

DESIGN & ACCESS STATEMENT

New Fire Station

at

St James Road, Brackley

for

Northamptonshire County Council

prepared by

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Revision A – Secure by Design Statement added – 27 June 2008

Revision B – Response to Consultation added - 10 July 2008

Site Context

The site is at present a vacant plot of land, owned by Northamptonshire County Council, to the south side of Brackley town centre and bounded by Oxford Road to the west, St. James Road to the south and Herriffs Farm Road to the north.

Oxford Road is the main road into the town centre from the main A43 trunk road to the south (which also forms the town by-pass). The approach to the site from the A43 is flanked by industrial and retail developments. The sub-urban context is reinforced on the site by a wide open verge area between the site and road, containing a public footpath and some Rowan, Hawthorn and Holly trees above unkempt undergrowth, forming a hedge to the site boundary. St. James Road forms a dead end access to mainly industrial units located on both sides of the road and would be the most suitable road for access onto the site.

Herriffs Farm Road is adopted for a short distance from Oxford Road (along part of the northern boundary of the site) and then narrows down into a privately owned access serving a number of residential properties on its northern side, including a pair of cottages, a bungalow and more modern dwellings adjacent to the site. The pair of cottages form the end of a strip of buildings which extend the town's conservation area south.

To the eastern side of the site and built on part of the original larger site, is the relatively recently constructed local Police Station, housed in a single storey domestic style building, with access off St. James Road.

The site itself is presently unused and consists of mainly roughly mown grass and an area of overgrown vegetation around a dip in the ground (which could possibly have been the site of a now completely dried up pond) adjacent to the Oxford Road boundary.

The present Fire Station is situated in an historic, purpose built building in Main Street, near the centre of town, constructed to house the original horse drawn fire engine. It is now therefore inadequate for use by a modern fire service assisting in serving the south west of the County.

The building is too small to house a modern fire appliance or provide the storage required for all the up to date fire fighting equipment. There is no attached ancillary yard facility for necessary training and no dedicated parking for the retained fire fighters when they are called out. The front of the building is located on the busy main road through the town centre, which causes safety problems for members of the public using the adjacent footpath and problems for the fire fighters with parking and access onto the road.

The new site has been selected as it is located with easy access to both the town and the main A43 road, which provides a quick route to the surrounding towns, villages and roads, including nearby Silverstone Race Track. The eastern half of the site was used for the construction of the new town Police Station and the remaining site has always been seen as a potential site for a new Fire Station (and possible Ambulance Station).

Design/Appearance

The size and the internal layout of the proposed building is very much dictated by use and the accommodation required. As with the existing building, the new station will not be manned full-time but will be staffed by retained fire officers, who will be using it for emergency call outs and occasional training sessions during mid-week evenings. Therefore no living in accommodation is required.

The internal plan consists of a 2no. high bays to house the fire appliances, together with ancillary office, equipment storage, changing areas, toilets and a training/meeting room. These different height spaces are unified under a single low pitch mono-pitch roof. This means the building is kept low on the elevation facing the adjacent dwellings but is able to establish significant presence to the town entry, both by the high end wall and the overall simple form. Whilst the simple bold form of the monopitch roof responds to the suburban and highway scales, the elevations under the roof are articulated with a variety of brick panels, offset against the roof line.

The brick wall panels, referring to the predominant materials of neighbouring residences and providing a civic quality, are mixed with flat panel cladding, which relate to the commercial context and the technical nature of modern fire fighting. Red colour coated metal panels provide points of emphasis around the facades.

The external yard will be used for parking during a call out and for training and exercises when required. The exercise tower has been located against the new building and in the centre of the site to keep it as far away from the adjacent houses.

The yard will be surrounded by a security fence with access via sliding gates.

Landscaping

It is the intention to retain the existing trees to the Oxford Road boundary of the site and remove all undergrowth. (These are outside the site boundary). One Hawthorn is to be removed, to allow pedestrian access from the Oxford Road, and replaced on the same hedgerow line. The wide strip between the yard fence and Herriffs Farm Road boundary is retained as grass, with trees in groups, and a hawthorn hedge planted against the fence. Shrubs planting is used between the cottages and the new building to provide screening for the cottages. Elsewhere, new planting is minimal, providing ground cover where grass would not prove viable/ easy to mow.

Access

Car Parking:

Car parking facilities for the fire fighters during call outs and other times will be provided in the yard but there are 2no. visitors car parking spaces and 1no. disabled space shown outside the yard for use when only the building is being used.

Entrances:

Vehicular access on and off the site will be from St. James Road over a new crossover, constructed in accordance with Highways specification. It is felt access off St. James Road is the safest and most practical and will have the least impact on the local dwellings during call outs. The existing adjacent Police Station is already located off St. James Road.

There is however, we believe, the requirement for additional double yellow lines for the length of St. James Road from its junction with Oxford Road and the proposed new site access to stop vehicles parking and allow safe and permanent use by the fire engines during a call out.

A new pedestrian access onto the site and into the building will also be formed off St. James Road, which will be constructed to allow for disabled use direct from the disabled parking space provided to the main public entrance of the building.

A new automatic access door will be provided at the entrance into the building and will include a wheelchair friendly threshold and wheelchair ramp externally.

Circulation:

The new building will have as standard:

- Corridors and passageways will be a minimum of 1500mm wide with either level floors or ramps (no steps).
- Colour contrast of at least 20 points Light Reflectance Value (LRV) is to be provided between walls and floors, floors and ceilings.
- Colour contrast of at least 20 points Light Reflectance Value (LRV) is to be provided between door/door frames and surrounding walls, door face and leading edge to non self-closing doors and between ironmongery and doors.
- Ironmongery door handles are selected to meet the requirements of BS8300 to be operable with one hand using closed fist.

- All doors are designed to provide minimum clear opening widths, measured to the face of any protruding ironmongery, to comply with Building Regulations AD Part M Table 2.
- Doors on access routes will be fitted with vision panels towards the leading edge to provide minimum zone of vision between 500mm and 1500mm from floor level.

Sanitary Accommodation:

- Sanitary accommodation is shown on the plan, including a wheelchair accessible toilet located adjacent to the main entrance to the building.
- Any colour scheme for the sanitary accommodation will be selected to ensure colour contrast of minimum 20 points LRV between floor and walls, walls and ceiling, cubicle doors and walls, sanitaryware and walls.

“Secured by Design” Statement

As previously noted the site of the new Fire Station is at present a very public open space, with residential buildings on Herriffs Farm Road, industrial units on St James Road, the main Oxford Road into and out of Brackley town centre to the front of the site and the towns Police Station located on the adjacent site.

In developing the design for the new facility it was decided to retain as much of this open feeling to the site to assist in the security of the site by public awareness. The following principles were used in the design process:

- The public front of the building was required to be easily accessible for public use, so was required to be kept as “open” as possible. For this reason the public main entrance was kept clearly visible from the main Oxford Road and from the site access off St James Road. The building form was kept relatively simple in plan form to avoid recesses and places of concealment.
- Footpath and vehicle access to the site was kept visible from the main roads and the Watch Room/Office situated off the entrance of the building. The path and vehicle approach to the building will be well illuminated by building mounted lighting (and the adjacent street lighting).
- External doors have been kept to a minimum i.e. there is only one single entrance door, which is accessed by a power operated sliding door into the entrance lobby. In turn this lobby is controlled by the adjacent Watch Room/Office and access into the rest of the building by a secure door.
- Internal doors to any rooms containing high value equipment will be fitted with secure locking devices.
- External windows have also been kept to a minimum and located only within rooms in which they are essential. These windows will be specified to “enhanced security” standards to BS 7950, including locking handles and laminated glazing.
- The building is a single storey, rising from three metres at its lowest to six metres at its highest, with a low monopitch roof. This roof is finished with robust profiled metal standing seam composite roofing panels and a wide overhang, making climbing on the roof very difficult. There are no roof lights proposed.
The walls are also of a non-combustible construction, consisting of brickwork at lower level and profiled metal cladding panels above.
- The actual service area of the building i.e. the appliance bays, are accessed by standard rapid opening folding steel doors, with acrylic glazing in metal frames (secured from the inside for security reasons). The front doors provide easy egress for the appliances onto St James Road by internal operation and the rear will be operated automatically from outside allowing access back into the appliance bays. These doors have the additional security of a security fence situated around the external yard.
- As mentioned above the external exercise yard and personnel parking area is protected by a 1800mm high anti-climb close mesh security fence, around the whole of the yard and accessed through automatically controlled matching sliding gates from St James Road.

- Having discussed security with Northamptonshire Fire and Rescue Service we were informed that they do not fit intruder alarms to the un-manned stations due both to operational requirements and nuisance to local residents. The retained fire officers receive a call out from a central control and access the site through the automatically operated gates into the rear parking area. The building is then accessed through the rear door into the Rough Wash area and after changing into their fire fighting clothing, the appliances exit the building via the internally operated main doors. These doors close automatically when the appliance has left the site and we intend to operate a similar self-closing device to the exercise yard/car park, making the building secure while the appliances are out “on a shout”. Being an unmanned operation the building remains unmanned during most call out operations. The Fire and Rescue Service have made the decision that no intruder alarms are fitted to their un-manned stations as they have caused a problem and possible delays when they need de-activating and re-activating when a call out occurs and a nuisance to the local residents when they are activated in the middle of the night and there is nobody on the site to turn them off. Therefore there is no plan to fit intruder alarms to the building doors and access gates but ensure the locking devices installed to these are as secure as possible.
- Planting is required around the Oxford Road and Herriffs Farm Road boundaries of the site to screen the exercise yard and security fence from the adjacent residential properties. This planting will be selected for its anti-intruder nature i.e. thorns, etc. making access to the security fence difficult. Any new trees selected will be planted in isolated positions, kept as far away from the fence as possible and selected for their anti-climbing structure i.e. single tall trunks with high level canopies.
- The proposed bin store is located outside the secure yard as it may need collecting when the site is un-manned. However it will be constructed of non-combustible materials with lockable doors and constructed against a high wall of the building, which is also constructed of non-computable finishes.
- The exercise tower is so designed that the ground to first floor is fitted with vandal guards and a lockable access door.

Response to Consultation

A number of concerns were expressed on the first design submitted. These were:

- The design did not provide a civic presence suitable for a public building. Comments were made about the context of the Conservation area, but ignored the more prevalent context of suburban industrial/commercial buildings and wide roadways.
- The yard was too large and too close to the residential buildings on Herriffs Farm Road. In addition, the security fence was felt to be intrusive.
- The materials were considered too industrial, although the original design included a brick lower elevation.

In response, the design was amended by:

- Rotating the footprint through 90°, so that the building is parallel to the Oxford Road. This reduces the impact of the building upon the residential properties on Herriff’s Farm Road, whilst increasing the impact as a Gateway building when viewed on the approach into the town from the A43. This design results in some functional compromises, principally single entry into the appliance bays, which were agreed by the Fire service.
- Revising the elevations to provide increased articulation, detail and variety in placement of brick panels, to provide a more sculptural effect, offset against the bold monopitch roof.
- Reducing the yard, and leaving a much wider verger to Herriffs Farm Road.
- Adapting the landscape design to screen the yard fence.

These amendments provide a final design, which is more responsive to context and better encapsulates our design concepts.