

DMFD074 Appendix 1

Report title

Biggin Hill Fire Station - New Appliance Bay

Report to

Deputy Mayor's Fire and Resilience Board

Date

16 June 2020

Report by

Laura Birnbaum, Assistant Director Property

Report number

LFC-0283y

Protective marking: **OFFICIAL**

Publication status: Published with redactions

Summary

This report is an update to the report approved at Commissioner's Board on 18 December 2019 where it was noted what whilst the construction of a new appliance bay may be the only solution at that stage, further investigation of other options should be undertaken. The outcome of these investigations were to be included in the report to Deputy Mayor's Fire and Resilience Board.

Further options explored included a collaborative model with Biggin Hill Airport Ltd and the feasibility of a utilising a temporary appliance bay structure, similar to temporary facilities used during construction at other stations to maintain operational delivery. The outcome of collaboration discussions with Biggin Hill Airport site proved unviable. The whole life cost and associated challenges of a utilising a temporary structure make this option sub-optimal compared with the proposed solution.

This report seeks approval to construct a new appliance bay to the left of Biggin Hill fire station in line with the updated feasibility report. This is a significantly value engineered outcome of the original proposal. Property have deemed this option to be the most cost effective way of removing the health and safety hazards to London Fire Brigade (LFB) operational staff which currently exist due to the size of the existing appliance bays, in relation to the size of the fire appliance. The proposed procurement route for the construction element is to use the Greater London Authority (GLA) group of frameworks open to LFB.

Recommended decisions

That the London Fire Commissioner

- Provides authority to the Assistant Director of Property to complete the construction of an additional appliance bay at Biggin Hill Fire Station, based on the pre tender estimate of £498k and within a 15 % tolerance of the submitted pre-tender estimate price.

-
- Approves a capital budget of £498k for the Biggin Hill Fire Station appliance bay, with delegated authority to the Assistant Director of Property to increase the budget, within a tolerance of 15%, up to £573k.
 - Delegates Procurement Authority, as detailed in paragraph 24 to the Assistant Director Technical and Commercial to procure the works.

Background

1. Biggin Hill fire station features on LFB Property's Asset Management Plan (AMP) March 2017 as a priority 3 station for improvement (priority 1 being the highest), with a status of 'Replace' defined as 'relocate to an alternative site if one is available, if not rebuild on the same site'. The two bay station has accommodation issues, however the crucial and most pressing issue is the width and length of the appliance bays used by the pumping appliance (Series 3). The 4x4 Land Rover also located at the station is not subject to the same concerns associated with the pumping appliance.
2. To reverse and turn out of the appliance bays, the pumping appliance requires several manoeuvres by the driver supported by firefighters acting as banks persons. It is evident that damage has been caused to the building fabric by vehicles entering and exiting the bays, with only a very small tolerance between the appliance and the building fabric. The pumping appliance has to be reversed into the bays and parked at an angle across both bays to allow the cab doors to be opened for the crew to exit, and to support checks for operational readiness. Additionally, the wing mirrors have to be folded in to allow the appliance to clear the bay opening on egress and ingress.
3. There have been a number of accidents linked to the restricted access in the appliance bays at Biggin Hill fire station. For example, a firefighter injured themselves dismounting the appliance through slipping on the appliance step as they were unable to fully open the door. Further injuries have been caused to firefighters due to severe restrictions on space, one of which has resulted in a personal injury claim against the former London Fire and Emergency Planning Authority.
4. The Station Commander has highlighted that turn out and attendance times are being negatively impacted as staff are required to follow a risk assessment protocol to exit the appliance bay. These H&S issues have been raised on a number of occasions by the station based crews and consequently AC Fire Stations has requested an urgent review of the issue and for a solution to be implemented.
5. The Major Capital Works Board received an options paper which considered the following options:-
 - a. Providing a long term temporary steel frame forming a single appliance bay at the side of the station (currently the entrance to the rear yard).
 - b. Widening the existing appliance bay and creating another smaller bay for the Land Rover response vehicle.
 - c. Demolition and rebuild of Biggin Hill fire station at an estimated cost of £5m.
 - d. Do nothing.

The direction from the board was for property officers to pursue option 'A'.

6. Prior to proceeding with a full costed feasibility, officers appointed a structural engineer to review the construction solutions listed above. An option to widen the existing bays was discounted as removing the central column between the two existing bays was not feasible due to the height and load bearing properties of the central supporting column. Additionally lengthening the existing bay was also discounted due to the high cost and the need to re-model other areas of the station, with a need to decant the station during the works.
The "do nothing" option was also discounted as the H&S risk would still remain. Whilst demolition and re-build is always an option, the costs would be significantly higher than any of the other options and the crews would also need to be decanted throughout the re-build, which would take 2 – 3 years from feasibility to completion.
7. Further options explored after Commissioner's Board discussion included:-

- a. A collaborative model with Biggin Hill Airport Fire Service.

A site visit arranged in line with key stakeholder availability took place late February 2020. The proposal discussed was to develop a shared fire station facility which would support the Airport Fire Service commitment airside, and provide designated site capacity to secure delivery of LFB statutory operations via the rear of the site adjacent to the airport perimeter boundary. After consideration of the proposal by Biggin Hill Airport CEO and executive members, the response received by LFB some weeks later advised that Biggin Hill Airport wanted to keep the area LFB were viewing within the airport boundary available for business development and there was unlikely to be financial viability in the proposal.

- b. Siting a prefabricated building to the side or rear of Biggin Hill fire station.

A further feasibility exercise was undertaken to explore the provision of a prefabricated building in lieu of the original brick and steel framed structure. A similar structure was used to support operational delivery whilst Orpington fire station was being rebuilt. Exploration of siting this structure to the side and the rear of Biggin Hill station was investigated as both feasibility and cost would differ depending on location. This option was discounted on a number of reasons; cost (equivalent to option C) with a lifespan of only 10-15yrs; complicated access from the station to the temporary appliance bay; the location of the appliance bay within the yard coupled with further difficulties in reversing the appliance into the bay and concerns over ongoing maintenance and durability.

- c. A value engineered option of the original brick and steel framed structure.

The original feasibility study proposing the brick and framed structure to the side of the station has been subject to a value engineering exercise. In order to minimise cost the appliance bay was reduced in height and length (as agreed with Health & Safety) and the electronic vehicle gates to the rear were also omitted from the

design. These were the main factors that lead to a significant reduction in the pre-tender estimate. The pre tender estimate has therefore been reduced in cost by approximately £127k compared to the original recommendation, taking in account the 15% tolerance.

8. The proposal from Property Officers was to proceed with option C, the value engineered solution of the original brick and steel framed structure to construct a new appliance bay to the left of the existing station. This option is considered to be the most cost effective way of removing the H&S hazards currently present with the size of the existing appliance bays in relation to the size of the appliances.
9. Tasks included within the updated feasibility;
 - (i) Seek to obtain a licence from LB Bromley for unrestricted access into the rear of Biggin Hill fire station via the council owned rear access.
 - (ii) Value engineer and adapt Pre-Application feedback (planning advice regarding the proposed new appliance bay) from LB Bromley for the side addition to Biggin Hill fire station of a new appliance bay.
 - (iii) Concept design detailing the existing and proposed elevations and internal layouts.
 - (iv) The front elevation to be complementary to the appearance of the existing structure.
 - (v) Pre-tender estimate for the build, including all associated fees.
 - (vi) Indicative programme for Royal Institute of British Architecture (RIBA) stages 3-7.

Proposed Refurbishment – Outline Benefits

10. The resolution of H&S risks will be delivered by the provision of a new appliance bay that will be constructed adjacent to the existing fire station. The new appliance bay will ensure that the appliance can be reversed into the bay without the risk of injury to personnel as the width and length of the new bay will be greater than the existing bays. A comprehensive overview on how the proposed solution addresses the current issues is contained within an updated feasibility and cost plan report available as background information to this report. A high level diagrammatic summary of the resolutions can be referenced in Appendix 1, with further supporting drawings at Appendix 2.
11. Due to the constraints of the site width, the dimension of 6.5 metres for a new appliance bay as recommended in the Standard Station Design Brief (SSDB) cannot be achieved. However, the proposed width of 5 metres is greater than the current bays and does remove the current health and safety risks when mounting, dismounting and working around the appliance. The new appliance bay will be accessible via the existing station, creating a structure that works with the existing building providing improved operational efficiencies. The Land Rover will remain in situ in one of the existing bays, this vehicle is much smaller than the appliance and therefore does not pose any H&S concerns.
12. The proposed new appliance bay has been designed to compliment the integrity and appearance (from the front elevation) of the existing station. Unlike the existing appliance bays, the new bay will have access doors front and back, therefore allowing the appliance access into the yard. The new bay will be set back from the existing building line to reduce the impact and any right to light claim from the neighbouring property. This will not have a

dramatic affect in terms of any loss in parking, due to the positioning of the new bay, which will largely occupy the access drive into the yard.

13. The current proposal will not provide rear access for the appliance to access the proposed new appliance bay. Biggin Hill fire station backs onto a local authority park area which has a small maintenance road passing the rear of the fire station, which is not suitable for fire appliances.
14. A licence to provide access for LFB staff to use the a rear road to access the yard is agreed in principle with the local authority, but will require further clarification with LB Bromley. Finalising the licence is subject to satisfying the terms of an existing lease which also provides use of the park's maintenance road to a leisure centre. Pending agreement of the licence, the maintenance road could only be used for LFB staff vehicles only.
15. Having a rear access licence in place will support operational readiness, especially at change of watch, as crews will not have to keep moving the appliance from the new appliance bay to access/park in the rear yard. However, rear access is not essential to support the solution recommended by this report and will be provided if terms can be agreed at negligible cost. The Station Commander is aware the likely outcome of the recommended option will incur the necessity to park the appliance on the existing forecourt in front of the station at change of watch.
16. Subject to the above access licence being granted with agreed terms and future affordability, there may be an opportunity to revisit the provision of rear gates to enable rear access for LFB staff vehicles and improve security.

Project Management and Procurement

17. A consultant was appointed using the Multi Disciplinary Consultancy (MDC) framework to undertake a feasibility study, design, cost and project management services to deliver the construction of a new appliance bay for Biggin Hill fire station. Subject to agreement of recommendations in this report, Fulkers Bailey Russell consultancy will be instructed to ensure the works are delivered in accordance with the specification standard through to handover and post completion.
18. LFB project management oversight will be led by Property department's client side project manager, who will remain responsible for liaising with the consultants via regular design review meetings and overseeing progress for the design, construction, commissioning and handover of the project.
19. Updated feasibility outcomes have been designed in consultation with internal stakeholders including the Station Commander and station based crews. The Brigade's project manager will ensure that pre-start and hand over meetings, as well as periodic and ad hoc site meetings with consultants and contractors are held to monitor progress of the works.
20. A small project board chaired by LFB's Client Side Project Manager will be established to monitor progress against key milestones and the project budget. Pending agreement,

corporate project status will be assigned to the project by the Programme Management Office, enabling monitoring and scrutiny in line with LFC governance requirements.

21. The proposed procurement route for the construction element will be to complete an open, competitive tender via one of the GLA Frameworks available to the LFB. The works will be tendered in accordance with the Commissioner's Code of Practice on Tenders and Contracts. Fulkers Bailey Russell will recommend the appointment of the most economically advantageous tenderer to carry out the works complying with LFC Standing Orders Relating to Procurement rules. The refurbishment is below the OJEU works threshold of £4,733,252, negating the need to conduct an OJEU procurement process.
22. The selection of the successful tenderer will be based on a process that evaluates both the cost and quality of contractor's tenders. The ratio to be applied to this process will be 60% cost evaluation and 40% quality evaluation. This process and ratio is suitable for major building contracts to ensure best value is achieved through the careful assessment of not only tender cost, but also the contractors financial and insurance status and their services in relation to use of resources, skills and experience, quality control, health and safety and environmental processes.
23. As part of the LFCs statutory duty under the Police and Crime Act 2017 and the London Safety Plan 2017 principle of collaboration, heads of estates for blue light services liaise regularly with a remit to review opportunities for improved efficiency and effectiveness across respective estates. The provision of the new appliance bay will only create space solely for operational needs and therefore limit any possibility for collaboration in respect of vehicle turnout.
24. As part of standing orders the Assistant Director Technical and Commercial has authority to approve procurement initiation, accept a tender, award and enter into a contract in accordance with existing standing orders. Procurement authority also extends to any actions required under any existing contracts (e.g. deductions for unsatisfactory performance or giving notice and termination of contracts), except where actions relating to contract performance are in accordance with a formula or process included within the contract.

Projected Capital Costs

25. The total estimated cost arising from the revised feasibility and value engineering exercise is £498k including all consultancy fees, planning fees, construction costs and staff costs and is included in the capital budget 2020/21 and 2021/22. The costs at this stage are based on pre tender estimates and firm quotes for the construction element will not be received until RIBA stage 4 is completed, it is recommended that a tolerance of 15% is allocated to this budget. The identified contingency within the project will enable the project to overcome uplifts in cost experienced in the tender process, as well as any unforeseen risks or delays to the project due to market fluctuations and any unforeseen impacts of Brexit and associated supply chain elements.
26. Should the total costs provided in Table 1 exceed an agreed tolerance of 15%, a revalue engineering exercise would be applied to establish if the cost could be reduced within the

tolerance approved, prior to award of the contract. If this exercise was unsuccessful the works will be subject to further approval.

Table 1 – Projected pre-tender capital costs

Description	Cost (£k)	Description
Feasibility	18	Full feasibility including surveys and pre-app (sunk cost) including additional reports.
Statutory / planning fees	7	All associated fees related to statutory consent (building control, asbestos, party wall agreements) & planning application fees.
Construction costs	386	Costs to construct a new appliance bay adjacent to the existing fire station (including prelims, overheads and profits at 20% plus 10% contingency).
Consultant Fees	60	All associated consultancy fees, including any expert advice & compensation that may result from a right to light claim from the adjoining property.
LFB Staff costs (7%)	27	7% of the original pre-tender estimate of the total sum of building works
Total	£498	

Outline Programme

27. The following key milestones are based on receiving LFC agreement on recommendations by August 2020. Dates provided are indicative at this point as the timeline will be subject to review throughout the design stages.
28. Currently the programme for the provision of the new appliance bay does depend upon approval of the planning application that will be submitted to Bromley during the detailed design stage of the works. A pre planning application was submitted to Bromley in October 2019 to gauge the local authority's response on the proposed new appliance bay to the side of the fire station. The overall response was positive and perceived risks are highlighted later in this report.
29. The fire station will remain fully operational throughout the life of the project, however there will be a reduced capacity in the rear yard during construction to provide required contractor welfare facilities and storage of materials and equipment. Effective working relationships will be formed between the principle contractor, Station Commander, station based crews and LFB's Client Side Project Manager to ensure minimal disruption throughout the duration of the project.

Table 2 – Programme Milestones

03/08/2020	LFC/Deputy Mayor decision expected to secure capital funding
10/08/2020	Purchase Order issued to Fulkers Bailey Russell to proceed to full design and tender
31/08/2020	Planning application submitted
20/11/2020	Planning application decision date
30/11/2020	Full design and tender pack uploaded onto Blue Light
21/12/2020	Tender period
04/01/2021	Tender evaluation
18/01/2021	Contract Award
1/02/2021	15 week construction period commences
14/05/2021	Practical completion and Handover
17/05/2021	Occupation for fire crews

Risk and Dependencies

30. A major risk is obtaining planning permission in order to progress with the recommended option of the new appliance bay. A pre-application process with the council formed part of the feasibility and has provided some indication of whether planning permission is achievable.
31. Although the pre-application outcomes were largely positive regarding the investment in Biggin Hill fire station, LB Bromley highlighted potential concerns as follows:
- The proposed new bay structure would project approximately 7.8m beyond the rear extension of the neighbouring property, which may be considered to have an unacceptable visual impact.
 - The proposed bay would have a significant height of 4.4m.
 - The proposal would result in a tall and significant expanse of wall close to the common boundary with the neighbouring property which may be considered to have an unacceptable visual impact on this neighbouring property.

- The proposed new bay may result in a harmful level of overshadowing given the depth and height of the development and may impact upon the level of sunlight received to the rear windows of the neighbouring dwelling and its rear amenity space.
 - In terms of noise and disturbance, the proposed appliance bay would be situated in closer proximity to the neighbouring property than the existing appliance bays. However at this stage Environmental Health department have not objected to the proposal in this regard.
32. To reduce the impact on the neighbouring property and support a more favourable planning application in response to the pre-application comments, consultation with LFB H&S department has been undertaken to reduce the length and height of the proposed bay.
 33. The design changes inline with the pre-app advice have been reviewed and the size of the bay in terms of height and length has been reduced accordingly and inline with LFB Health and Safety guidance. LFB strategy and risk officers have advised that Biggin Hill will retain a standard Mercedes Series 3 appliance for the foreseeable future. Therefore, provided the proposed new bay has sufficient space to safely support required working practices for this type of appliance, a bespoke reduction to the SSDB guidelines has been agreed to achieve planning permission.
 34. Now that the design changes have been agreed which will reduce the impacts on the neighbouring property, this should fulfil Policy 37 of the Bromley Local Plan which seeks to protect residential occupiers from inappropriate developments.
 35. Bromley Council have agreed in principle to issue a licence to the LFB for the unrestricted use of the access road at the rear of Biggin Hill fire station (subject to further negotiation with other leaseholders). Any licence secured will reserve the right for LB Bromley to terminate this agreement at one month's notice. LFB's request to obtain a more secure easement for access was refused.
 36. As detailed above, following a site visit in December 2019 by LFB H&S and Property department officers, H&S confirmed at this stage they would be happy to agree a reduction in length of the appliance bay to 12 metres. This would be a reduction of 3 metres from the 15 metre length as detailed in the pre-application submission.
 37. LFB H&S officers also confirmed that they would agree to a reduced height of 3.6 metres, which is the approximate height of the existing appliance bay. Should approval be granted to proceed to technical design, H&S will be further consulted during this stage.

Finance comments

38. This report seeks approval to construct a new appliance bay at Biggin Hill Fire Station. The report recommends that a capital budget of £498k is approved for these works with delegated authority to increase the budget by up to a 15% tolerance to £573k.

39. The total budget included in the capital programme for this scheme is currently £700k, £400k in 2020/21 and £300k in 2021/22. The pre-tender cost estimate therefore results in a budget saving of £127k after taking into account the 15% tolerance.
40. If this is funded from external borrowing and based on a useful life of 60 years, the annual debt charges will be £27k, including £10k for the repayment of borrowing and £17k in interest payments at a projected rate of 3%.

Workforce comments

41. The workforce implications of the provision of the additional appliance bay supports a positive outcome for staff as benefits will be realised by a safer place to work with reduced risks to staff due to a larger and improved facility.
42. Site meetings in 2019 with officers from Property department, working alongside the Station Commander for Biggin Hill Fire Station, agreed design proposals for the provision of an additional appliance bay to support the feasibility process. Since then the project manager from Property department has continued to take opportunities to keep the Station Commander updated on progress and engage with crews on questions surrounding the proposed addition.
43. The Fire Brigades Union is represented on future Major Works Capital Boards. Wider representative body consultation will be sought as part of the LFC governance process and representation will be invited at project board level.

Legal comments

44. Under section 9 of the Policing and Crime Act 2017, the London Fire Commissioner (the "Commissioner") is established as a corporation sole with the Mayor appointing the occupant of that office. Under section 327D of the GLA Act 1999, as amended by the Policing and Crime Act 2017, the Mayor may issue to the Commissioner specific or general directions as to the manner in which the holder of that office is to exercise his or her functions.
45. By direction dated 1 April 2018, the Mayor set out those matters, for which the Commissioner would require the prior approval of either the Mayor or the Deputy Mayor for Fire and Resilience (the "Deputy Mayor").
46. Paragraph (b) of Part 2 of the said direction requires the Commissioner to seek the prior approval of the Deputy Mayor before "[a] commitment to expenditure (capital or revenue) of £150,000 or above as identified in accordance with normal accounting practices...".
47. The statutory basis for the actions proposed in this report is provided by sections 7 and 5A of the Fire and Rescue Services Act 2004 ("FRSA 2004"). Section 7 (2)(a) FRSA 2004 the Commissioner has the power to secure the provision of personnel, services and equipment necessary to efficiently meet all normal requirements for firefighting and section 5A allows the Commissioner to procure personnel, services and equipment they consider appropriate for purposes incidental or indirectly incidental to their functional purposes.

48. General Counsel also notes that the proposed service will be procured in compliance with the Public Contracts Regulations 2015 and the Commissioner's Scheme of Governance.

Sustainability implications

49. The project will be administered in alignment with the authorities sustainability policies. Details on the scope of how this project impacts on those policies is located within the full SDIA (Sustainable Development Impact Assessment) completed for these works.
50. A registration with Construction Line (a pre-qualification scheme for UK based construction companies) would be a requirement for all tendering companies which includes checks to ensure all companies are compliant with the Modern Slavery Act. The minimum requirements set by Construction Line are:
- All UK workers receive minimum wage and robust immigration checks. Further checks have also been made to ensure that the preferred bidder pays the London Living Wage and appropriate conditions will be included in the contract in line with LFC policy.
 - Map supply chains to identify where the highest risk and exposure to modern slavery exists; undertake site inspections; provide training to local employees and local suppliers and other initiatives to manage modern slavery risks
51. The preferred bidder will ideally be a small/medium sized enterprise (SME).

Equalities implications

52. The London Fire Commissioner and decision takers are required to have due regard to the Public Sector Equality Duty (s149 of the Equality Act 2010) when exercising our functions and taking decisions.
53. It is important to note that consideration of the Public Sector Equality Duty is not a one-off task. The duty must be fulfilled before taking a decision, at the time of taking a decision, and after the decision has been taken.
54. The protected characteristics are: Age, Disability, Gender reassignment, Pregnancy and maternity, Marriage and civil partnership (but only in respect of the requirements to have due regard to the need to eliminate discrimination), Race (ethnic or national origins, colour or nationality), Religion or belief (including lack of belief), Sex, and Sexual orientation.
55. The Public Sector Equality Duty requires us, in the exercise of all LFC functions (i.e. everything the LFC does), to have due regard to the need to:
- (a) Eliminate discrimination, harassment and victimisation and other prohibited conduct.
 - (b) Advance equality of opportunity between people who share a relevant protected characteristic and persons who do not share it.

- (c) Foster good relations between people who share a relevant protected characteristic and persons who do not share it.

56. Having due regard to the need to advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:

- (a) remove or minimise disadvantages suffered by persons who share a relevant protected characteristic where those disadvantages are connected to that characteristic;
- (b) take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it;
- (c) encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

57. The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities.

58. Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:

- (a) tackle prejudice, and
- (b) promote understanding.

59. The equality impact assessment indicates that the proposals in this report will not have a disproportionately adverse effect on any persons with a particular characteristic. The new appliance bay will remove the Health and Safety concerns that are currently present with the existing bays, therefore creating a safer environment for all.

List of Appendices

Appendix	Title	Protective Marking
1.	Feasibility issue resolution	
2.	Proposed Drawings	

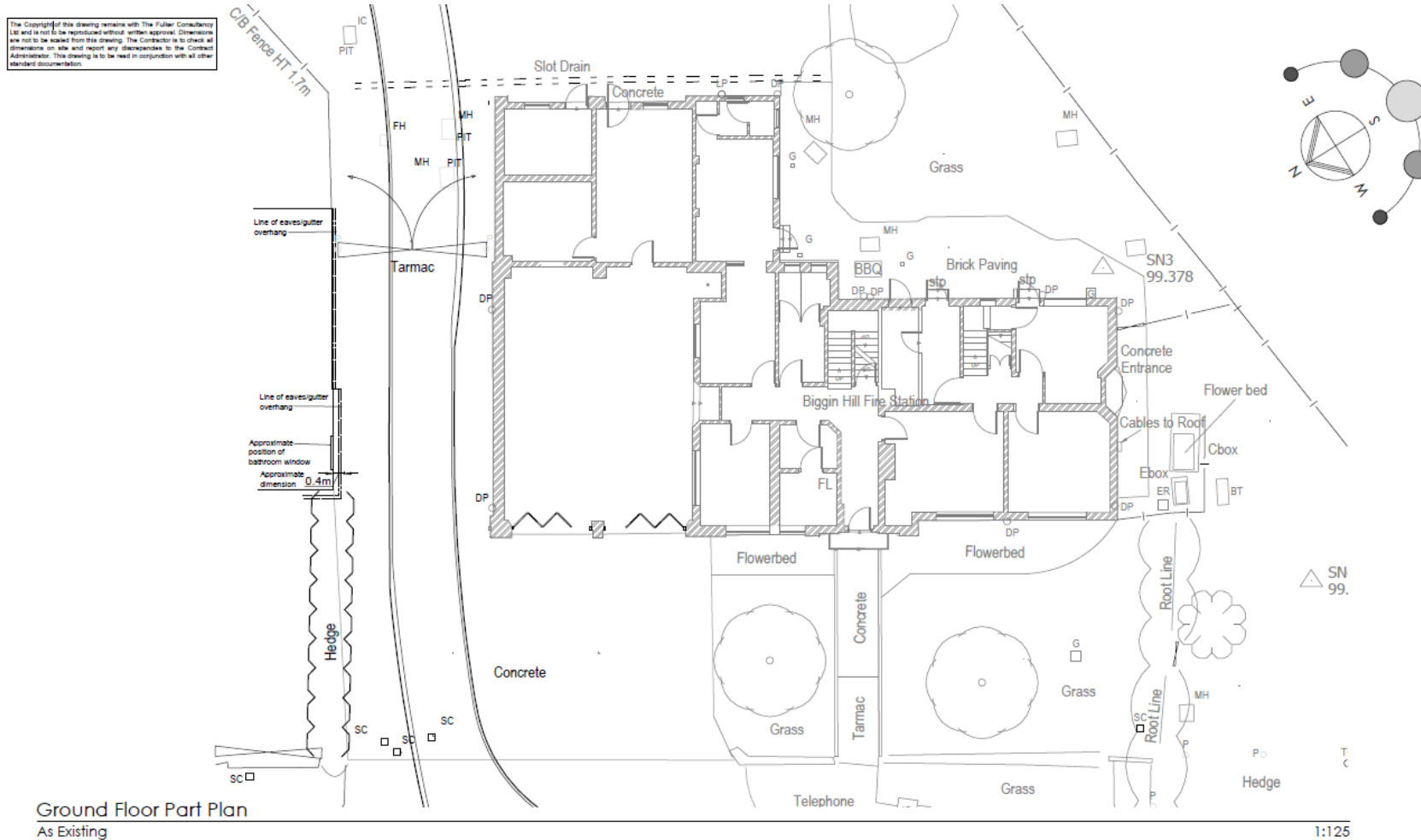
Appendix 1 – Revised Feasibility Summary

A feasibility report is available for background reading together with the revised value engineered report that incorporates the pre-app advice received from the Local Authority of Bromley. Further information on the discounted option reports are also available upon request. Please see below for a high level summary on condition and operational resolutions supported by this proposal.

Issue	Resolution
Currently the existing appliance bays are too narrow for the modern appliances.	The proposed new appliance bay will be wider than the existing bays, this will reduce the current Health and Safety concerns, although the appliance will still have to reverse into the bay, due to the lack of rear access for the appliance.
Currently the existing appliance bays are too shallow for the modern appliances.	The proposed new appliance bay will be longer than the existing bays, this will again reduce the current Health and Safety concerns.
Access to the yard only available via the front of the station.	Discussion is in progress to agree a licence for rear access rights agreed with Bromley Council. This has proved not to be as straight forward and even though agreed in principle the licence may be revoked at any time. Therefore the access into the yard will be via the new appliance bay (the appliance will need to vacate the bay to allow for yard access).

Appendix 2 – Proposed Drawings

- Existing site plan
- Proposed Internal layout
- Proposed Front Elevation



rev.	description	date	chd.
client:	London Fire Commissioner		

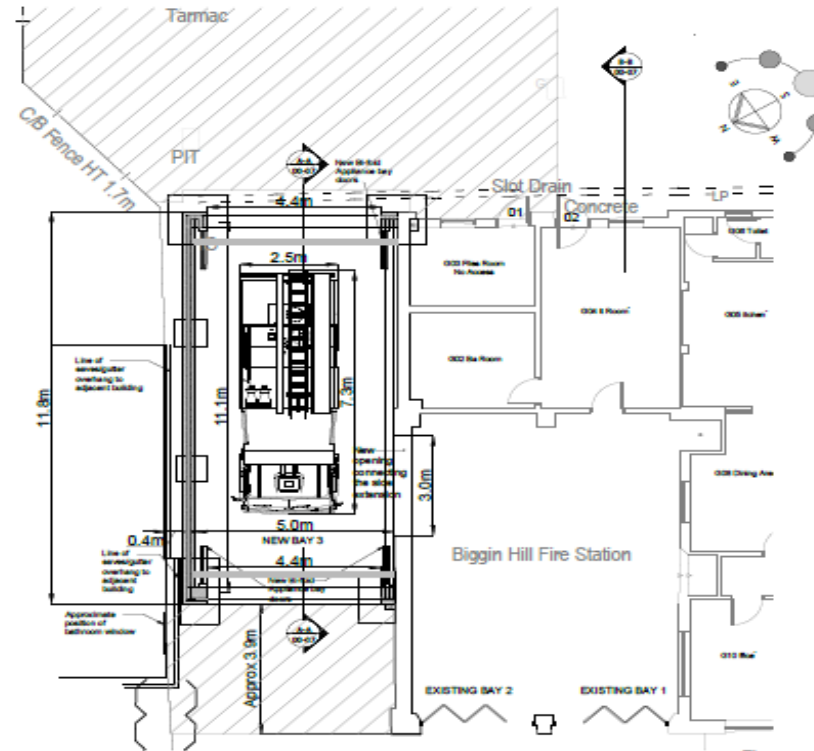
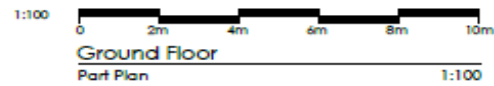
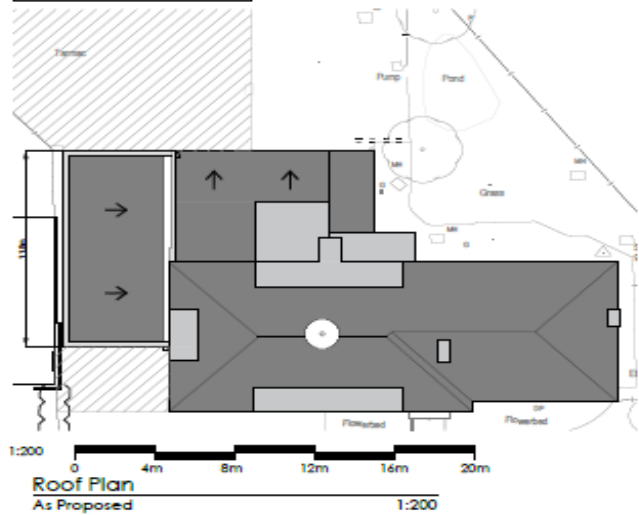
FulkersBaileyRussell
london | gravesend | brighton | bristol | leeds | reading | manchester
info@fulkersonline.co.uk | www.fulkersonline.co.uk | 01474 388175

project: Biggin Hill Fire Station
Proposed additional Appliance Bay

drawing title: Plan
As Existing

drawn: AS	chd: PC	date: June 2019
status: FEASIBILITY		scale: 1:125 @A3
proj no:	19 / 2083	
drg no:	00-03	rev no:

The Copyright of this drawing remains with The Fulcrum Consultancy Limited and is to be used solely for the purposes of the project described herein. It is not to be used for any other purpose without the written consent of The Fulcrum Consultancy Limited. This drawing is to be used in conjunction with all other drawings.



B. App location updated		07.05.20	AB
A. Appliance bay extension shortened in length and height		21.04.20	AB
rev.	description	date	drawn
001	London Fire Commissioner		

Fulcrum Bailey Russell
London | Glasgow | Brighton | Leeds | Manchester | Newcastle
info@fulcrum.co.uk | www.fulcrum.co.uk | 01753 355175

project: Biggin Hill Fire Station
Proposed additional Appliance Bay

drawing title: GF Part Plan
and Roof Plan
As Proposed

drawn: AG	check: PC	date: Sep 2019
title: FEASIBILITY		scale: As shown @A3
proj no: 19 / 2083		
fig no: 00-04	rev no: B	

The Copyright of this drawing remains with The Fulker Consulting Ltd and is not to be reproduced without written approval. Dimensions are not to be scaled from this drawing. The Contractor is to check all dimensions in situ and report any discrepancies to the Contract Administrator. This drawing is to be read in conjunction with all other standard documentation.



Front Elevation
As Proposed

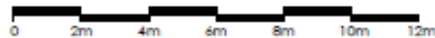
1:125



Rear Elevation
As Proposed

1:125

1:125



rev	description	date	drawn
A	Appliance bay extension shortened in length and height	21.04.20	AB
client	London Fire Commissioner		

project: Biggin Hill Fire Station
Proposed additional Appliance Bay

drawing title: Elevations
As Proposed

drawn: AG	check: PC	date: June 2019
status: FEASIBILITY		scale: 1:125 @A3
proj no: 19 / 2083		
fig no: 00-06	rev no: A	

Fulkers Bailey Russell
london | gloucester | brighton | bristol | leeds | reading | manchester
info@fulkers.co.uk | www.fulkers.co.uk | 01473 388175

