



stay connected

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## **Telecommunications Connectivity**

Combined Fixed Network and  
Mobile Coverage Assessment

**Pegasus Place**  
Gatwick Road  
Crawley  
West Sussex  
RH10 9AY

# Fixed Network Connectivity - Desk Top Study

## Pegasus Place, Gatwick Road, Crawley, West Sussex RH10 9AY

Oct 2011

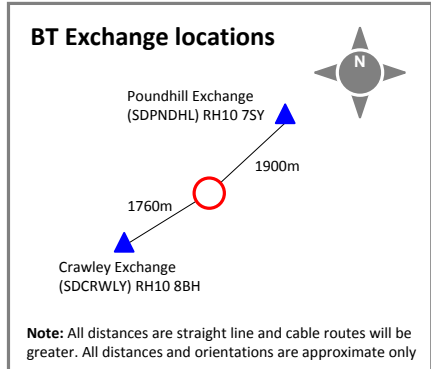
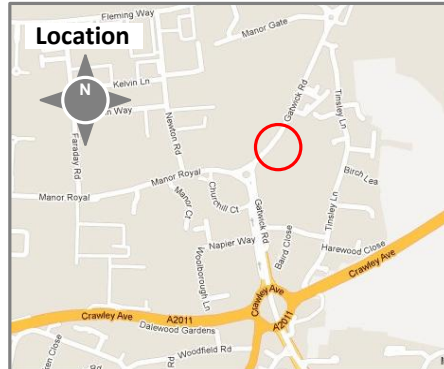
STRUCTURE

Pegasus Place is an office park comprising of three separate buildings situated between Crawley Town Centre and Gatwick Airport. The three buildings total some 50,000 sq ft and have terracotta tile and glazed elevations. The business park is situated in a mixed environment of office accommodation and commercial premises to the north of Crawley Avenue (A2011).

TOPOGRAPHY



Pegasus Place  
Gatwick Road, Crawley  
West Sussex RH10 9AY



BT SUMMARY

The office park is currently served from the Crawley Exchange, located to the south west of the site. This exchange provides excellent services including ADSL, ADSL+, SDSL, (21CN WBC) FTTC, plus the availability of good LLU services from AOL, O2/Be, C&W Bulldog, Sky Easy Net, Talk Talk, and Tiscali all over BT infrastructure. Based on the FTTC capabilities, Crawley exchange can offer broadband speeds of around 4.5Mbps (Data obtained via the BT website) over its existing network. The office park is positioned on the fringe of the Poundhill Exchange coverage area located to the north east, which affords similar services to that of Crawley Exchange at this time.

TELECOMS CARRIERS

Telecommunications carriers with owned infrastructure located within easy reach of the building are listed below for information. In addition to these, there are a number of alternative carriers that can provide service, albeit over a third party network such as BT. It must be noted that the presence of infrastructure within the search area does not constitute availability of service at the building location.

- British Telecom** Tel: 0800 800 152 www.bt.com
- Cable & Wireless** Tel: 0800 092 5825 www.cw.com
- Virgin Media (NTL/Telewest Business)** Tel: 0800 953 0180 www.virginmediabusiness.co.uk
- Global Crossing** Tel: 01256 733555 www.globalcrossing.co.uk

SUMMARY

The services available at Crawley Exchange afford the office park with an excellent level of services to meet today's business needs. The presence of additional carriers with existing infrastructure over BT's network adjacent to the building, and within local environs, offers additional choice of services and resilience albeit this may be restricted by the location and cost of providing a service over owned infrastructure. However, the ability to provide such services over the BT network or another third party should not be overlooked as a more cost effective solution.

**RATING**

BT / LLU **4**

CARRIERS **3**

- BT / LLU**
- 1** Limited services available from BT only
  - 2** Good BT services, limited by LLU Operators
  - 3** Good BT/LLU services now, or planned
  - 4** Excellent BT/LLU services now, with diversity

- CARRIERS**
- 1** Limited infrastructure available
  - 2** Good level of infrastructure but with access issues
  - 3** Good level of infrastructure with limited access issues
  - 4** Excellent level of infrastructure with no access issues

GLOSSARY OF TERMS

- ADSL (Asymmetric Digital Subscriber Line)** Asymmetric line speed, the speed from the internet to the user, and the user to the internet are different. Feed over copper cable, governed by distance from exchange to user. (co-exists with voice services)
- ADSL+ (Asymmetric Digital Subscriber Line+)** Asymmetric line speed as above, but with faster connections both downstream and upstream over similar distance following roll-out of BT's 21CN Wholesale Broadband Connect (WBC).
- SDSL (Symmetric Digital Subscriber Line)** Symmetric line speed, the speed between the user and the internet are the same in both directions but cannot co-exist with voice services over the same line.
- FTTC (Fibre to the Cabinet)** Provides fibre to the cabinet, shortening copper cable length requirements to enhance speed
- LLU (Local Loop Unbundling)** Is the process by which third party network operators are able to install equipment into BT exchanges in order to deliver their own services without having to utilise BT's network.

# Mobile Voice / Data Appraisal - Coverage Predictions

Pegasus Place, Gatwick Road, Crawley, West Sussex RH10 9AY

Oct 2011

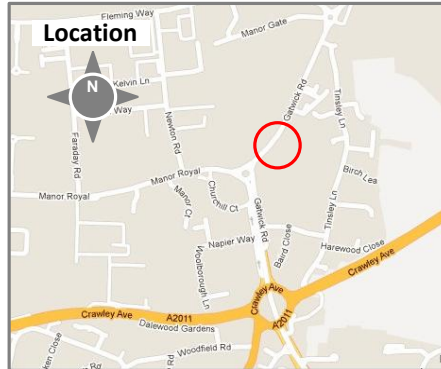
STRUCTURE

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TOPOGRAPHY

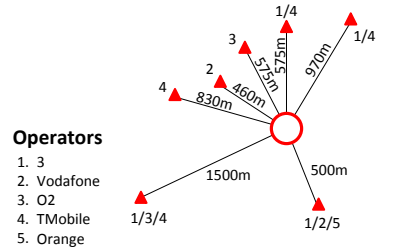


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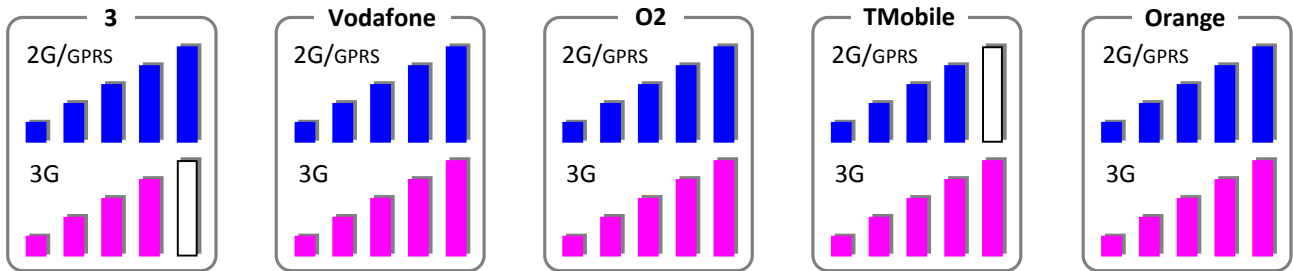


### Macro Locations

Note: All distances and orientations are approximate only



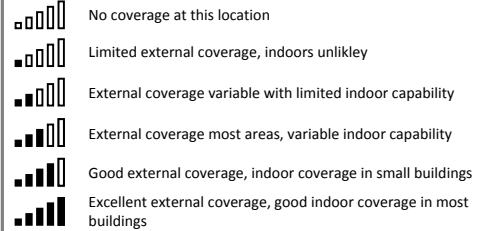
STREET LEVEL COVERAGE



OBSERVATIONS

Pegasus Place has an excellent level of macro coverage from all of the five mobile operators as shown in the plan above. The closest serving cells are detailed in respect of 2G and 3G services and can be seen vary in location and distance. The majority of cells will provide coverage to the buildings. Based on this information it is considered to be a location that affords very good overall coverage across all operators.

### COVERAGE KEY - Street Level



PREDICTIONS

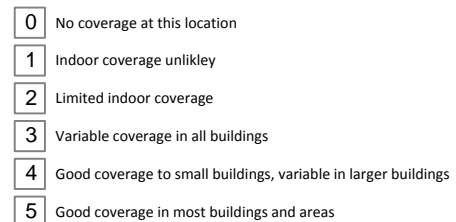
Based on the location of the site, its buildings and serving cells, it is envisaged that a good level of coverage will be present within all buildings for both 2G and 3G services, with potentially only small specific areas having issues due to their location such as internal rooms in the centre of the building. In addition, due to the number of close adjacent cells a degree of dropped calls may be experienced due to non dominance issues. This is due to handsets switching between cells during calls as each external cell competes to provide strongest signal.

Further to the coverage levels, the availability of service is dependant on capacity. This is the volume of data and simultaneous voice calls the macro cell can accommodate at any one time. Capacity issues result in 'network busy' messages or dropped calls. The level of capacity can be addressed by the operators should the building be populated with a high number of users on a single network which will impact on both them and others using the same cell.

INDOOR SUMMARY

OPERATOR	2G / GPRS	3G
3	4	3
Vodafone	4	4
O2	4	4
TMobile	3	4
Orange	4	4

### COVERAGE KEY - Indoor prediction



It should be noted that the location, building fabric / materials, surrounding environs impact on the ability of RF penetration and these predictions are for guidance only.

## **Pegasus Place Gatwick Road, Crawley, West Sussex RH10 9AY**

### **Fixed Telecoms Appraisal**

In addition to the Fixed Network Desktop study completed, a review by survey of the above site was undertaken on 10<sup>th</sup> October 2011. The purpose of this survey was to clearly identify the presence of existing telecommunications carrier's infrastructure adjacent to the site.

### **Local Carriers**

The level of infrastructure on the estate is one that encompasses a number of historic carriers, some now operating under alternative businesses (shown in brackets). On inspection a number of carrier's infrastructure is present along Gatwick Road and to its junction with Crawley Avenue including Cable & Wireless (Mercury), Virgin Media (Telewest and NTL), Global Crossing and British Telecom (BT). All of these with the exception of Global Crossing have a physical presence across the entrance to Pegasus Place. Global Crossing is located on Crawley Avenue with no physical evidence it continues along Gatwick Road.

It was found that there are a number of carriers chambers in the footway adjacent to the site entrance. In addition, there are a number of chambers located on the site over and above those owned by BT, affording good access to the building from the public highway. Assuming these are owned and maintained by the landlord, they could provide access for all carriers should it be required. One chamber directly outside the site entrance shows evidence of an existing connection via a chamber marked CATV, which will be owned and operated by Virgin Media.

### **Service Availability**

The services afforded by BT over existing fibre and copper networks via their FTTC capabilities provides a good level of broadband services with speeds expected in the region of 4.5Mbps (Data obtained via the BT website). This with the availability of services from Cable & Wireless and Virgin Media provides a good alternative albeit with some potential requirements for infrastructure to connect into the building.

### **Summary**

Based on the local carrier infrastructure and the availability of services from BT's Crawley Exchange, we consider the building can be provided with fibre connectivity in minimal timescales from order. The presence of the Cable & Wireless and Virgin Media infrastructure outside of the building entrance affords an excellent level of service and diversity at this time with minimal or no requirements for external street works. In addition, the availability of the other carriers located in the area affords even greater choice of service and resilience should it be required.