

## Design and Access Statement

for the

### Provision of New Sub-Station to the Newland Development

#### Justification for the Requirement for Sub-Station

The wider scheme is for the provision of 116 new replacement homes due to works required for the provision of HS2 complete with a Replacement Community Centre, Replacement Public House, and the provision of 3 No. New Commercial Spaces, also 3 Mitigation Sites to replace green space lost due to the development.

Upon applications for new Electricity supplies for the above homes and commercial spaces, UKPN who are the owners of the infrastructure, advised that the network in this area was nearing full capacity. UKPN advised that to meet the demand expected sub-stations would be required to add capacity back into the network at the Newlands and Rydal Open Water (Former One Stop Shop) Sites

All options to reduce the loadings to avoid the need for new sub-stations were explored, this exercise reduced the requirement to one sub-station at the Newlands Site, UKPN advised that there were no other options available, and therefore to provide the required services for the development a sub-station was unavoidable

#### Justification for Proposed Sub-Station Location

Several Locations were considered as follows:

- Option 1: Upgrade of Existing Sub-Station to the North of the Site
- Option 2: Internal to the Plant Room of the Newlands Block
- Option 3: External Adjacent Existing Sub-Station to North of the Site
- Option 4: External as per the Application Drawings

#### Option 1

This option was not taken forward for the following reasons (See Option 1 Mark Up):

- UKPN confirmed that the existing sub-station was at capacity
- the existing Transformer is the largest size for residential use and cannot be replaced with a larger one
- under the latest guidance on the provision of sub-stations the access for maintenance would not be acceptable to UKPN, it should also be noted that works to form a new bridge in Hampstead Road will raise the level of the road in this area closing off the current poor access to the existing sub-station, it was noted that Hampstead Road is a Red Route and access from this road would not meet the latest requirements for sub-stations accessed from a main road.
- Alternative access routes were explored as per the Option 1 Mark Up
  - Alternative Route 1 was not considered viable due to the impact on Mitigations Site 3 of the Approved Landscape Scheme, drawings 114 RPE M3 100 Rev A and 114 RPE M3 101 Rev A are attached for reference
  - Alternative Route 2 was not considered viable due to the impact on the Approved Landscaping Scheme, the reduction in Green Space and the quality of the overall scheme

- UKPN have advised that they may decommission this sub-station as part of the HS2 works and provide capacity from an alternative location outside the scope of this application.

## Option 2

This option was not taken forward for the following reasons (see Option 2 Mark Up):

- Various locations within the building footprint were considered before the option of the Plant Room was considered
  - Location 1: To area of bin stores, this option would require the re-location of the bin stores and the need for access for collection of waste, also this option would not comply to Building Regulations due to travel distances being exceeded
  - Location 2: In the Commercial space with Direct Access from Varndell Street, this option was not taken forward due to the impact on the prominent South Elevation with views from Mitigation Site 3
- The proposed plant room is not large enough to accommodate the size requirements from UKPN, the proposed CHP Boilers and the additional space for future expansion required by Condition 40 of the Shadow 106 Agreement. To incorporate these requirements would greatly reduce the size of the Commercial Unit.
- Access for maintenance would be a major issue for the following reasons
  - Due to HS2 works access from Hampstead Road would not be possible
  - Alternative route 1 would Impact on the Open Space Mitigation Site 3, see attached mark up and proposed Mitigation Site 3 Agreed and Approved Drawings
  - Alternative route 2 to sub-station by extending existing service route was not considered viable due to the impact on the Approved Landscaping Scheme, the reduction in Green Space and the quality of the overall scheme

## Option 3

This option was not taken forward for the following reasons:

- Access routes have the same impact as Option 1 as follows
  - Alternative Route 1 was not considered viable due to the impact on Mitigation Site 3 of the Approved Landscape Scheme, drawings 114 RPE M3 100 Rev A and 114 RPE M3 101 Rev A are attached for reference
  - Alternative Route 2 was not considered viable due to the impact on the Approved Landscaping Scheme, the reduction in Green Space and the quality of the overall scheme

## Option 4

This option was taken forward for the following reasons:

- UKPN preferred location meets all their requirements for access and maintenance
- Least impact on Mitigation Site 3
- Least Impact on the Approved Landscape Scheme

## Impact on Approved Landscape Scheme

As per the above statements Option 4 will have least impact on the Planning Approved Landscape Scheme, the other options would reduce the quality and overall appearance of the landscaped areas.

## **Impact on Proposed New Trees**

Our Landscape Consultant ACD Environmental have confirmed that the proposed location of the new Sub-Station has no impact on any existing trees. They have also positioned new trees at a distance where there is no impact on the root zones. The trees proposed are the same species as the Approved Landscape scheme.

## **Design and Materials for Proposed Sub-Station**

The proposed sub-station will be designed with the following features to reduce the overall impact:

- The building will be brick built with bricks to match the proposed Newlands Block
- The Louvered doors will be finished to match the windows and doors to the Proposed Newlands Block
- Planting beds will be provided to reduce the impact and screen the sub-station
- New trees have been positioned to offer further screening to the sub-station from Hampstead Road and the proposed Newlands Block
- The proposed roof will be flat Sedum Blanket Green Roof, this is proposed to reduce the impact on views from above and also to replace green space lost to the foot print of the building and also reduce rain water run-off from the roof
- The access area to the front of the sub-station will be a reinforced grassed area, again to replace lost green space