 47m and is situated on the rooftop of Wrexham Police Station, Bodhyfryd. EE Ltd.'s Radio Planners have confirmed that as there are no similar height structures to relocate onto. Therefore, two replacement cells are required to maintain and improve existing coverage.

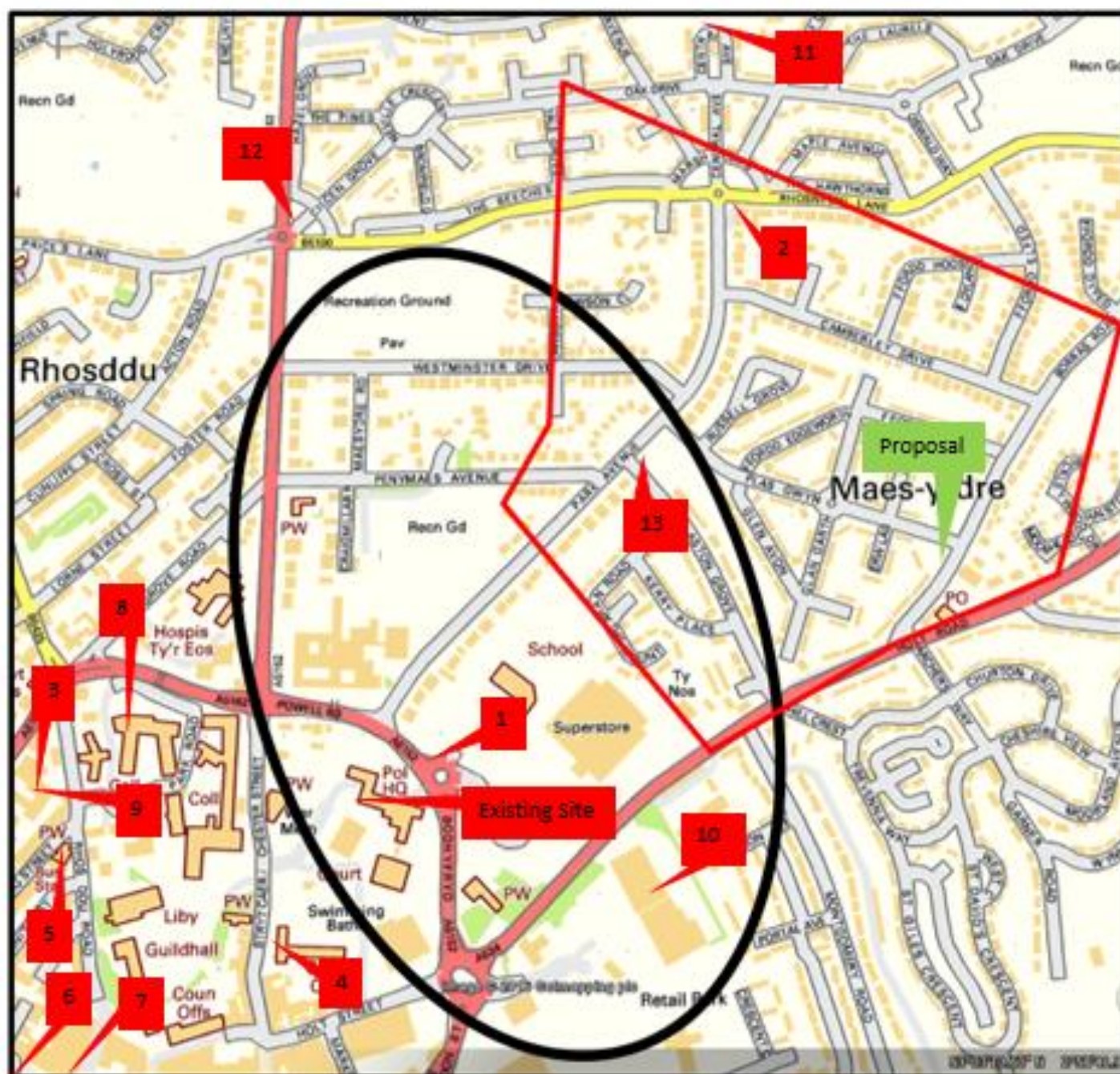
If CLY0001 cannot be replaced, then upon its removal existing users of the network's voice and data services would experience a reduction or loss of coverage in this area. From mid-2017 these users will include the Emergency Services as EE have been awarded the contract to provide network coverage for all the blue light services.

The slim streetpole with shrouded antenna has been selected as the most suitable replacement in this area as it has been designed specifically for deployment into urban areas and is in context with the surrounding street furniture. This position has been chosen opposite the two retail units and car park as it will have the least impact on the surrounding residents. There is a green with trees behind the footpath where the equipment will be sited and the surrounding housing is angled so that there are no direct facing views onto the site.

It is important to note that any analysis on alternative sites is predicted based on a location as close to the existing site being far preferable than one further away i.e. the further you move away from the existing site, the less suitable any location becomes in terms of radio coverage.

There are no suitable large structures or shareable other operator sites within the search area that can provide the height required to maintain the radio coverage.

Alternative sites considered and not chosen.





1 – VF 55490 – Approx. NGR: E: 333799 N: 350735

Non- shareable SW structure with no room for additional cabinets.

2 – O2 34659 – Approx. NGR: E: 334181 N: 351385

Non- shareable SW structure with no room for additional cabinets.

3 – O2 1913 \ Airwave NWA098B – Approx. NGR: E: 333346 N: 350710

Radio Planner has confirmed that this site would not provide the required coverage.

4 – Crown Buildings – Approx. NGR: E: 333636 N: 350522

The antenna height that can be achieved on this building is less than at Peoples Market Car Park - 92202.

5 – Trinity Church - Approx. NGR: E: 333392 N: 350623

The building lends itself to potentially hosting face mounted antenna however they would be 10m lower than at Peoples Market Car Park - 92202.

6 – St Marys Catholic Cathedral – Approx. NGR: E: 333159 N: 350472

The limited orientation achievable and the reduction in land height meant that this site did not offer the same coverage or capacity of the proposal.

7 – Regent House – Approx. NGR: E: 333126 N: 350562

The antenna height that can be achieved on this building is less than at Peoples Market Car Park - 92202.

8 – College Cambria – Approx. NGR: E: 333484 N: 350762

The antenna height that can be achieved on this building is less than the proposal.

9 – Wrexham Telephone Exchange – Approx. NGR: E: 333361 N: 350676

Radio Planner has confirmed that this site would not provide the required coverage.

10 – Roxburgh Hill House – Approx. NGR: E: 333310 N: 350344

The antenna height that can be achieved on this building is less than at Peoples Market Car Park - 92202.

11 – Oak Drive SW – Approx. NGR: E: 334163 N: 351544

The Councils online records show the grass verge as adopted. However, further investigations have confirmed that this is not the case. Elevated photos show that the mast would have to be more than 20m to clear the surrounding trees which is unlikely to be acceptable to the Councils planners in this low rise residential area.

12 – Chester Road SW – Approx. NGR: E: 333643 N: 351369

Radio Planner has confirmed that this site would not provide the required coverage.

13 – Aston Grove SW – Approx. NGR: E: 334057 N: 351072

Radio Planner has confirmed that this site would not provide the required coverage.



Additional relevant information

As discussed above the proposed site is required as an existing site is being lost. This means that all the existing (and potential) customers in the area will suffer a loss of service should a replacement not be found. The cellular nature of mobile telephony means that the replacement needs to be located as close to the existing as otherwise there will be areas which overlap with other cells (in a mature network i.e. one where there are established neighbouring masts/cells) and areas which may lose out altogether. The search area for the replacement is therefore, by definition, tighter than it might otherwise be for a new cell. The potential locations looked at are listed above.

Mobile connectivity is constantly evolving and by definition, doesn't follow any specific land use. Indeed, residential areas are generally the areas of highest demand as mobile devices are not now, only the preserve of the business community but are used most often for social reasons. Many devices are not even used on the move, and often tablets and notebooks are used in people's houses via their mobile contract (as opposed to fixed line). There are increasing amounts of households who only have mobile contracts and no fixed line in the house.

In addition, as mentioned earlier from mid-2017 EE will be the Emergency Services Network provider and therefore maintaining coverage is also required for all the blue light services.

Hopefully the above list of discounted alternatives has provided the evidence the Council require in terms of reasonable alternatives.

Planning Policy

National planning guidance on telecommunications in Wales is contained in Chapter 12 of the Planning Policy Wales (PPW) (Edition 9, November 2016), entitled 'Infrastructure and Services'. The framework states that the development of high speed broadband technology and other communications networks is fundamental to securing both economic and social wealth. Chapter 12 also states that, when preparing local plans, authorities should support the expansion of such facilities.

PPW Chapter 8 states that "The Welsh Government recognises that widespread access to affordable, secure telecommunications infrastructure is important to citizens and businesses across Wales. It is important that the telecommunications infrastructure in Wales is able to meet this challenge, helping to build a thriving and prosperous Welsh economy."

2.13.2 Where approval of details of planning permission is required the following should, be taken into account for telecommunications related planning applications:

- *the extent to which radio and telecommunications masts can be shared; and*
- *the need for dishes and other installations to blend with their backgrounds.*

Whilst the Government accept that the communications network is essential, it also recognises that the network should be kept to the minimum number of sites required to provide the high-quality service required. Use of existing buildings and high structures should be favoured over the development of new mast sites.

Local Planning Policy

The proposal complies with the Wrexham County Borough Local Development Plan (LDP) 2013-2028 Preferred Strategy- February 2016.

Policy SP1: Economic growth, employment and enterprise

- Support the delivery of high speed broadband infrastructure across the Borough, and provision of adequate telecommunications.



Assessment against Policy

As demonstrated, the proposal complies with both the Planning Policy Wales (PPW) and Wrexham County Borough Local Development Plan (LDP), in that one of the two replacement sites (92202) is proposed to be sited on an existing building. However, as there are no other 47m high structures to site on in the city centre a second cell is required, this proposal and a search has concluded that there are no existing shareable sites or existing buildings to locate onto therefore a new site is required.

Consideration has been given to the type of equipment to be deployed and where it is to be sited, opposite a car park and two retailing units. There is a green with trees behind the footpath where the equipment will be sited and the surrounding housing is angled so that there are no direct facing views onto the site.

As previously mentioned, EE Ltd requires a site for a new installation in this location in order to maintain coverage which will be reduced or lost when the original installation is removed because of the redevelopment of the site.

This therefore has an adverse impact on those that rely on this vital service and coverage from an economic, social and environmental perspective. Not least the Emergency Services who will also be reliant on the coverage the proposed installation will provide from mid-2017.

We would again reiterate that we believe that we have demonstrated that the telecommunications development, having regards to the technical and operational constraints, have been designed to minimise environmental and visual impacts through careful siting and design choices as set out in. The proposal complies with both national and local planning guidance and as such it is considered to provide the best location from both a technical and town planning view.

Any information required regarding location, height of antennas, frequency etc. can be found in the supporting documents, which are submitted as part of this prior approval application. As noted above, an ICNIRP certificate has also been enclosed fulfilling the requirement of national policy and LDP. We believe this proposal is compliant with all relevant planning policy, as noted above, and could therefore be supported by your department.

Contact Details

Name (agent)	Stephen Granger	Telephone	07772 886584
Operators	EE Limited	Email address	s.granger@harlequin-group.com
Address	c/o Harlequin Group	Date	12/04/2017
Signed	Stephen Granger	Company	Harlequin Group
Position	Senior Surveyor		For and on behalf of EE Limited