COMMITTEE REPORT

BY THE EXECUTIVE DIRECTOR FOR ECONOMIC GROWTH AND NEIGHBOURHOOD SERVICES READING BOROUGH COUNCIL

PLANNING APPLICATIONS COMMITTEE: 1 June 2022

Ward: Thames App No.: 212061

pitches

Address: Richfield Driving Range, Richfield Avenue, Reading, Berkshire, RG1 8EQ Proposal: The demolition of existing driving range structures and the development of a new three-storey 8 form entry school for years 11 - 16, including a SEND unit and 300 place 6th form (total school capacity of 1500 pupils) including the creation of a new access from Richfield Avenue, new parking area, cycle parking landscaped areas, external play areas, Multi Use Games Area (MUGA) and sporting

Applicant: Bowmer & Kirkland

Deadline: 23 May 2022 Extended to 30 June 2022

RECOMMENDATION:

Delegate to the Assistant Director for Planning, Transport and Public Protection Services (AD PTPS) to (i) GRANT planning permission subject to the satisfactory completion of a S106 legal agreement in the form of a unilateral undertaking or (ii) to REFUSE permission should the legal agreement not be completed by 30 June 2022 (unless officers on behalf of the AD PTPS agree to a later date for completion of the legal agreement).

The S106 legal agreement to include a minimum of the following:

- Secure a S278/38 Agreement for the construction of a Tiger Crossing on Richfield Avenue (to allow cyclists as well as pedestrians to cross safely).
- £5,000 towards a Traffic Regulation Order for alterations to the parking restrictions along the Caversham Road frontage of the site.
- To ensure an access and egress for large vehicles to access land to the south of the car park
- £200,000 towards widening / improving pedestrian / cycle routes on the north and south sides of Richfield Avenue
- Employment, Skills and Training The production, implementation and monitoring of an Employment and Skills Plan (ESP) for the Construction and End User phases of the development. In the event that the developer chooses not to provide either ESP themselves then a financial contribution commuted sum of £26,107.50 for the Construction ESP and £7,832.25 for the End User ESP (calculated using the SPD formula in relation to both the construction and end user phases) will be secured in lieu of an ESP.

CONDITIONS TO INCLUDE:

- 1. Implementation within 3 yrs
- 2. Development in accordance with Approved Plans
- 3. Materials as specified with samples to be approved
- 4. Development in accordance with Flood Risk Assessment
- 5. Implementation of Approved Land Gas Remediation Scheme

- 6. Submission and Verification of contamination remediation
- 7. Long term monitoring and maintenance of contamination remediation
- 8. Actions on finding contamination not previously identified
- 9. Restrictions on penetrative piling
- 10. Mechanical plant noise mitigation to be approved
- 11. Odour Management details to be approved
- 12. Requirement for Air Quality mitigation plan
- 13. Full Details of all External Lighting to be approved
- 14. Floodlighting of External Sports Areas details to be approved
- 15. Construction Methods as submitted and approved
- 16. Hours of Construction limitations
- 17. No burning of construction waste
- 18. Refuse and recycling bin stores
- 19. Interim BREEAM Certificate (Pre-Commencement)
- 20. Final BREEAM Certification (Occupation)
- 21. SuDS Strategy for approval
- 22. Vehicle Parking provided as approved
- 23. Vehicle access provided as approved
- 24. Bicycle Parking provided as approved
- 25. Details of EV Charging Points and provision as approved
- 26. Provision of visibility splays prior to occupation
- 27. Visibility splays to be kept free of obstructions
- 28. Travel Plan provided and approved
- 29. Travel Plan review
- 30. Roads to be provided in accordance with approved plans
- 31. Details of hard and soft landscaping to be submitted and implemented as approved
- 32. Boundary treatment to be implemented as approved
- 33. Landscape Management Plan to be submitted and implemented as approved
- 34. Aboricultural Method Statement and Tree Protection Plan to be submitted and implemented as approved
- 35. Construction environmental management plan (CEMP: Biodiversity) (Pre commencement)
- 36. Ecological enhancements
- 37. Vegetation clearance to avoid bird nesting season (March-August)
- 38. Rivermead Ditch enhancement and management plan
- 39. Community Use Agreement

INFORMATIVES TO INCLUDE:

- 1. IF5 Terms and Conditions
- 2. IF6 Building Regulations
- 3. IF2 Pre-Commencement Conditions
- 4. I11 CIL Not Chargeable
- 5. IF4 S106
- 6. IF3 Highways
- 7. I29 Access Construction
- 8. IF7 Complaints about Construction
- 9. IF8 Encroachment
- 10. Thames Water informatives
- 11. IF1 Positive & Proactive

1. INTRODUCTION & BACKGROUND

- 1.1 The application site is approximately 5.53 hectares and comprises the former Leaderboard Golf Centre. It is owned by Reading Borough Council.
- 1.2 The application site is relatively level. Between 1970 and 1979 the site was used as a household and commercial landfill site. By 2002 it was in use as a golf driving range but this use ceased some years ago. It was also recently used as a laser clay shooting range.
- 1.3 The site is located to the south of Thameside Promenade and the River Thames, to the north of Richfield Avenue and east of Cow Lane and Cow Lane Bridge. To the south of the site is a large commercial/industrial area. To the east is Rivermead Leisure Centre.
- 1.4 To the west is the main site of the annual Reading Festival which is used as farmland throughout the remainder of the year. The southern triangular parcel of the site is used by Festival Republic for access and logistics to the main festival site while the north of the site towards the Thames is used for camping. Access to the Caversham Bridge Garden centre, which is located to the south-east of the site is also provided through the southern triangle.
- 1.5 The proposal comprises the demolition of the existing driving range structures and the development of a new 8 form entry school for years 11-16 including a new Special Education Needs and Disability (SEND) unit and 300 place Sixth Form plus associated highways and landscaping works. The school will be operated on behalf of the Local Education Authority by the Maiden Erlegh Trust, who operate other schools within the area.
- 1.6 There is an identified and pressing need for additional secondary school places within the local area. The Report 'School Place Planning' (Brighter Futures for Children, June 2019) outlines requirements to ensure sufficiency of places within Reading and confirms the urgent need for the provision of a new secondary school. 'Bulge Classes' (with their associated costs) at secondary school level were identified as being required from 2019 to cope with the deficit in school places ahead of the new secondary school being brought forward. The report identified the limited ability of schools to accept bulge classes and also the inability of Reading's neighbours to accept more Reading pupils was also identified. As pupils move through the system, this will also affect post 16 and sixth form provision.
- 1.7 Insufficient provision of SEND facilities was also identified.
- 1.8 The provision of a new secondary school is required to reduce the need for out-borough provision creating a budget saving and enabling pupils to be educated within the Reading community.

- 1.9 The scheme considered in the planning application is being delivered through the Department for Education's (DfE) Off-Site Framework which focuses on the delivery of new schools through Modern Methods of Construction.
- 1.10 Detailed pre-application discussions have taken place for the masterplanning of this site as part of the wider Rivermead Area between Greenwich Leisure Limited, Reading Borough Council, Festival Republic and the DfE (who have appointed Bowmer and Kirkland (the applicant) as the main contractor for the proposed development).
- 1.11 The site is within the Thames Valley Major Landscape Area designation (Policy EN13) and within designated Local Green Space (Policy EN7). It is also within an Air Quality Management Area (Policy EN15) and in Flood Zones 2 and 3.
- 1.12 The application is referred to committee as it is a 'major' development.



Site Boundary Plan



Aerial Photo (source: River Academy DAS)



Northern Boundary with River Thames beyond (source: River Academy DAS)

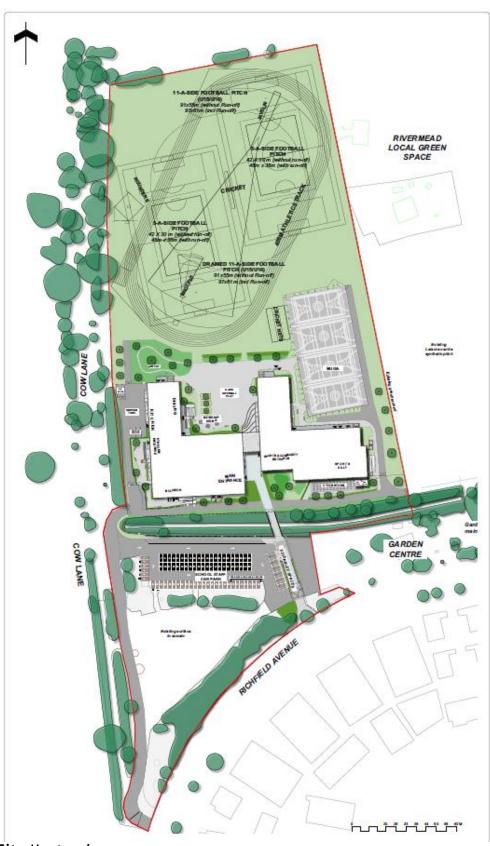
2. PROPOSAL

- 2.1 Full planning permission is sought for a new three-storey 8 form entry school for years 11 16, including a dedicated self-contained Special Education Needs and Disability (SEND) unit.
- 2.2 The proposed secondary school will operate as "The River Academy" in reference to its riverside location and will accommodate 1,200 pupils aged between 11 to 16 years old and 300 sixth form students.



Elevated view of the main approach from the south and arrival from Richfield Avenue (source: River Academy DAS)

- 2.3 The proposed development is part two and part three storey in height totalling 11,333 sq m (GEA) of new floorspace. The main teaching accommodation is in the west and centre of the site and the sports block in a wing to the east. The buildings are arranged to the north of a watercourse which crosses the site east-west and a pedestrian bridge is provided to access the main school from Richfield Avenue. Car parking is provided to the south of the main buildings and sports pitches and areas of open space including a student courtyard is located in the north of the site closest to the River Thames.
- 2.4 The new school will employ 156 no. (FTE) members of staff. 82 no. car parking spaces, including 6 no. accessible parking spaces, will be provided within the parking area to the south of the proposed new school buildings. 120 no. cycle parking spaces will be provided on site and 8 no. Electric Vehicle Charging Points (EVCP) will be provided.
- 2.5 Vehicular access to the site is proposed to be from the existing access point on Richfield Avenue, and via an improved existing access track, which runs parallel and to the east of Cow Lane.
- 2.6 Pedestrian access is from Richfield Avenue; a route marked with fencing and bollards through the car park over the new bridge passing over the watercourse crossing the site from east-west. Pupils and visitors will be led to the main entrance; sixth form pupils have their own private entrance to the west of the building, which is accessible through a controlled gate



Site Masterplan

2.7 The main school buildings are proposed to be clad in a light brick slip system at ground floor with the upper floors treated with cladding panels in a deep grey. Accentuation in the form of coloured cladding panels have been included to emphasise key areas such as the main student entrance and windows. Glazing and doors are framed in a light silvery finish.



Looking south to school buildings across courtyard

- 2.8 In terms of layout, the ground floor includes the main reception area to the building, dining facilities and a main assembly hall as well the drama and music departments. The 6th form accommodation and SEN cluster are located to the south/west with dedicated circulation and external space. The sports facilities are in the east of the ground floor accommodation. The first floor includes most of the general teaching accommodation grouped into departmental grouping with associated staff and ancillary accommodation. The second floor includes the science department, maths department and art rooms.
- 2.9 Hard and soft landscaping is proposed throughout the site and the provision of sports and play facilities, including seasonal provision for: A Four Court MUGA; no. 2 11 a-side football pitches (containing space for no. 2 five a-side football pitches); Cricket pitch and cricket nets; Space for a 400 athletics track, and other athletics areas. The landscaping proposals include new tree planting; structural planting and the creation of a habitat area; and to retain as much vegetation on site as is possible.
- 2.10 A fencing strategy has been provided to create areas defined as 'secure', with 'controlled access' and 'publicly accessible'; whilst the school is in use the pupils will be located within the secure line. A new 2.4 metre weldmesh perimeter fence will provide a secure site boundary to the external play areas with a 3 metre weldmesh perimeter fence to the MUGA. 1 metre timber post and rail fencing is identified along the south of the main school buildings along the route of the water course which crosses the site in this location and

- is identified to ensure the safety of the public. The main area of publicly accessible land is the car park within the southern triangle.
- 2.11 The public parking area to the south of the proposed school buildings will be upgraded to create a new hard-surfaced area and demarcated parking spaces (with permeable paving). The parking area will remain within the ownership and control of Reading Borough Council and will be provided to the school under license. The improvements to the parking area and access will be carried out by the applicant. The school will have operational control of the parking area outside of the period when the Reading Festival will need the site for set up, operations and decommissioning.
- 2.12 The building has been designed to enable secure out-of-hours community use. The eastern side of the building can be secured and made available by the community out of school hours. Areas of the school which are to be made available to the community are the spaces all of the sports facilities including the main hall, activity studio and changing rooms, along with the hygiene room and accessible changing areas. The use of school facilities for out-of-hours community use will also create opportunities for synergy with the adjacent leisure centre.
- 2.13 The new building has been designed to be fully accessible and inclusive with all floors and thresholds level and lift access to all floors. Routes into the buildings will be signed and demarcated appropriately using landscape treatments. All learning spaces will be designed to accessible standards, be appropriately lit, incorporate height-adjustable furniture where required and have acoustic attenuation to meet or exceed necessary standards.
- 2.14 The school will make the playing fields available to Reading Festival for camping (for disabled campers). Provision is made for vehicular access on both the eastern and western side for campers during the Festival period. Pedestrian festival access will be provided through the southern triangle to the south of the main school buildings.
- 2.15 The existing garden centre to the east of the southern triangle also requires access for delivery vehicles throughout the day. A loading bay has been identified with gate access to that business.

The Planning Application

- 2.16 The applicant submitted the following plans and documents on 21 December 2021:
 - Application form
 - CIL form
 - Design and Access Statement
 - Ecology Statement
 - Flood Response Plan

- Flood Risk Assessment
- Landscape Appraisal
- Existing Ground Levels (Drawing no. FS0949-ASO-XX-XX-DR-Y-1100/P01)
- Site Location Plan (FS0949-ALA-XX-ZZ-DR-L-0016/P01)
- Environmental Noise Survey Report
- Phase II Geo-Environmental Assessment
- Air Quality Feasibility Assessment Phase 1
- Construction Environmental Management Plan
- Drainage Statement
- Energy Strategy
- Foul Water Drainage Layout Sheet 1 (Drawing no. FS0949-HEX-XX-XX-DR-C-9202/P03)
- Foul Water Drainage Layout Sheet 2 (Drawing no. FS0949-HEX-XX-XX-DR-C-9203/P03)
- Water Monitoring Strategy
- Reading Borough Open Space Review
- Proposed External Lighting and Security Philosophy Layout (Drawing no. FS0949-CPW-ZZ-XX-DR-E-6300/P05)
- Phase 1 Contaminated Land & Geotechnical Desk Study Report
- Remediation Strategy
- Arboricultural Impact Assessment
- Sequential Assessment
- BREEAM Pre-assessment report
- Statement of Community Involvement
- Surface Water Drainage Layout Sheet 1 (Drawing no. FS0949-HEX-XX-XX-DR-C-9200/P05)
- Surface Water Drainage Layout Sheet 2 (Drawing no. FS0949-HEX-XX-XX-DR-C-9201/P05)
- Utilities and Drainage Survey
- Planning Statement
- Planning and Landscape Drawings
- Travel Plan
- Transport Statement
- 2.17 Following the submission of the application the following additional information has also been submitted:-
 - The following revised and additional plans:-
 - Whole Site Illustrative Masterplan (Drawing no. FS0949-ALA-XX-ZZ-DR-L-0027/P03
 - Landscape General Arrangement Plan (Drawing no. FS0949-ALA-XX-ZZ-DR-L-0002/P19)
 - Detailed General Arrangement Plan 1 of 2 (Drawing no. FS0949-ALA-XX-ZZ-DR-0028/P03)
 - Detailed General Arrangement Plan 2 of 2 (Drawing no. FS0949-ALA-XX-ZZ-DR-L-0029/P03)
 - Detailed General Arrangement Plan 1 of 4 (Drawing no. FS0949-ALA-XX-ZZ-DR-L-0003/P08)

- Detailed General Arrangement Plan 2 of 4 (Drawing no. FS0949-ALA-XX-ZZ-DR-L-0004/P09)
- Detailed General Arrangement Plan 3 of 4 (Drawing no. FS0949-ALA-XX-ZZ-DR-L-0005/P11)
- Detailed General Arrangement Plan 4 of 4 (Drawing no. FS0949-ALA-XX-ZZ-DR-L-0006/P09)
- External Lighting Plan (Drawing no. D45008/AE/B)
- Landscape Illustrative Masterplan (Drawing no. FS0949-ALA-XX-ZZ-DR-L-0001/P05)
- Ground Works and Typical Flood Void Detail (Drawing no. FS0949-JWA-ZZ-00-DR-A-9080/P01)
- Planting Schedule (Drawing no. FS0949-ALA-XX-ZZ-DR-L-0014/P05)
- Planting Plan (Drawing no. FS0949-ALA-XX-ZZ-DR-L-0013/P10)
- 3 Month Diffusion Tube Survey Report (dated February 2022)
- Contractor's Proposals Acoustics (dated 1 February 2022)
- Façade/ Planning Review (dated 15 February 2022)
- Pedestrian and Cycle Infrastructure Review (dated 29 March 2022)
- Initial Response to RBC Highways Comments (dated 30 March 2022)
- Contamination Remediation Strategy (04 April 2022)
- Arboricultural Impact Assessment (dated 19 April 2022)
- Response to RBC EHO Comments Project Memo (dated 29 April 2022)
- Additional Modelling Technical Note and Appendices A-F (dated 10 May 2022)
- Air Quality Assessment (dated 17 May 2022)
- Construction Environmental Management Plan (revised 19 May 2022)
- 2.18 Community Infrastructure levy (CIL): the proposal is CIL liable, but education is not a chargeable use, as set out in the Council's CIL Charging Schedule.

3 PLANNING HISTORY

- 3.1 The Council's online planning application register does not identify any formal applications submitted at the application site. There are several planning applications relating to adjacent land, which are considered relevant to this application:
 - Ref. 212034 Screening Opinion sought on current proposal. The Local Planning Authority adopted a Screening Opinion to the effect that the development proposed, as per submissions received on 16 December 2021, is not development that is likely to have significant effects on the environment by virtue of factors such as its size, nature or location. Accordingly, an

Environmental Statement was not required to accompany the planning application. Issued 7 February 2022.

- Ref. 201734 planning permission was granted on 12 April 2021 for a new replacement leisure centre including a 25m 8 lane competition pool and diving, with associated parking and landscaping, followed by the demolition of existing Rivermead Leisure Centre.
- Ref. 191532 a planning application was submitted on 23 September 2019 at land adjacent 10 -12 Richfield Avenue for the construction of a garden centre building with a kitchen and WC facilities. A decision is currently pending.

4 CONSULTATIONS

Statutory

Environment Agency

The following is a summary of the response (25 February 2022):-

- 4.1 The application site lies within Flood Zone 2 and Flood Zone 3 according to the EA's Flood Map for Planning. This is defined as areas having a medium and high probability of flooding respectively, in accordance with Table 1 'Flood Risk' of the Planning Practice Guidance. The site is also located above a historic landfill, which is a highly contaminative previous use.
- 4.2 The applicant has assessed climate change appropriately with finished floor levels set high enough. Compensation and voids have been provided for mitigation. No losses in any of the bands so level for level compensation. Voids provided for floor levels rather than compensation so we are satisfied with the detail given.
- 4.3 The EA had provided pre-application advice to the applicant and some of the reports or their conclusions submitted with the application had been seen previously. The EA confirmed that it was therefore broadly in agreement with the reports and their conclusions and have no objection to the development from the perspective of groundwater quality.
- 4.4 However, the EA confirm that given the site overlies a historic landfill, monitoring of activities and the impact on water quality will need to be undertaken during the construction phase. Four conditions have therefore been recommended as follows:-
 - To ensure the development is in accordance with the submitted Flood Risk Assessment and the following mitigation measures that must be fully implemented before occupation and retained throughout the lifetime of the development:-

- Finished floor levels shall be set no lower than 39.8 metres (AOD).
- Compensatory storage shall be provided as outlined in the Flood Risk Assessment.
- Ground beams shall be provided as outlined in Section 3.4 of the Flood Risk Assessment.
- To require a verification report to be provided before occupation to demonstration that all remediation works have been completed and to demonstrate the effectiveness of that remediation. The report should include results of sampling and monitoring carried out in accordance with an approved verification plan.
- To require that if, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to, and approved in writing by, the local planning authority. The remediation strategy shall then be implemented as approved.
- To require that no piling using penetrative methods shall be carried out without the written consent of the local planning authority.

Non-statutory

RBC Development Control Transport

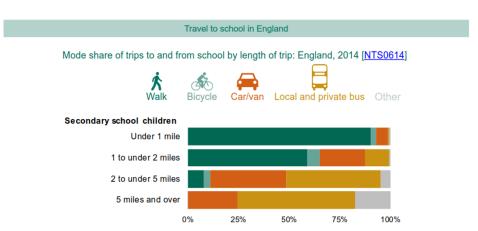
The following is a summary of initial comments issued on 11 February 2022:-

- 4.5 An objection was issued on the following grounds:
 - Insufficient information has been submitted with the planning application to enable the highways, traffic and transportation implications of the proposed development to be fully assessed. From the information submitted, it is considered that the additional traffic likely to be generated by the proposal would adversely affect the safety and flow of users of the existing road network within Reading, contrary to Policies TR1 and TR3 of the Reading Local Plan.
 - The proposed layout fails to demonstrate that it complies with the Local Planning Authority's standards in respect of vehicle parking. This could result in on-street parking on the adjacent highway network adversely affecting road safety and the flow of traffic, and in conflict with Policy TR5 of the Reading Local Plan

- The proposed development does not comply with the Local Planning Authority's standards in respect of cycle and pedestrian access to the site and is in conflict with Reading Local Plan Policy TR4.
- 4.6 The applicant's submitted Transport Assessment ('TA') had been considered in drawing the above conclusions and a detailed analysis of the following issues was highlighted:-

Traffic Distribution and Analysis

Model Split and Distribution: concern was expressed that the TA did not define a proposed catchment area for the school and stated that without that the assumptions on traffic distribution were vague and that this had serious implications for the traffic modelling. Further information was requested on the assumptions made in the assessment to allow a detailed review of the analysis in the TA to be undertaken as it appeared to imply that pupils would not be sourced from north of the river which was considered to be implausible. Concern was also expressed at the reliance in the analysis of modal split on Department for Education / National Statistics school census information from 2011 which, given its age, could be unreliable. It was noted that it had been assumed that 19% of pupils would arrive by car; but data from the DfT indicates that the further a pupil lives from a school the greater chance they will use a private car, as detailed in the figure below.



This information shows why the need to clarify the catchment area is important as it shows that as a distance a pupil lives from school increases, the greater the likelihood they will travel by car. The details of the catchment were therefore requested along with the modal split calculated by the distance from the site. In addition, full details of how the calculations have been undertaken were requested. Evidence to justify the assumptions made in relation to staff travel was also requested.

- Baseline Surveys: it was noted that baseline surveys were undertaken on Tuesday 30 November 2021. Since April 2020, the DfT has provided datasets to assist in identifying if surveys undertaken during the Covid pandemic were likely to be representative of pre-pandemic flows. Comparison of these datasets against the baseline surveys for the site have confirmed that the data is considered to be representative of baseline conditions. Traffic modelling has been undertaken of three junctions:-
 - Cow Lane / Portman Road / Beresford Road;
 - Rivermead Leisure Centre / Richfield Avenue;
 - Caversham Road / Caversham Bridge / Richfield Avenue.

It was confirmed that the applicant had also been asked to model Caversham Bridge / St Peters Hill / Prospect Street traffic signals during pre-application discussions but this had been omitted and should be undertaken. Concern was also expressed that the modelling runs had been undertaken assuming the school opening hours would be 9:30 to 15:30; but no other school within Reading operates these times. Further justification of the proposed school day was requested; and if it is proposed to be 09:30 to 15:30 a Section 106 agreement will have to be agreed which states the school day (tutor sessions, assemblies, classes) will not commence earlier than 09:30. Notwithstanding this further analysis is required of the implications of issues such as before school and after school activities. It was noted that the distribution figures indicated that parents would be dropping off within the school car park, even though no on site drop off area is identified provided. If it is envisaged that parents would instead utilise the 30 minute drop off within the adjacent Rivermead Leisure Centre it is noted that the assessment does not identify any vehicles associated with the school entering or leaving the leisure centre drop off areas. Information on drop offs is therefore required. Additional monitoring is finally required for the Caversham Road / Richfield Avenue roundabout which does not appear to be showing representative results. Site observations on this roundabout taken during peak periods in the morning and afternoon between 15:00 and 17:00 do not show the roundabout operating within the conditions identified in the TA. An examination of the geometry of all junctions should also be provided (including plans).

Sustainable Transport Provision

• It was noted that the Institute of Highways and Transportation (IHT) has prepared several guidance documents that provide advice with respect to the provision of sustainable travel in conjunction with new developments. Within these documents it is suggested that: most people will walk to a destination that is

less than one mile; the bicycle is a potential mode of transport for all journeys under five miles; and walking distances to bus stops should not exceed 400 metres, with people being prepared to walk twice as far to rail stations. The nearest bus stops served by regular bus services are on the Caversham Road, 750 metres from the entrance to the school and along the Oxford Road, 1,200 metres from the school entrance, which are in excess of the bus walking distances recommended by the IHT. Given these distances the pedestrian routes will need to be safe for pedestrians and the footways along Richfield Avenue do not meet the latest requirements, with regards pedestrian safety. The footways at the various access points and junctions are poorly laid out with no tactile paving or drop kerbs provided as shown in the photographs below.



Due to the significant increase in pedestrians it is identified that these footways should be significantly improved and comply with the latest requirements for cycleways detailed within LTN 1/20 Cycle Infrastructure Design. The proposed formal Tiger Crossing over Richfield Avenue was identified to be in the wrong location and it was stated that this should be provided as close as possible to the school pedestrian access to benefit pedestrians walking from both directions. It was also noted that the assessment shows 27% of pupils (405) will travel to the school by bus, which equates to five full buses. The existing bus services along Caversham Road and Oxford Road are approaching capacity at peak times and therefore analysis of bus capacity is required to determine if this increase in bus patronage can be accommodated. The access road will pass along Cow Lane which is a Public Footway 17 on the definitive map. The proposals provided no details of how this footway will be re provided following the construction of the access road and how pedestrian safety will be maintained.

Car Parking and Drop Off

 Clarification is requested on pupil drop off. The submitted plans show School Keep Markings across the site entrance which is the incorrect use of the marking as detailed within paragraph 13.28 of Chapter 3 of the Traffic Signs Manual. A Traffic Regulation Order will be required on Richfield Avenue to prevent loading between 8am and 10am and 3pm and 6pm to ensure that issues of congestion and delays do not arise associated with waiting parents dropping off or collecting children. Further calculation of staff parking needs are required and justification for the number provided as the scheme currently includes 82 parking spaces for 156 staff.

Servicing and Swept Analysis

• The swept path analysis provided within the TA was not complete as it did not include the access road. The analysis was requested ensuring that consideration is given to refuse vehicles (where these need to access the car park), HGVs accessing the Garden Centre and a full 56 seater coach. Vehicles need to be shown entering and egressing from Richfield Avenue. Deliveries to the Garden Centre need to be clarified: no accessways or delivery areas have been shown, it is considered detrimental to safety to have articulated vehicles passing through a school car park and across the main pedestrian access; and no mitigation measures have been detailed to show how pedestrians will have priority over goods vehicles.-

The following is a summary of comments issued on 25 April 2022:-

4.7 Following the provision of additional information on 20 March 2022 by the applicant additional comments were provided by RBC Development Control Transport. The additional information covered Traffic and Distribution, Sustainable Transport Provision, Car Parking and Drop off, Servicing Provision and pedestrian and cycle infrastructure review. The following additional comments were provided:-

Traffic and Distribution

 The revised modelling had not been provided but the proposed pupil catchment area and mode share, junction geometry and proposed modal share and proposed distribution of staff was accepted provided that the potential for staff to live within other suburbs of Reading was included in the analysis.

Sustainable Transport Provision

• The proposed Tiger Crossing has been repositioned as close as possible to the entrance to the school as previously requested. The crossing should be provided under a Section 278 agreement, which should include the provision of Stage 2,3 and 4 Safety Audits. Bus Capacity Assessment was still to be received. A detailed analysis of the pedestrian / cycleway within the area has been undertaken within the second Technical Note submitted. It was not accepted that the conclusions regarding

provision along Portman Road, Cow Lane and Beresford Road from the west (where 65% of the pupils will travel from) is acceptable. It is considered that the footway / cycleway should be widened to ensure it is 3 metres to the new Tiger Crossing by the school main entrance (extending the existing 3 metre width at Cow Lane). A similar conclusion is reached in relation to the provision from Caversham Road to the school as the proposals will result in a significant increase in pedestrian and cyclists. The shared cycleway on the south side of Richfield Avenue should be widened from Caversham Road to the new Tiger Crossing. Both requests are to ensure compliance with standards.

Swept Path Analysis

• The revised swept path analysis is acceptable, although a coach is still required to cross the land to the south which is currently used to store construction vehicles. It is assumed that this use will cease when the school is operational and, if not, then a \$106 obligation should be entered to ensure a clear route through this part of the site is maintained at all times. Concern remains regarding deliveries to the Garden Centre that will need to be through the school car park (even if these avoid school peak periods there are no guarantees). Therefore if no alternative route is available, deliveries to the Garden Centre should not occur between the hours of 8am and 4.30pm on days the school is operational.

Summary and Conclusions

- The original holding objection is maintained until revised traffic modelling and bus capacity assessments have been submitted and approved. However and following the information submitted the following \$106 / \$278 Heads of Terms were confirmed:-
 - To design and construct the Tiger Crossing as detailed on the submitted drawings and in accordance with the requirements of the Highway Authority, including the submission of Stage 2,3 and 4 Road Safety Audits.
 - To design and construct the Site Access including the provision of a new footway along the western side of the carriageway as detailed on the submitted drawings in accordance with the requirements of the Highway Authority, including the submission of Stage 2,3 and 4 Road Safety Audits.
 - Widening the existing footway / cycleway on the south side of Richfield Avenue to 3 metres from Cardiff Road to Caversham Road. Drawings to be submitted and approved before construction commences on site.

- An access route should be maintained for large vehicles egressing the land to the south of the proposed car park at all times.
- An obligation to prevent deliveries to the Garden Centre occurring between the hours of 08:00 to 16:30 on all days the school is open.

The following is a summary of comments issued on 18 May 2022:-

- 4.8 Additional traffic junction modelling was issued by the applicant on 10 May 2022 providing analysis of three junctions between 08:00 and 10:00 and 15:00 and 17:00:-
 - Beresford Road / Portman Road / Cow Lane, Mini Roundabout.
 - Richfield Avenue / Caversham Road Roundabout.
 - Bridge Street / Church Street / Church Road signalised junction.
- 4.9 The modelling was completed using the 'Junctions 10' modelling which expressed the relationship between traffic flow and capacity of priority controlled junctions as a ratio (the 'Ratio of Flow to Capacity'). The program predicts the anticipated queue lengths and delays that are likely to occur at the junction. It also includes a further performance measurement which correlates the length of the delay experienced by arriving vehicles to a scale that is referred to as the 'Level of Service' which gives a measure between 'Free Flow' where vehicles have complete freedom to manoeuvre and 'Forced or Breakdown Flow' which is the point at which demand exceeds capacity.
- 4.10 The review of the additional information provided has been considered as follows:-

Trip Distribution

Before the modelling was undertaken the distribution of trips had been agreed based on the likely catchment area of school for pupils and travel to work census data for staff. The peak period increase in traffic flows generated by the school on the network are summarised in the table 1 below, noting the schools opening hours are proposed to be 09.30 to 15.30 and therefore the total flows cover the full 120 minute periods. The flows are based on baseline surveys obtained in autumn 2021 and assume that the school is expected to reach capacity in Given the close proximity of the Caversham Road / 2028. Richfield Avenue roundabout with the Church Street / Bridge Street / Church Road signals, both junctions have been modelled together; this is because the junctions are interlinked with queues from the signalised junction affecting the capacity of the roundabout

Link	Morning Peak (08.00 to 10.00)	Afternoon Peak (15.00-17.00)
Portman Road (Eastbound)	64	41
Portman Road (Westbound)	41	64
Beresford Road (Northbound)	93	77
Beresford Road (Southbound)	77	93
Cow Lane (Northbound)	157	119
Cow Lane (Southbound)	119	157
Richfield Avenue (Caversham	61	101
Road to Rivermead Roundabout)		
(Eastbound)		
Richfield Avenue (Caversham	101	61
Road to Rivermead Roundabout)		
(Westbound)		
Caversham Bridge (Northbound)	61	73
Caversham Bridge (Southbound)	73	61
Caversham Road (Southbound)	0	28
Caversham Road (Northbound0	28	0

 The results for each junction are provided in Annex 2 of this report for completeness and the conclusions can be summarised as follows:-

Beresford Road / Portman Road / Cow Lane, Mini Roundabout:-

- AM Peak: even with development between 8am and 9am the implications are minimal but between 09:00 and 09:45 the extra vehicle movements generated by the parent drop off results show all arms being significantly over capacity. The greatest impact is on Beresford Road which exceeds capacity between 09:00 and 09:30, while Portman Road has unstable flow or exceeds capacity for a significant greater proportion of the morning peak period.
- PM Peak: vehicles departing the site have the greatest impact on the Cow Lane and Beresford Road approaches, but capacity is exceeding in all scenarios. While the vehicle trips from the school slightly exacerbate the situation, the junction is over capacity. For both the peak periods, it may be possible to add an extra lane approach on the Beresford Road and Cow Lane approaches as occurs on the Portman Road approach to separate the two turning flows. However, the cost of the works will have to take into consideration any implications with regards the viability of the School.

Richfield Avenue / Caversham Road Roundabout:-

- AM and PM Peaks: the Caversham Bridge and Caversham Road arms of the roundabout are at capacity in all scenarios. The queue lengths for the later years scenarios do not represent the queue lengths actually to be expected, as once a junction has passed theoretical capacity the model starts to behave erratically and queue lengths grow exponentially even through

the predicted traffic does not. Queues on Caversham Road are a result of queues backing back over the bridge from the Church Street / Bridge Street traffic signals and the increase of right turners from the Caversham Bridge into Richfield Avenue. As the junction is already at theoretical capacity the additional vehicular movements are unlikely to result in a severe impact and are within the daily fluctuations one would expect to see on a congested network.

Bridge Street / Church Street / Church Road

- AM Peak: the Bridge Street arm of the junction is at theoretical capacity in all scenarios during the AM peak. The Church Road and Church Street arms remain under theoretical capacity for a significant proportion of the AM peak, only reaching capacity after the normal peak period of 8am to 9am between 9.15am and 9.45am, which coincides with the school opening time.
- PM Peak: the junction is already at capacity in the afternoon period and as with the roundabout at Caversham Road / Richfield Avenue, the queue lengths for the later years scenarios do not represent the queue lengths actually to be expected, as once a junction has passed theoretical capacity the model starts to behave erratically and queue lengths grow exponentially even through the predicted traffic does not.
- The response also comments on the model used noting that the Junctions 10 modelling cannot pick up the implications of pass by and linked trips which are likely to occur given not all vehicle trips will be primary trips. Linked trips are where a journey was already on the network but diverts to pass by another destination, which is a common occurrence with schools where a parent may be on the way to their place of employment. Similarly, a pass by trip is where a vehicle would be travelling by the destination anyway and therefore if the vehicle stops at the school, it is not a new vehicle trip on the network. Therefore, the modelling undertaken is very much a worse case scenario.
- It is noted that given the limitations of Junctions 10, to replicate queues on the network a Vissim model would be required of the local network, including Vastern Road and Reading Bridges. While this would represent queues more realistically, it will also show that the existing network is and will be approaching capacity in all scenarios. While the school will result in an increase in vehicle movements, this has to be taken into context with the expected increase in background vehicle growth which the DfT TEMPRO program expects will likely occur. Therefore, in isolation, the vehicle movements generated by the school is unlikely to have a severe impact on the network.

Sustainable Travel

- The response reconfirms that it is imperative that cycle improvements are undertaken to ensure the infrastructure can accommodate the predicted pedestrian and cyclists movements to the school and ensure trips transfer from vehicular to active travel modes, to lessen the impact on the highway network.
- The information submitted by the applicant in May 2022 included a detailed analysis of the implications of the predicted 324 pupils who will travel to site by bus, utilising the latest pre pandemic bus patronage surveys. The bus surveys count the number of passengers heading into the town centre in the morning peak between 07:30 and 09:00 and therefore, which is when the majority of pupils will be on a bus, given the nearest bus stops on the Oxford Road are one kilometre away and Caversham Road 650 metres away. The assumptions and analysis are robust and will result in 214 passengers on the Oxford Road corridor services resulting in there still being circa 10% of seated capacity remaining and 110 passengers on services from Caversham resulting in there still being circa 20% of seated capacity remaining. It is therefore concluded that the additional patronage on services will not have a severe impact on their operation.
- 4.11 *Planning Officer note:* the applicant has provided the key information requested in the original February 2022 holding objection response. The limitations of the modelling software used to analyse nearby junctions has been noted but the use of more comprehensive software would not result in a different conclusion to that reached. Some additional information is required in the form of HGV access for deliveries across the car park and detailed design of the Tiger Crossing will be required and these can be secured via planning conditions and the s106 agreement. The holding objection has therefore been lifted subject to the satisfactory discharge of conditions and obligations as noted.

Reading Borough Natural Environment

4.12 The Arborcultural Impact Assessment dated 6 March 2021 from SJ Stephens submitted with the application was rejected for being out of date. An up to date assessment and landscaping plan was requested.

Trees

4.13 With reference to the revised Arboricultural Impact Assessment dated 10 May 2022 from SJ Stephens Associates, I can confirm that this satisfactorily responds to the points in my memo of 9 May and demonstrates that development is acceptable subject to securing an arboricultural method statement via condition L7.

4.14 I note, in relation to the trees immediately adjacent to the northern boundary line that the intention is to cut back as necessary - this is reiterated on the Landscape GA plan. I hope that this will not detrimentally impact the health or appearance of the trees - they are conifers so excessive cutting back will not look great.

Landscaping

- 4.15 With reference to the submitted landscaping plans and schedules, in terms of fencing, I note that FS0949-ALA-XX-ZZ-DR-L-0007 Fencing General Arrangement Plan-S2-P07 includes a 2.4m weld mesh fencing around the perimeter. No mammal gaps are provided and would seem appropriate, albeit I'll leave GS Ecology to confirm. As no new fencing plan has been provided, I assume either GS Ecology are happy or they haven't commented.
- 4.16 There is a lack of clarity over the removal of some trees, those being T30, T30a & T30b. These are shown to be retained on the AIA with some surrounding/adjacent trees to be removed. However, the Landscape General Arrangement Plan appears to show the removal of T30a & T30b. I will assume this is just a plan 'typo' as they are shown to be retained on the Illustrative Landscape Masterplan.
- 4.17 I previously questioned whether trees could be included at the north end of the field in the north-west or north-east corner these have not been included and with no explanation. One or the other would be welcome.
- 4.18 With reference to the Planting plan and schedule, I note the inclusion on one evergreen species (Pinus sylvestris), which is positive along with either native or wildlife friendly species as required. I previously mentioned that new tree planting should meet the diversity aim of 30:20:10 ratio (Family:genus:species). The current planting schedule does not meet this, specifically at species level. However, final landscaping can be secured to consider this address other matters within this memo.
- 4.19 The majority of trees are ultimately large (some wider spreading than others) so in that respect is positive. However, I would question the feasibility of some of the trees shown given the ultimate size making their long-term retention unlikely in such proximity to the building, e.g. the proposed Liriodendron on the west elevation of the Sports hall & northern elevation of the main building and the Carpinus on the east elevation of the main building. Tree planting locations should use the 'right tree in the right place' principle to allow sufficient space for the tree to grown to its full potential. This will need to be considered in the final landscape plans. I would also welcome reasoning as to why new trees have not been proposed on the south side of the staff car park where existing trees are to be removed.

4.20 The information submitted thus far shows that sufficient landscaping, including tree planting, could be accommodated and the final details will have to be secured via condition. In conclusion the development is acceptable subject to conditions L2 (landscape etc), L3 (boundary treatment), L4 (Landscape management plan) and L7 (Arb Method Statement).

Reading Borough Ecology

4.21 Habitat:

Habitats comprise buildings, bare ground and hardstanding with small areas of tall ruderal vegetation, earth banks, hedgerows and scattered trees. These habitats are not priority habitats and will not be a constraint to the proposals.

4.22 The watercourse:

A ditch runs east to west within the site and then north up the western boundary of the site boundary. The report states that: "The ditch / watercourse through the site has the potential to offer some higher ecological value as small watercourses are often functional parts of ecological networks, and as habitats in their own right. There is some risk that construction activity could adversely affect this ditch. No plans have been developed for the proposed school layout; however, the ditch crosses the site and there is a risk that this would need to be diverted or culverted, which would represent a negative impact to biodiversity".

- 4.23 It is not proposed to culvert the ditch but pollution control measures will need to put in place to avoid material entering the watercourse both during and after construction. This should be included in the Construction Environmental Management Plan for Biodiversity (CEMP: Biodiversity) which should be secured via a planning condition. The watercourse is polluted, overgrown by trees and shrubs and full of rubbish. It used to contain Japanese knotweed but there is no mention of this in the ecology report. The development provides an opportunity to enhance this ditch, by creating a more varied channel, desilting and reprofiling, and removing rubbish and dense vegetation. It is recommended that a condition is set to ensure that the ditch is enhanced in line with policy EN11.
- 4.24 Policy EN11 also reads "Where development in the vicinity of watercourses is acceptable, it will:- [...] Be set at least ten metres back from the watercourse wherever practicable and appropriate to protect its biodiversity significance;" The access road along the east of the site and the car park to the south of the ditch appear to be closer than 10m to the top of the ditch and this element of the scheme does not appear to comply with policy EN11.

4.25 Roosting Bats

The trees and the building (an open structure comprising brick and timber with an unlined corrugated metal roof) are considered

unsuitable for use by roosting bats, and no bats or signs of bats were observed during the survey. As such, the risk of the proposals adversely affecting bats is considered to be minimal.

4.26 Lighting

Paragraph 185 of the NPPF states that planning decisions should limit the impact of light pollution from artificial light on nature conservation. Lighting can have an adverse impact on wildlife and excessive lighting can adversely affect species groups such as bats and birds. It is also one of the reasons for a significant reduction in invertebrate numbers. The stream wildlife corridor within the site and to the west of the site (alongside Cow Lane) are likely to be used by foraging and commuting bats and other nocturnal wildlife. As such, lighting in and around these areas should be kept to a minimum. The Proposed External Lighting and Security Philosophy Layout (CPWP, ref FS0949-CPW-ZZ-XX-DR-E-6300) shows the lighting levels averaging 10 lux (twilight is 1 lux). These levels need to be reduced (or modified via use of cowls and hoods) so that light does not spill onto these wildlife corridors. A condition to achieve this should be set.

4.27 Ecological impacts during construction

In the absence of mitigation the proposals could affect the following species and habitat: • Nesting birds in trees, buildings and scrubby areas. • Watercourse to the south and west of the site - • Badgers (there is a sett nearby) • Other terrestrial foraging animals e.g. foxes and hedgehogs • Small numbers of common species of reptiles and amphibians (such as common frog and slow worm). These should be included in a CEMP: Biodiversity secured via planning condition.

4.28 Biodiversity enhancements

It is a pity that no significant enhancements, such as a green roof, are proposed. However, should the application be approved it is recommended that a condition be set to ensure that a wildlife friendly landscaping scheme is implemented and that ecological enhancements are provided. Wording is given below. Conditions Should planning permission be granted it is recommended that the conditions below are set.

Reading Borough Environmental Protection

Noise generation

- 4.29 Comments received noted that in terms of noise generating development that the noise assessment submitted with the application proposes noise limits for any plant to be installed. The limits proposed are acceptable. Once the plant has been selected then a further assessment should be submitted to demonstrate that the limits are met.
- 4.30 In addition, a noise assessment will be required for the MUGA, and other outdoor playing fields to ensure that there will not be an

unacceptable impact on amenity due to noise from these uses. Ideally this should be submitted prior to approval to ensure that the layout and any mitigation required regarding noise from the MUGA etc. are taken into account in the plans. Conditions were recommended.

Kitchen Extraction - odour

4.31 In addition to concerns about noise (as discussed above), cooking odour is often a significant problem in commercial kitchens and therefore the applicants must provide an assessment of the likelihood of odours based on the proposed cuisine and a statement of how the proposals will ensure that odour nuisance will be prevented. Reference must be made to the EMAQ guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems (Sept 2018) or the (withdrawn) DEFRA version (Jan 2005).

Air Quality - Increased exposure

- 4.32 The proposed development is located within an air quality management area that we have identified with monitoring as being a pollution hot-spot (may breach the EU limit value for NO2) and introduces new exposure / receptors. An assessment and/or mitigation measures should be provided as part of the application.
- 4.33 The initial assessment submitted showed that air pollution monitoring has been installed to assess the exposure of the school attendees to potentially poor air quality. A further assessment was required to be submitted as a condition confirming the results and any mitigation required.

Air Quality - Increased emissions

- 4.34 Reading has declared a significant area of the borough as an Air Quality Management Area (AQMA) for the exceedence of both the hourly and annual mean objectives for nitrogen dioxide. In addition to this, recent epidemiologic studies have shown that there is no safe level for the exposure to particulate matter (PM2.5 and PM10).
- 4.35 The proposed development is located within or adjacent to an air quality management area and has the potential to increase emissions. An assessment should be provided as part of the application.
- 4.36 Where any increase in emissions is identified a mitigation scheme must be submitted. The mitigation scheme must quantify the emissions saving that it will bring about, in order to prove that the detrimental effect of the development can be offset.

4.37 Mitigation against increased emissions:

- Provision of cycling facilities / residents cycles
- Parking consider reducing number of parking spaces, graduated permit schemes based on euro standards, allocated parking for car clubs / low emission vehicles

- Provision of electric charging bays or low emission fuelling points
- Development / promotion of car clubs
- Improvements to local public transport
- Travel Plans a travel plan is a set of measures aimed at reducing single occupancy car use, it is important that the effectiveness of the plan is considered
- Mitigation through design, improved air flow around development, alternative plant
- 4.38 It may be appropriate in some circumstances for the developer to fund mitigating measures elsewhere to offset any increase in local pollutant emissions as a consequence of the proposed development. This may be achieved through the use of a s.106 agreement, which may in some circumstances involve the direct funding of a specific scheme or measure or be in the form of a contribution to the costs of the monitoring network and / or air quality action plan.
- 4.39 Reading Borough Council's Air Quality Policy EN15 requires that developments have regard to the need to improve air quality and reduce the effects of poor air quality through design, mitigation and where required planning obligations to be used to help improve local air quality.
- 4.40 Until an assessment and mitigation plan has been submitted and approved by the Environmental Protection Team it is impossible to determine whether the proposed development is appropriate for the proposed location, therefore until the above has been received I would recommend refusal on air quality grounds. (see para 4.57 below).

Contaminated Land

- 4.41 The development lies on the site of an historic landfill which has the potential to have caused contaminated land. The proposal may introduce new pollutant linkages between contaminated land and sensitive receptors at the site.
- 4.42 The developer is responsible for ensuring that development is safe and suitable for use for the intended purpose or can be made so by remedial action.
- 4.43 A contaminated land assessment and remediation plan have been submitted to give an indication as to the likely risks and to determine whether the site although further work is required as the precise remediation measures are yet to be determined for each element of the development. The general approach sounds acceptable.
- 4.44 Only an initial ground gas risk assessment has been submitted so far, with further monitoring and a detailed remediation strategy proposed to be carried out.

4.45 See recommended conditions below, these are required to ensure that future occupants are not put at undue risk from contamination.

Light

- 4.46 I have concerns about any proposed flood-lighting of the MUGA and other sports pitches resulting in loss of amenity to nearby residents. Insufficient information has been provided in order for me to assess whether the proposed lighting scheme is likely to adversely impact on nearby residents.
- 4.47 More details should be submitted by way of a condition. This information should include a layout plan with beam orientation and a schedule of equipment in the design (luminaire type; mounting height; aiming angles and luminaire profiles) and an isolux contour map to show light spill levels (down to 2 lux if operating between 23:00 and 07:00, or down to 10 lux if operating only between 07:00 and 23:00). The plans should neighbouring buildings so that the predicted impact on them can be assessed. The applicants should demonstrate that light levels will not exceed the relevant guidance lux levels specified in the table below. Information should also show how glare will be controlled.

Environmental Zone - Brightness	Light trespass (into windows) Ev [Lux]	
	Pre-curfew	Post-curfew
	(before 23:00hrs)	(after 23:00hrs)
E3 - Suburban	10	2
E4 - Urban	25	5

Institute of Lighting Professionals: Guidance Notes for the Reduction of Obtrusive Light GN01:2011

Construction and demolition phases

4.48 The measures within the proposed CMS are largely acceptable however there are a few items that also need to be covered, these could be added to the existing CMS prior to approval.

Bin storage - rats

4.49 There is a widespread problem in Reading with rats as the rats are being encouraged by poor waste storage which provides them with a food source. Where developments involve large bin storage areas there is a greater risk of rats being able to access the waste due to holes being chewed in the base of the large wheelie bins or due to occupants or passers not putting waste inside bins, or bins being overfilled. It is therefore important for the bin store to be vermin proof to prevent rats accessing the waste. A condition is recommended.

Further information provided

4.50 The following is a summary of comments issued on 2 March 2022 following the submission by the applicant of an updated Construction Environmental Management Plan and Air Quality Monitoring.

- 4.51 It was confirmed that the documents are acceptable and would no longer be recommending conditions requiring an air quality exposure assessment, nor CMS requirements for white noise and pest control. For clarity, an air quality assessment of the impact ON air quality will still be required.
- 4.52 The following is a summary of comments issued on 5 May 2022 following the submission by the application of further information on the remediation strategy and associated documents;
 - No further queries on remediation strategy. Some minor concerns about the maintenance plan but these can be dealt with once the long term maintenance plan has been drafted and submitted. It is agreed that a condition is needed to secure a long term maintenance plan (in addition to the validation report).
- 4.53 **Planning Officer Note:** No further outstanding issues that cannot be addressed through planning conditions and these have been identified in the recommended list.

Reading Design Review Panel Comments

- 4.54 The model plan achieves an improved road elevation but creates two northern facing courtyards. The design seems to have resulted in less sunlight on the spaces created north of the school buildings.
- 4.55 The location of the buildings in the southern area of the site with drained playing fields in the northern areas seemed appropriate given the flood risk associated with the site. There should be no risk to children using the playing fields from contamination under the site associated with previous land infill that occupied this area.
- 4.56 To accommodate flood risk the building has been set on elevated ground beams allowing flood waters to occupy the space below the ground floor concrete slab. Details on how rabbits, foxes, stagnant water can be prevented from being left in the space should be provided.
- 4.57 It is not clear how taller spaces within the buildings can be created using a prefabricated system without using steel members. It is not clear how the precast concrete floor was supported.
- 4.58 The choice of external cladding materials and their muted colours could have been examined further with perhaps a more colourful treatment the result.
- 4.59 The presentation had many high quality images but there was no elevation of view from the River Thames and beyond to the north which might have a significant aspect of the impact of the building in the wider setting.

- 4.60 It achieves a Very Good BREEAM rating which was disappointing given the technology of the proposed system of prefabricated material being used.
- 4.61 The external planting and landscaping did not achieve much more than providing a decorative setting for the building and alternative methods of rainwater disposal (syphonic internal system) into swales and water retaining areas was not explored, to generate more diverse habitats. This proposal should offer a biodiversity net gain and we encourage the applicant to consider the use of the Biodiversity Planning Toolkit.
- 4.62 It was disappointing to hear that the heating will be by gas boilers rather than heat pumps (although they can be installed at a later time apparently) from the first moment. The interior spaces were provided with sophisticated control systems and low energy fittings and design approach which is not seen on the exterior appearance.
- 4.63 There was little external manifestation of alternative energy strategies, such as solar and wind, which is again disappointing. The elevations were understated and might be improved with greater variation, modelling and coloured materials.
- 4.64 The travel infrastructure needs further thought thereby avoiding/reducing congestion on the southern Riverfield Avenue and its wider connections to Reading. Is the inclusion of 120 cycle spaces ambitious enough?
- 4.65 Does the access to the building provide enough opportunities for groups outside the school community?
- 4.66 Although the sports facilities to the east are separately accessible from the front entrance courtyard there is no separate/alternative provision for the arts and performance areas to the west, can this be improved?
- 4.67 **Planning Officer note**: further information has been provided by the applicant in response to comments covering colours, materials and the void under the building. Matters are capable of being addressed through planning conditions and these have been identified in the recommended list.

Reading UK CIC

4.68 Reading UK CIC, which acts as the Economic Development Company for Reading, advise that under the Council's Employment Skills and Training SPD the applicant is required to commit to a local Employment and Skills Plan (ESP), or financial contribution for employment and training projects in the borough. Whether this is a formal plan or a financial contribution, it shall be secured via unilateral undertaking/legal agreement. This is in respect of the

- construction phase only, owing to the nature of the proposed scheme (education provision).
- 4.69 *Planning Officer note*: addressed through the proposed s106 Agreement.

Reading Borough LLFA

The following is a summary of comments issued on 17 May 2022

- 4.70 Clarification is required on the greenfield run off rate assumed within the flood risk assessment which appears inconsistent. The run off also does not include the run off rate associated with areas of retained greenfield and the filter drains to the east of the site and the north of the ditch which are not connected to the wider drainage network. The application does not appear to comply with DEFRA standards. Further information is also required on the drainage system that relates to the car park and the sports pitch.
- 4.71 **Planning Officer note:** additional information was provided for review on 19 May 2022 which responds to all queries raised. The information has been confirmed to be satisfactory and relevant conditions recommended.

Reading Borough Leisure

4.72 No comments provided. To be reported in an update if comments are received ahead of committee.

Reading Borough Waste

4.73 No comments provided. To be reported in an update if comments are received ahead of committee.

Reading Borough Education

4.74 No comments provided. To be reported in an update if comments are received ahead of committee.

Reading Borough Emergency Planner

4.75 No comments provided. To be reported in an update if comments are received ahead of committee.

Reading Borough Sustainable Development

4.76 No comments provided. To be reported in an update if comments are received ahead of committee.

Public/ local consultation and comments received

- 4.77 Letters were sent to residents and businesses (a total of 210) along and to the south of Richfield Avenue and along the Warren to the north of the Thames. Site Notices were displayed along Richfield Avenue and Thameside Promenade from 8 January 2022. A Press Notice was also published.
- 4.78 **Planning Officer note**: A summary of the representations (2 with objections, one in support and one observation) received is provided below:
 - Impact on traffic
 - Health and safety concerns of pupils so close to the river
 - Pressure on businesses in the local area
 - Carbon footprint
 - Landscaping and views
 - Ensuring community access to sports facilities is formally secured

Caversham and District Residents Association

It is very disappointing that a development of this scale, providing 4.79 education for our young people, pays so little attention to the opportunities to reduce its carbon footprint and meet the needs of the climate emergency. There seems no reference to energy measures of any kind. The transport plan should be far more ambitious to avoid congestion, pollution and impact on climate change. 120 cycles spaces for 1500 pupils is grossly inadequate. Safe cycle routes from the North, South and West to reach Richfield Avenue should be considered. There is no reference to discussion with Reading Buses and potential provision of a bus stop nearer the school. The landscape appraisal gives inadequate representation of the impact on views towards the school, including from St Peters Conservation Area. Tree planting to screen the school is insufficient and should be increased to soften the views of the school. Community access to sports facilities is welcome but should be formally secured.

Maiden Erlegh Trust

4.80 Support for a much-needed new secondary school to serve the north and west of Reading. The Trust's application to establish this new school was submitted in association with Reading Borough Council and supported by a basic need business case that recognises the shortage of secondary school places in the Borough. School Place Planning data indicates that the Borough will be short of 12 forms of entry (360 places) by 2025 and this is based upon the numbers of current primary school age children occupying places in the Borough's primary schools. The proposed school will be an 8 form entry intake (240 places) as it is assumed that some primary school children will

move to the Independent sector as they transition to secondary school, and parental choice will mean some children will access school places outside of Reading Borough. The data indicates that an 8 form entry intake will ensure sufficiency of secondary school places within the Borough over the place planning period. When considering the proposed location of the new school, the Local Authority conducted significant due diligence on a number of locations, and the Rivermead site was deemed optimal and proposed to the Department for Education. The Department for Education has conducted further significant due diligence of the proposed site and deem this location appropriate for the establishment of what will become River Academy. The proposed site is not without its logistical challenges, but considerable efforts have gone into collaboratively finding solutions to these issues. As a result, Maiden Erlegh Trust wholeheartedly support the need for this new school in Reading Borough, and lend its support for this planning application.

Caversham Globe

It is disappointing that the proposed development appears to do the 4.81 bare minimum to meet current environmental criteria. It is hoped that the architects would review the proposal and add a green roof particularly considering its proximity to the river. If there is not a green roof then solar panels on the roof would be a suitable addition. The landscaping also appears to be disappointing. There should be more trees to screen the buildings. As part of previous planning permission for this location it was agreed that there should be hedging around the outside of the fencing of the driving range. This hedging provides natural habitat for a significant amount of wildlife in this location (birds and rabbits in particular). The hedgerow also provides a natural sound barrier for residents. As such the hedgerow on the outside perimeter of the fencing must be maintained and the few gaps in the hedgerow should be planted with similar hedging. It is also disappointing that the number of cycle spaces appear to be so limited. 120 bike spaces for 1500+ pupils does not appear to be anywhere near enough if pupils are to be encouraged to cycle to school to help meet RBC's climate change plans. (For reference 75% of Dutch children cycle to school which would suggest up to 1,125 bike spaces could be required in the future.) It is also concerning that the proposed site sits within a flood zone. It would appear obvious that to reduce risk of flooding floodplains should not be developed upon. In particular grass should not be replaced with tarmac in such locations. The shortage of potential sites in Reading for such a school is understood. Thus, if this land is to be developed upon then this proposal should do the maximum possible in terms of environmental mitigation given the location of the site, rather than the minimum.

Unit 5 Richfield Place 12 Richfield Avenue

4.82 This is already a busy route in the morning and adding more traffic is going to cause so many more issues. Is it also a good idea to have a school near a river - concern over health and safety of pupils so close to the river and the fact it is so close to a very busy road. Also concern of the pressure it will put on businesses in the local area.

5 RELEVANT PLANNING POLICY AND GUIDANCE

5.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that proposals be determined in accordance with the development plan unless material considerations indicate otherwise. Material considerations include relevant policies in the National Planning Policy Framework (NPPF) (2021) which states at Paragraph 11 "Plans and decisions should apply a presumption in favour of sustainable development". The relevant sections of the NPPF are:-

National Policy

- 5.2 National Planning Policy Framework (NPPF):-
 - Section 2 Achieving Sustainable Development
 - Section 6 Building a Strong Competitive Economy
 - Section 8 Promoting Healthy and Safe Communities
 - Section 9 Promoting Sustainable Transport
 - Section 11 Making Effective Use of Land
 - Section 12 Achieving Well-Designed Places
 - Section 14 Meeting the Challenge of Climate Change, Flooding and Coastal Change
 - Section 15 Conserving and Enhancing the Natural Environment
 - Section 16 Conserving and Enhancing the Historic Environment

<u>Adopted Reading Borough Local Plan - November 2019</u>

- 5.3 The development plan for this Local Planning Authority is the Reading Borough Local Plan (November 2019). The relevant policies are:
 - CC1: Presumption in Favour of Sustainable Development
 - CC2: Sustainable Design and Construction
 - CC3: Adaptation to Climate Change
 - CC4: Decentralised Energy
 - CC5: Waste Minimisation and Storage
 - CC6: Accessibility and the Intensity of Development
 - CC7: Design and the Public Realm
 - CC8: Safeguarding Amenity
 - CC9: Securing Infrastructure
 - EN1: Protection and Enhancement of the Historic Environment
 - EN2: Areas of Archaeological Significance
 - EN3: Enhancement of Conservation Areas
 - EN4: Locally Important Heritage Assets
 - EN5: Protection of Significant Views with Heritage Interest

EN6: New Development in a Historic Context EN7: Local Green Space and Public Open Space

EN8: Undesignated Open Space EN9: Provision of Open Space EN10: Access to Open Space

EN11: Waterspaces

EN12: Biodiversity and the Green Network

EN13: Major Landscape Features and Areas of Outstanding Natural

Beauty

EN14: Trees, Hedges and Woodland

EN15: Air Quality

EN16: Pollution and Water Resources EN17: Noise Generating Equipment

EN18: Flooding and Drainage

TR1: Achieving the Transport Strategy

TR3: Access, Traffic and Highway-Related Matters

TR4: Cycle Routes and Facilities

TR5: Car and Cycle Parking and Electric Vehicle Charging

OU1: New and Existing Community Facilities

Supplementary Planning Guidance/ Documents

- Employment, Skills and Training (April 2013)
- Sustainable Design and Construction (December 2019)
- Revised Parking Standards and Design (October 2011)
- Planning Obligations Under Section 106 (April 2015)

Other Relevant Documents

Tree Strategy (2020)

6. ENVIRONMENTAL IMPACT ASSESSMENT

- It is considered that the proposal does not fall within Schedule 1 of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as updated¹) (hereafter referred to as the EIA Regulations 2017). However, the proposal falls within the description at paragraph 10(b) of Schedule 2 as an 'urban development project' and exceeds the threshold of the site area being 5 hectares in column 2. Therefore, the Council considers the proposal to be 'Schedule 2 development' within the meaning of the EIA Regulations 2017.
- 6.2 The Council has therefore considered if the proposed development is likely to have significant effects on the environment. In determining such effects, the Council has considered the criteria for screening Schedule 2 development set out in Schedule 3 of the Regulations.

¹ The Town and Country Planning (Environmental Impact Assessment) Regulations 2017; updated by the Town and Country Planning and Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2018 - SI 2018/695

These are the characteristics of the development, its location and the types and characteristics of the potential impact. Based upon the description of the development and the information provided in the applicants screening request (Ref. 212034 received on 16 December 2021) it is concluded that the development, while being Major in size and lying adjacent to the River Thames within the locally designated Thames Valley Major Landscape Feature and near to potential biodiversity sites, would not introduce a significant change to the site appearance or lead to potentially harmful effects on the environment.

- 6.3 On the basis of the above, the Council considers that the development proposed is not development that is likely to have significant effects on the environment by virtue of factors such as its size, nature or location and therefore it is not EIA development and an Environmental Statement is not required.
- A screening request was requested by the applicant on 16 December and the Council's screening opinion was issued on 7 February 2022 to confirm that an Environmental Statement is not required.

7. APPRAISAL

- 7.1 The main matters to be considered are:
 - Principle of development and effect on the Thames Valley
 Major Landscape Area and Local Green Space
 - Design considerations
 - Transport and Parking
 - Landscape and Trees
 - Sustainability
 - Environmental Matters contamination, flood risk, air quality and noise
 - Other Issues raised in consultation
 - Equalities impact

<u>Principle of Development and effect on the Major Landscape Area and Local Green Space</u>

- 7.2 Policy CC1 of the Reading Borough Local Plan requires a positive approach to development proposals that reflect the presumption in favour of sustainable development, which lies at the heart of the National Planning Policy Framework (NPPF).
- 7.3 It goes on to state that "Planning applications that accord with the policies in the development planwill be approved without delay, unless material considerations indicate otherwise....."
- 7.4 A large proportion of the application site is situated within the Rivermead and Thameside Promenade area of Local Green Space

(LGS) (Policy EN7Wp). Policy EN7 offers significant protection to LGS and Public Open Space (POS) noting that proposals that would result in the loss of any of these areas, erode their quality through insensitive adjacent development or jeopardise their use or enjoyment by the public, will not be permitted. As a result of its location, the Rivermead and Thameside Promenade LGS is a valuable area of open space at the heart of Reading used for communities to the north and south of the river. Its use is primarily for informal recreation but also includes more formal resources including those accessing the river for water-based activities as well as the formal uses afforded by the Rivermead Leisure Centre immediately adjacent to the application site.

- 7.5 However, it is important to note that Policy EN7 is specifically worded to protect the unnecessary loss of areas that are accessible to the public and makes an important distinction between areas of unrestricted and restricted public access (e.g. a park V a school playing field). In this regard, the most recent use of the application site as a golf driving range and laser clay shooting range restricted public access for safety reasons.
- 7.6 Effectively, and whilst the site is within the area of LGS, the application site has always functioned as a managed sports facility rather than as any sort of publicly accessible green space or park. The proposed community use of the sports facilities offered by the school will ensure a continuation of this use. Other land outside of the application site and within the Rivermead and Thameside Promenade is currently, and has been historically, accessible and used by members of the public and clearly fulfils its intended LGS designated within the Local Plan.
- 7.7 The Open Space Review that accompanies the application notes that although the proposed school buildings and the MUGA would result in the reduction of 1.1 ha land associated with a defined LGS / Other Sports Facilities open space typology the reduction only represents 6.6% of the total defined LGS / open space typology site area (16.8 ha).
- 7.8 The community use of the school sports facilities outside of school hours is emphasised in the application. The building has been designed so that the eastern side of the building can be closed off securely and used by the community out of hours. This includes all of the sports facilities including the main hall, activity studio and changing rooms, along with the hygiene room and accessible changing.



View of MUGAs and playing fields

- 7.9 Therefore, whilst the proposal will result in the loss of a notable amount of designated LGS and to a certain extent alter the way the public perceive the remaining LGS, the actual loss of this particular part of the LGS is unlikely to fundamentally affect the overall status or way in which the remainder of the Rivermead and Thameside Promenade is enjoyed by members of the public. Plus, the site will remain in managed accessible use for members of the public. It is therefore concluded that the overall intention of Policy EN7 to prevent loss or jeopardise the use of areas of LGS is not compromised by the application proposal.
- 7.10 Consideration has also been given to whether any other policies are more applicable and/or whether any material planning considerations are applicable in accordance with the requirements of Section 38(6) of the Planning and Compulsory Purchase Act 2004 and the NPPF.
- 7.11 Policy OU1 'New and Existing Community Facilities' is clear in its support for new, extended or improved community facilities. This policy is important in that it identifies the Council's parameters in assessing such facilities over the plan period. The policy states that "Where a proposal for a new school meets a clear need, and it would otherwise accord with national and local policy, it will be acceptable on sites identified for residential or other development." Importantly this policy goes onto recognise that the on-site intensification of some facilities (particularly schools) may result in the loss of some open areas.
- 7.12 This policy also acknowledges the competing priorities of meeting educational need within the borough against existing and proposed social and environmental commitments. Any such assessment of a new secondary school on this land would more directly engage the requirements of this policy than Policy EN7. This policy is also set against the presumption in favour of sustainable development and the clear support at national level for authorities like Reading to actively seek to meet the day-to-day needs of their residents.

- 7.13 Turning to the key economic, social and environmental aspects of the presumption in favour of sustainable development, the following issues are relevant:-
 - **Economic** the proposal would contribute to and encourage associated economic activity within Reading through the construction works, ongoing operation and management of the school and new employment opportunities (circa. 156 FTE staff are envisaged to be employed by the school);
 - Social the proposal is a clear response to a Borough wide need for additional school places. Paragraph 94 of the NPPF emphasises the importance of a Local Authority having sufficient choice of school places to meet the needs of existing communities. It goes on to say that, "Local planning authorities should take a proactive, positive and collaborative approach to meeting this requirement and to development that will widen choice in education".
 - In particular LPAs should give 'great weight' to the need to create, expand or alter schools through planning applications. Paragraph 121 of the NPPF supports the needs for LPAs to make more effective use of sites that provide community services such as schools, provided this maintains or improves the quality of service provision and access to open space. The use of the school facilities by the community is also a key enhancement.
 - Environment the land at the former Leaderboard Golf Range is not recognised as currently having any substantial environmental value in terms of biodiversity and the proposals have the potential to enhance this value through a comprehensive landscape strategy, landscape and ecological management as well as sustainability and energy efficiency. This is considered further below.
- 7.14 Overall, it is considered that the above merits associated with the proposal in the planning balance outweigh the small percentage of inaccessible LGS that would be lost and the principle of development is acceptable. As recognised by representations received, it will be important to ensure that the community use operates effectively and this can be secured through appropriate planning conditions.

Design considerations

- 7.15 The NPPF states that "Good Design is a key aspect of sustainable development" (para. 126) and that development that is not good design should be refused, especially where it fails to reflect local design policies and government guidance on design.
- 7.16 Policy CC7 of the Reading Borough Local Plan sets out the importance of high design quality that maintains and enhances the character and appearance of the area of Reading in which it is located.

- 7.17 The application proposals have been considered by the DRP and detailed comments have been provided covering layout, built form, appearance and other environmental aspects of the proposals.
- 7.18 The proposed site is within the Thames Valley designated Major Landscape Feature (MLF under Policy EN13) and as noted above, a large proportion of the site located within the Rivermead and Thameside Promenade area of Local Green Space (Policy EN7Wp).
- 7.19 Policy EN13 states that "Planning permission will not be granted for any development that would detract from the character or appearance of a Major Landscape Feature". The supporting text goes on to state that "the extent to which new development prevents or minimises the visual impact on major landscape features and other landscape values is largely dependent on the location, design and scale of proposals". It also notes that the policy "does not rule out development in or close to these areas, but seeks to ensure that development only takes place where it can preserve or enhance the character or appearance of the feature".
- 7.20 Policy EN7 identifies that proposals will not be permitted that "erode their [Local Green Space's] quality through insensitive adjacent development....".
- 7.21 The submission includes a Design and Access Statement. This sets out how the proposed development has been designed to adhere with the above policies. In particular, it highlights how the proposed school has been purposely located at the southern area of the site aligned with the existing (and to be redeveloped) leisure centre buildings in order to protect the open space character to the north of the site close to the river. In addition, significant landscaping is proposed as well as regular maintenance which in turn will enhance the quality of open space on the site and ensure its appearance is kept up.
- 7.22 The Design and Access Statement also outlines that the form and mass of the building is to a certain degree a result of designing the building to the brief set by the DfE for the school and also responding the key site constraints it is effectively a modern 'functional' design approach. Careful consideration has been given to effective circulation around the building and also the pupil experience of the buildings. Design emphasis has been placed on key features like the entrance and the sports hall and the external appearance and colour palette aims to present an 'aspirational' image.
- 7.23 A Landscape and Visual Assessment also accompanies the application. The Visual Assessment identifies a number of locations of potential significance in the immediate and surrounding area to the proposed school. It highlights that significant vegetation acts to obscure extensive views of the site including from elevated areas north of the river, south of the river in areas like Prospect Park and from

Chazey Wood. Views that do exist are likely only through breaks in vegetation. Overall, these demonstrate that the proposals will not detract from the character or appearance of the Thames Valley Major Landscape Feature, due to the distance of the proposed buildings from important visual receptors, lack of intervisibility due to distance and intervening trees and vegetation.

- 7.24 The proposals described comprise a mainly three storey structure which will not create an overly overbearing visual impact in the surrounding area; it also relates well to the adjacent Rivermead leisure centre. The buildings have been designed with a strong entrance focus point and incorporates design features such as coloured panels to add interest. Conditions have been identified to require samples of the materials to be used to be provided for approval to ensure that these are of high quality prior to their installation.
- 7.25 Landscaping and tree planting within the site is protected and retained where possible. A landscaping and planting strategy has been provided by the applicant and conditions have been identified to ensure that these maximise the potential to enhance the landscape character of the site.
- 7.26 Considering the above, the design of the proposed development is considered to ensure an appropriately functional and appropriate response to the site and the proposed development and avoid adverse impacts on the surrounding area.

Transport and Parking

- 7.27 Policy TR3 (Access, Traffic and Highway-Related Matters) states that in determining proposals involving new or altered access onto the transport network, consideration will be given to the effect on safety, congestion and the environment. Development will only be permitted where:
 - Access and works to the highway comply with the adopted Transport Authority standards
 - The development would not have a material detrimental impact on the transport network
 - The proposals would not be detrimental to the safety of uses of the transport network including pedestrians and cyclists
 - The proposals would not generate regular HGV movements on unsuitable roads.
- 7.28 Proposals which involve a material increase in the use of an existing site access will not be acceptable if they would be likely to result in the encouragement of the use of the network for short local trips or compromise the safe movement and free flow of traffic on the network or the safe use of the road.
- 7.29 Policy TR4: Cycle Routes and Facilities states that developments will

- be expected to make full use of opportunities to improve access for cyclists to, from and within the development and to integrate cycling through the provision of new facilities.
- 7.30 Policy TR4 requires that development does not detrimentally affect an identified cycle route. Where opportunities exist, improvements to that route, including the provision of connecting routes, and/or cycling facilities will be sought within developments or through planning contributions.
- 7.31 Policy TR5: Car and Cycle Parking and Electric Vehicle Charging states that development should provide car parking and cycle parking that is appropriate to the accessibility of locations within the Borough to sustainable transport facilities, particularly public transport and 10 % of the car parking spaces should be provided with electric vehicle charging points.
- 7.32 The closest bus stop to the site is located along Richfield Avenue which is approximately 250m east from the site. This stop is served by the 42, 42a and 60a, F10, F11 and F12. It should be noted that the 42a only runs in the evening and the 60a on Sundays. There are also two other bus stops located further east along Caversham Road approximately 750m from the site. These bus stops serve an additional three routes. The nearest National Rail station to the site is Reading West, located approximately 1km (12- minutes' walk) south of the site.
- 7.33 The site will be accessed from Richfield Avenue by Cow Lane, which in this location is a public footway. A total of 82 car parking spaces are proposed of which six shall be for blue badge holders.
- 7.34 A Transport Assessment and Travel Plan accompany the planning application. A range of issues were raised during the determination of the application in relation to the modelling that formed the basis of the assessment; and therefore the reliability of the outcomes. The assessment has been extensively supplemented and whilst limitations with the modelling technique used by the applicant has been raised, it is concluded that the same conclusion would be reached in terms of the impact on the local highway, pedestrian and cycle network and therefore the conclusions now reached can be relied upon.
- 7.35 Of particular focus has been the assumptions on which the assessment has been based and the applicant has supplied additional information covering the likely catchment area for pupils and staff including distance from the site. Given the location of the school, it is likely that pupils will be sourced from the west and north of the borough at a distance of up to 3 miles from the school with staff coming from a broader catchment and potentially including suburbs surrounding Reading. This has been taken into account in the revised assessment and in providing an understanding of which vehicular, pedestrian and cycle routes most likely to be used by those travelling

- to and from the school. Consideration has also been given to the likely hours at which pupils, staff and parents will be travelling to and from the site.
- 7.36 From a vehicular perspective, the local highway network, and particularly junctions analysed to the east of the site, are already at or beyond capacity at key times when pupils, staff and parents collecting or dropping off pupils are likely to be travelling to and from the school. The assessment has shown that, nonetheless, the addition of the school traffic to the network, based on the assumptions drawn on likely catchment, are unlikely to make a material difference to the levels of congestion at the key junctions analysed. A Traffic Regulation Order is proposed to introduce parking restrictions and prevent further adverse impacts from parents waiting to collect pupils during key times.
- 7.37 A focus has been given on promoting alternative modes of travel to the school and discussions with the applicant during the course of the application has led to additional measures being identified for delivery through a s106 agreement to improve pedestrian and cycle facilities in the vicinity of the school to encourage travel by these means as well as ensuring that impact on existing facilities does not occur. The facilities include a new Tiger Crossing on Richfield Avenue and £200,000 towards widening pedestrian and cycle routes on the north and south of Richfield Avenue.
- 7.38 Information provided by the applicant has shown that bus services can accommodate the additional passengers.
- 7.39 The applicant has provided a Travel Plan and this will be developed and monitored to ensure that it works to further promote the use of alternative modes of travel to the school.
- 7.40 Detailed consideration has been given to car parking provision proposed within the site. The number of spaces meet standards and are therefore considered appropriate when balanced with other measures to encourage staff to travel by alternate means to the site. Particular consideration has been given to ensure that large vehicles can effectively access and egress including coaches which may be required for school trips, delivery vehicles accessing the existing Garden Centre to the south of the school and vehicles using the site during the Reading Festival. Information has been provided to demonstrate that adequate access and egress can be provided and appropriate set down, loading and delivery facilities are included within the proposals.
- 7.41 The development provides electric vehicle charging points and cycling parking facilities within standards and are considered adequate.
- 7.42 On balance, and with the additional information and mitigation

measures identified during the course of determination of the application, the application is considered consistent with policy.

Landscape, Trees and Ecology

- 7.43 Policy EN12 states that, for all sites, development should not result in a net loss of biodiversity and should provide for a net gain in biodiversity wherever possible. Development should also protect and wherever enhance features of biodiversity interest on and adjacent to sites and provide new tree planting, wildlife friendly landscaping and ecological enhancements. The policy also states that permission will not be granted for sites forming part of the Green Network where this could fragment the overall network; new development should demonstrate how the location and type of green space, landscaping and water features provided have been arranged to maintain or link into the existing Green Network and contribute to its consolidation.
- 7.44 Policy EN14 requires new development "...make provision for tree retention and planting within the application site ... to maintain and enhance the character and appearance of the area in which a site is located, to provide for biodiversity and to contribute to measures to reduce carbon and adapt to climate change".
- 7.45 The site is not located and does not contain any sites with biodiversity interest and is not covered by any Tree Preservation Orders. However, as it forms part of the Local Green Space (as described under this report under 'Principle of Development') it is relevant to ensure that it serves the function of stitching the Green Network together.
- 7.46 An Arboricultural Impact Assessment has been submitted with the application with an updated version provided during determination due to concerns raised regarding the age of the survey. A number of low/ moderate quality trees/ tree groups are proposed to be removed in order to facilitate the development. The Arboricultural Impact Assessment concludes that the impact of the development on existing trees will be minimal. It also sets out a number of mitigation measures.
- 7.47 The landscaping proposals includes the planting of 39 new trees and new areas of hedgerows on the site. This is consistent with Policy EN14. Further information has been requested by the Natural Environment Team during the determination process with a focus on the species to be planted and confirmation that these are appropriate for this site. Confirmation of these details can be confirmed via planning condition.
- 7.48 The application is also accompanied by an Ecological Assessment. There are no statutorily designated sites near the site; and the nearest non-statutory locally designated sites within 1000 metres are

the Warren Woodlands Complex Local Wildlife Site and Cow Lane Depot Local Wildlife Site. Ecology surveys show the site is not of ecological value; with an area of largely bare ground to the south and larger rougher amenity grassland with hardstanding and open fronted buildings bounded by hedgerows to the north. A small stream runs east to west.

- 7.49 The site has a moderate potential for supporting foraging badgers although no badger setts have been noted. The existing structures on the site are of negligible suitability for bats and the on-site trees are of low suitability for bats. The site has negligible potential for dormice, water vole and otter and a low potential for supporting reptiles or amphibians. The site has, however, high potential for supporting breeding birds.
- 7.50 The ecological assessment outlines that:
 - there will be no impacts to the Local Wildlife Sites;
 - the on-site habitats directly impacted are all of lower ecological value and are of negligible ecological value beyond the site level;
 - The loss of amenity grassland from the site, in relation to the habitats present in the surrounding area is not considered significant given the extensive higher quality badger foraging habitat in the parkland to the north and the pastures to the west;
 - The survey identified that there is a low potential for some of the ivy-clad trees to support bat roosts. If present, works to fell these would result in the destruction of any roosts and potentially direct harm (killing or injury) to any bats that may be present at the time of the works;
 - The impacts of this at this site would be considered to be low due to the general low quality of the habitat; nevertheless, measures should be implemented to minimise this as far as possible; and
 - The scale of any habitat loss would not be significant given the availability of more extensive habitat in the wider environment, particularly the parkland to the north and the open pastures / hedgerows to the west.
- 7.51 The applicant has outlined a range of landscape and ecological mitigation and enhancement measures which include avoiding bird breeding seasons, protecting tree roots, biodiversity enhancements and future management. All of these measures can be secured via planning condition.
- 7.52 Overall, the proposal is considered acceptable in landscape, ecology and arboricultural terms subject to the suggested planning conditions.

Sustainability

- 7.53 Following the declaration by the Council of a climate emergency and an increased focus on the consequence and responses to climate change, the importance of all aspects of sustainability are taking on a greater focus in the planning process. It is importance that the Council's commitment to sustainability is placed at the heart of the local decision-making process especially on significant social infrastructure projects such as schools.
- 7.54 There are several sustainability policies within the local plan which are relevant to the new development.
- 7.55 The overarching sustainability Policy CC2 requires all major non-residential developments to meet the most up-to-date BREEAM 'Excellent' standards, where possible. The explanatory text, however, recognises that for some types of development, including schools, it can be more difficult to meet these standards. However where this is the case, it is important that information is provided to demonstrate that that the sustainability standard to be achieved is the highest possible for the relevant development type and at a minimum meets BREEAM 'Very Good'.
- 7.56 Policy CC3 requires that all developments demonstrate how they have been designed to incorporate measures to adapt to climate change.
- 7.57 Policy CC4 requires any non-residential development over "1,000 sqm to consider the inclusion of decentralised energy provision, within the site, unless it can be demonstrated that the scheme is not suitable, feasible or viable for this form of energy provision".
- 7.58 Policy CC5 requires minimisation of waste during construction and the life of the development.
- 7.59 The application is accompanied by an Energy Statement. This states that the proposed school has been designed to meet exemplar design standards for education buildings based upon the DfE briefing document, known as the Output Specification (OS). There is no existing district heating network in the vicinity of the site, however, provision has been made to allow for future connection to a district heating network should this be provided. The inclusion of 8 electric vehicle charging bays would contribute to reducing carbon emissions.
- 7.60 The design requirements set by the DfE (e.g. modular design etc.) mean that certain BREEAM credits cannot be secured in this instance. The application explains that a 'fabric first' approach has been adopted focusing on high levels of insulation and air tightness which reduces heat loss from the buildings. The costs associated with the decontamination of this heavily contaminated site also limit the potential to incorporate new technology.

- 7.61 Consequently, the proposed development has been identified as likely to meet BREEAM 'Very Good' standards when the assessments are carried out prior to construction and then prior to the school opening. An assessment provided with the application submission concluded a score of 55.1% was achievable but the applicant has since clarified that the development is likely to achieve a BREEAM standard between 60-65%².
- 7.62 It is also recognised that new opportunities to improve the credits may emerge as development moves forward. Planning conditions have therefore been identified which will require the applicant to justify the credit achieved and why a higher standard is not achievable.
- 7.63 To conclude, the development does not meet the aspirational BREEAM Excellent standard specified by Policy CC2 but the applicant has provided explanation to justify why this cannot be achieved on this unique site. Notwithstanding, planning conditions have been specified which will require the highest rating possible to be achieved by the applicant. On balance, the development is therefore considered acceptable in sustainability terms.

<u>Environmental Matters - contamination, flood risk, air quality and noise</u>

Contaminated Land

- 7.64 Policy EN16 states that development will only be permitted on land affected by contamination where it is demonstrated that the contamination and land gas can be satisfactorily managed or remediated so that it is suitable for the proposed end use and will not impact on the groundwater environment, human health, buildings and the wider environment.
- 7.65 The NPPF places weight on the value of using brownfield land and supports opportunities to remediate contaminated land.
- 7.66 It is highly relevant that the application site is heavily contaminated due to the use of the site between 1970 and 1979 as a landfill. A contaminated land assessment and remediation plan have been submitted to give an indication as to the likely risks. A range of identified sources of contamination have been identified which could impact on human health and the environment.
- 7.67 Further work is required as the precise remediation measures are yet to be determined for each element of the development. However, the Environmental Protection Team note that the general approach to be acceptable, subject to conditions.

² The BREEAM ratings are as follows: <10% - unclassified; >10% - acceptable; >25% - pass; >40% - good; >55% - very good; >70% - excellent; >85% - outstanding

7.68 In addition to the above and in response to comments from Reading EHO and the DRP the applicant subsequently submitted a Contamination Remediation Strategy, which provides details of remediation and measures which are to be undertaken to ensure that the site and development is suitable for the end users. As a result, the Environmental Health Officer has no further comments on the remediation strategy, subject to various conditions being secured including for a long term maintenance plan.

Flood Risk

- 7.69 Policy EN18 requires development to be directed to areas as the lowest risk of flooding in the first instance, following the Sequential and Exception Test set out in the NPPF. This site is located within Flood Zone's 2/3 which are the areas of highest risk of flooding. No buildings are proposed to be located within the area designated as Flood Zone 3.
- 7.70 The building has been designed to mitigate risks of flooding onsite and elsewhere. The design of the school building and external site levels have taken the risks of flooding into account and will create additional compensatory flood volumes on the site during a flood event. Additional design measures will aim to achieve safe site and buildings for operation. The school building has been elevated with floor levels above critical flood levels and voids beneath the building have been created to accommodate additional flood storage volume.
- 7.71 A Flood Risk Assessment, a Drainage Strategy and a Flood Response Plan have been provided with the application. The Flood Risk Assessment concludes that the proposed school development at the site:
 - Is suitable in the location proposed and will be adequately flood resilient;
 - Is unlikely to place additional persons at risk of flooding through implementation of a bespoke (separate) Flood Response Plan and will offer a safe means of access and egress; and
 - Is unlikely to increase flood risk elsewhere as a result of the proposed development through the loss of floodplain storage, impedance of flood flows or increase in surface water runoff.
- 7.72 In addition, a Sequential Assessment accompanies the application due to the site's location within Flood Zone 2/3. It does not identify any sites that are sequentially preferable, available and deliverable to the application site.
- 7.73 The Environment Agency are broadly in agreement with the reports and their conclusions and have no objection to the development in relation to flood risk. Given the site overlies a historic landfill, monitoring of activities and their impact on water quality will need to be undertaken during the construction phase, therefore conditions

with regards to this have been requested.

7.74 Additional information has been provided relating to the drainage of the site to clarify conclusions reached in the drainage strategy. Planning conditions have been identified to require matters to be fully satisfied and if further concerns are raised by the LLFA prior to committee this will be identified in an update report.

Air Quality

- 7.75 Policy EN15 of the Local Plan requires developments to "have regard to the need to improve air quality and reduce the effects of poor air quality".
- 7.76 Various areas of Reading have been designated as Air Quality Management Areas. The southern end of the proposed development site falls within this AQMA. The proposed development will introduce additional traffic movements onto roads within the AQMA.
- 7.77 An Air Quality Assessment has been submitted with the application, as well as an updated assessment including further details on vehicular movements. An updated Air Quality Assessment has modelled transport emissions on links affected by generated traffic, including areas of known poor air quality, e.g. Prospect Street. The scope of the assessment was agreed between the applicant and the Environmental Health Department, prior to the completion of the updated Air Quality Assessment.
- 7.78 The updated Air Quality Assessment concluded that air quality at the site was acceptable for the introduction of the intended use as a secondary school. The qualitative assessment of construction activities has confirmed that the impact arising from dust is considered to be low. Regarding transport emissions associated with the development has shown that NO2 and particulate emissions are within air quality objectives at all locations assessed. In other words the overall impact of the development is shown to be negligible with the range of measures described in this report implemented such as a Travel Plan, improvements to walking and cycling infrastructure and management of construction activities.
- 7.79 A Construction Environment Management Plan and Air Quality Monitoring strategy were submitted during the determination period. The Environmental Protection Team confirmed that these were acceptable but have asked for an air quality assessment of the impact on air quality as a planning condition.

Noise

7.80 Key policies include CC8 which states that development most "not cause a detrimental impact on the living environment of existing residential properties..." and EN17 which notes "where noise"

generating equipment is proposed, the noise source specific61 level (plant noise level) should be at least 10dBA below the existing background level as measured at the nearest noise sensitive receptor seek to protect existing and future amenity".

- 7.81 The site's location surrounded by green space to the north, the existing Rivermead Leisure Centre to the east, warehouse units to the south and farmland to the west means there are no residential properties in the immediate area. The closest homes are located along The Warren located some distance way on the north side of the River Thames.
- 7.82 The noise assessment submitted with the application proposes noise limits for any plant to be installed. The Environmental Protection Team have confirmed that the limits proposed are acceptable.
- 7.83 Initially the Environmental Protection Team raised concerns about possible floodlighting of the MUGA and other sports pitches which could facilitate long periods of use of the facilities and result in a loss of amenity to nearby residents from light and noise. In response to this further information was submitted which concluded that the proposed lighting scheme and noise from students is unlikely to adversely impact on nearby residents.
- 7.84 For the above reasons, neighbouring amenity impacts of the proposal are considered to be acceptable, and the proposal consistent with the aforementioned policies, subject to conditions of planning permission.

Other Issues

Economic Development

7.85 It is a key priority of the Council to maximise employment opportunities for local people during both the construction and operation of development and has adopted an Employment, Skills and Training Supplementary Planning Document (April 2013). A s106 Agreement will be required for this development to secure local employment opportunities and this is consistent with the requirements of the SPD.

Need for the School in this Location

- 7.86 Section 14(1) of the Education Act 1996 requires that a local education authority must provide sufficient primary and secondary education facilities within their area.
- 7.87 There is a pressing need for secondary school places within the local area due in a large part to population growth. This report summarised the findings from the 2019 report prepared by Reading Borough Council's Brighter Futures for Children and which confirms

the need for a new secondary school in the area. The development of the application site for the secondary school was originally envisaged for a 2021 opening and the need for the school remains pressing.

- 7.88 Reading has a higher density of built form than the rest of Berkshire, with a significant amount of the borough developed with urban and suburban development. The supply of land suitable for a new secondary school in Reading is limited as a result of the density of existing development and other constraints. The application site has been identified as meeting the requirements for a new secondary school defined by the DfE in terms of size, etc (notable the DfE's BB103 Standards which require a minimum site of 2.3ha and a maximum site of 8.4ha).
- 7.89 Consideration has also been given to the fact that there is a dominance of secondary schools within the south and east of the Borough and a qualitative bias with many of these schools rated 'outstanding' by Ofsted. There is a corresponding undersupply of secondary schools within the west of the borough. The application site is in the north west of the borough and in an area which displays an undersupply of secondary school provision.
- 7.90 Alongside the Flood Risk Assessment a detailed sequential assessment was undertaken to consider if alternative locations exist where the school could be provided and no other sites were located. This is therefore the only site in which this proposal can be provided.

Equalities Impact

- When determining an application for planning permission the Council is required to have regard to its obligations under the Equality Act 2010. The planning application confirms that the new buildings have been designed to be fully accessible and inclusive. All spaces in the new building will be accessible to all; the floors and thresholds are level and there is a lift serving both floors. The design proposals have been developed with reference to Approved Document Part M (AD-M), the DfE Building Bulletin 91 'Access for Disabled People to School Buildings', Building Bulletin 102 'Designing for disabled children and children with special educational needs' and 'Design of an Accessible BS8300:2018 and Inclusive Built Environment.'
- 7.92 Consideration has been given to acoustic design as it has been shown that poor acoustics can have a significant negative impact on the educational development of children. Whilst adults can make guesses at words missed, children often find it harder to do so, and so wherever possible improvements will be made to the room acoustics, including sound insulation between spaces (airborne and impact), reverberation within teaching and study spaces and adequate sound absorption for corridors, stairwells and entrance halls.

- 7.93 Colour contrast will be used to define areas and highlight differences where appropriate. An inclusive design needs to consider all disabilities, and the design will cater for the visually impaired, those with poor manual dexterity and physical disabilities.
- 7.94 Other good practice measures identified within the application submission include full level access to all areas; Part M compliant doorways; generation circulation widths; appropriate shower, changing and WC facilities; induction loops where required; accessible car parking spaces close to the main entrance; and use of signage. All learning spaces will also be designed to accessible standards, be appropriately lit and incorporate height-adjustable furniture where required. The buildings are designed with appropriate refuges to allow for managed and assisted evacuation. All refuge areas will feature an alert and intercom link.
- 7.95 Therefore, in terms of the key equalities protected characteristics, it is considered that there would be no significant adverse impacts as a result of the development.

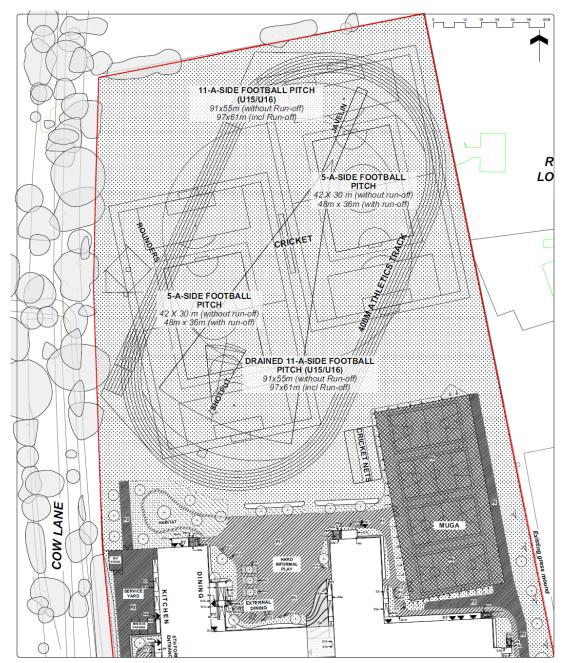
8 CONCLUSION

- 8.1 This proposal has been carefully considered in the context of the Reading Borough Local Plan 2019 and supplementary planning documents. The proposal will provide an new secondary school for Reading; the need for this having been identified in a report commissioned by the Borough Council in 2019. The borough has an obligation to provide sufficient education facilities at both primary and secondary level.
- 8.2 There is limited secondary school provision in the north and west of the borough and this is the only site available which meets the various requirements identified by the DfE for new schools of this nature. The development will ensure the decontamination and remediation of the site which remains contaminated from its use as a landfill in the 1970s.
- 8.3 The site is within the Thames Valley Major Landscape Area designation and within designated Local Green Space where development is generally unacceptable if it affects the open character of the designation. The buildings have been orientated towards the south of the site, close to Richfield Avenue, to retain as much open character as possible. The value of this site in terms of its contribution to the Local Green Space due to its previous semi-private use as a golf driving range means that the development as a secondary school has been shown to be consistent with the requirements of policy. The proposal also includes community use of the school facilities outside of school hours and will be used by Festival users during the Reading festival.

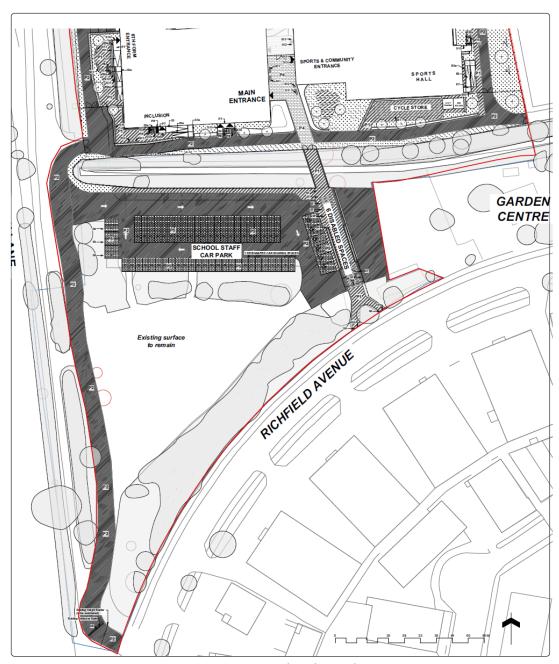
- 8.4 The design and orientation of buildings has been carefully considered and developed to be both functional but also respectful of its location. The building design includes features of architectural interest which are appropriate for its use. An updated comprehensive landscape strategy has been brought forward to satisfy initial officer concerns, including extensive additional tree provision and this will be continue to be developed with the applicant, as part of meeting planning conditions with a future management strategy as the site is brought forward.
- 8.5 From a sustainability perspective, the building meets a BREEAM 'Very Good' rating and work will continue with the applicant to maximise credits as the building is brought forward.
- 8.6 Significant transport analysis has been carried out and reviewed to understand transport impacts and potential mitigation to ensure that the site does not create an adverse impact on the local highways network and that future users are encouraged to use modes other than the private car. Mitigation has been put in place to ensure that the site, which is in Flood Zone 2/3, does not give rise to flood risk to future users and other uses off-site this includes raising the building above maximum flood levels. Conditions are proposed to ensure that air quality, noise, lighting and contamination risks do not impact on local amenity during either construction or operation.
- 8.7 Measures are also identified to encourage local employment and maximise the economic benefit from the development.
- 8.8 Officers have worked positively and proactively with the applicant on the scheme and amendments have been secured during the course of determination of the application which are considered to satisfactorily address policy issues. Officers therefore consider the scheme to be acceptable, that accords with relevant national and local policy and can be supported. The planning application is therefore recommended for approval subject to conditions and a \$106 agreement as detailed above.

Case Officer: Julie Williams

ANNEX 1 PLANS



General Layout - Northern areas of the Application Site



General Layout - southern areas of applications site



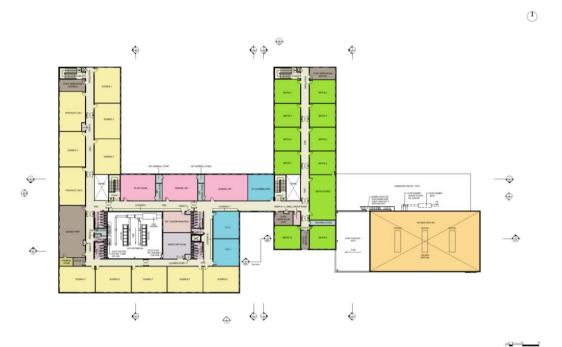
Layout of Sports pitches (winter and summer)



Ground Floor Layout

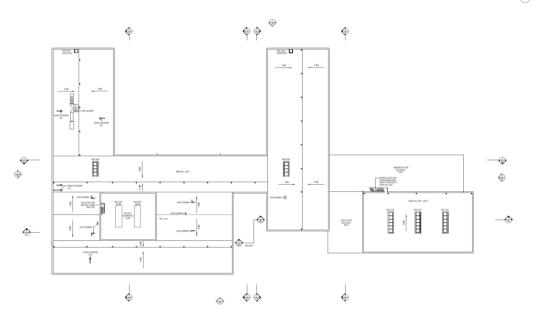


First Floor Layout



Second Floor Layout





Roof Layout





Cross Sections

ANNEX 2 Additional junction modelling provided in the Hexa Consulting Technical Note dated 10 May 2022

Junctions 10 Level Of Service (LoS) scale summarised in the table below as follows:-

- LoS A: Free Flow Primarily free-flow operation with vehicles having almost complete freedom to manoeuvre;
- LoS B: Reasonably Free Flow Reasonable free-flow conditions with vehicles having slightly restricted freedom to manoeuvre;
- LoS C: Stable Flow Stable operation but freedom to manoeuvre is restricted;
- LoS D: Approaching Unstable Flow Borders on unstable flow with freedom to manoeuvre severely limited;
- LoS E: Unstable Flow Traffic flow is very unstable and approaching capacity; and,
- LoS F: Forced or Breakdown Flow The point at which demand exceeds capacity.

Table 1: Beresford Road / Portman Road / Cow Lane - AM Peak Period

Time -	2021 Base		2028 Base		2028 Base plus Development			
	RFC	LoS	RFC	Los	RFC	Los		
	Portman Road Arm							
08:00-08:15	0.721	В	0.776	В	0.815	С		
08:15-08:30	0.734	В	0.791	С	0.893	D		
08:30-08:45	0.938	D	1.012	F	1.057	F		
08:45-09:00	0.734	С	0.790	D	0.791	E		
09:00-09:15	0.833	С	0.896	D	0.950	E		
09:15-09:30	0.879	D	0.951	E	1.121	F		
09:30-09:45	0.794	С	0.857	D	0.918	F		
09:45-10:00	0.777	С	0.836	D	0.841	F		
			Beresfor	d Road Arm				
08:00-08:15	0.435	В	0.484	С	0.530	С		
08:15-08:30	0.530	С	0.600	С	0.839	E		
08:30-08:45	0.554	С	0.627	С	0.679	D		
08:45-09:00	0.770	D	0.868	E	0.868	E		
09:00-09:15	0.815	E	0.932	F	1.139	F		
09:15-09:30	0.609	С	0.692	E	1.241	F		
09:30-09:45	0.482	С	0.542	С	0.599	F		
09:45-10:00	0.505	С	0.576	С	0.576	D		
			Cow L	ane Arm				
08:00-08:15	0.571	Α	0.616	В	0.616	В		
08:15-08:30	0.660	В	0.712	С	0.820	С		
08:30-08:45	0.641	В	0.692	В	0.689	С		
08:45-09:00	0.717	С	0.779	С	0.783	С		
09:00-09:15	0.760	С	0.821	С	0.931	E		
09:15-09:30	0.693	С	0.951	E	1.074	F		
09:30-09:45	0.624	В	0.675	В	0.678	E		
09:45-10:00	0.802	С	0.867	D	0.875	D		

Table 2 - Beresford Road / Portman Road / Cow Lane - PM Peak Period

Time	2021	Base	2028 Base		2028 Base plus Development			
Time	RFC	LoS	RFC	Los	RFC	Los		
	Portman Road Arm							
15:00-15:15	0.654	Α	0.703	В	0.703	В		
15:15-15:30	0.715	В	0.770	С	0.878	С		
15:30-15:45	0.753	В	0.810	С	0.923	E		
15:45-16:00	0.780	С	0.841	С	0.861	D		
16:00-16:15	0.820	С	0.886	D	0.894	D		
16:15-16:30	0.760	С	0.821	С	0.828	С		
16:30-16:45	0.761	В	0.819	С	0.877	D		
16:45-17:00	0.782	С	0.843	С	0.855	D		
			Beresford	d Road Arm				
15:00-15:15	0.903	F	0.987	F	0.987	F		
15:15-15:30	0.787	F	0.881	F	1.172	F		
15:30-15:45	0.821	F	0.960	F	1.223	F		
15:45-16:00	0.763	Е	0.863	F	0.831	F		
16:00-16:15	0.868	F	0.933	F	0.935	F		
16:15-16:30	0.781	E	0.852	F	0.877	F		
16:30-16:45	0.868	F	0.947	F	1.054	F		
16:45-17:00	0.752	E	0.836	F	0.818	F		
				ane Arm				
15:00-15:15	1.026	F	1.109	F	1.109	F		
15:15-15:30	0.880	F	0.952	F	1.179	F		
15:30-15:45	0.875	E	0.946	F	1.172	F		
15:45-16:00	0.942	F	1.021	F	1.022	F		
16:00-16:15	1.061	F	1.152	F	1.152	F		
16:15-16:30	0.882	F	0.959	F	1.023	F		
16:30-16:45	0.963	F	1.045	F	1.227	F		
16:45-17:00	1.011	F	1.097	F	1.161	F		

Table 3: Richfield Avenue / Caversham Road Roundabout - AM Peak Period

Time	2021 Base		2028 Base		2028 Base plus Development		
Tille	Delay (s)	LoS	Delay (s)	Los	Delay (s)	Los	
	Caversham Bridge Arm						
08:00-08:15	15	С	14	В	14	В	
08:15-08:30	78	F	51	F	1467	F	
08:30-08:45	141	F	122	F	1735	F	
08:45-09:00	24	С	28	D	786	F	
09:00-09:15	16	С	21	С	1607	F	
09:15-09:30	74	F	70	F	1467	F	
09:30-09:45	30	D	78	F	1262	F	
09:45-10:00	27	D	60	F	842	F	
			Cavershai	m Road Arm			
08:00-08:15	8	Α	61	F	68	F	
08:15-08:30	112	F	619	F	631	F	
08:30-08:45	230	F	1262	F	1312	F	
08:45-09:00	340	F	1948	F	2027	F	
09:00-09:15	393	F	2079	F	2246	F	
09:15-09:30	354	F	1728	F	1817	F	
09:30-09:45	231	F	1352	F	1358	F	
09:45-10:00	194	F	860	F	864	F	
			Richfield	Avenue Arm			
08:00-08:15	18	C	18	C	18	С	
08:15-08:30	15	С	16	С	16	С	
08:30-08:45	26	D	20	С	18	С	
08:45-09:00	18	С	18	С	18	В	
09:00-09:15	21	С	18	С	18	С	
09:15-09:30	20	С	15	С	14	В	
09:30-09:45	45	E	50	E	47	Е	
09:45-10:00	33	D	47	E	56	F	

Table 4 -Richfield Avenue / Caversham Road Roundabout - PM Peak Period

Time	2021	Base	2028 Base		2028 Base plus Development		
Tille	Delay (s)	LoS	Delay (s)	Los	Delay (s)	Los	
	Caversham Bridge Arm						
15:00-15:15	19	С	25	D	13	В	
15:15-15:30	21	С	22	С	2366	F	
15:30-15:45	36	E	36	E	4417	F	
15:45-16:00	177	F	164	F	4049	F	
16:00-16:15	183	F	198	F	3089	F	
16:15-16:30	87	F	102	F	2220	F	
16:30-16:45	129	F	97	F	1500	F	
16:45-17:00	146	F	100	F	876	F	
			Cavershai	m Road Arm			
15:00-15:15	4	Α	6	Α	5	Α	
15:15-15:30	23	С	48	E	49	E	
15:30-15:45	119	F	180	F	572	F	
15:45-16:00	195	F	312	F	328	F	
16:00-16:15	271	F	426	F	453	F	
16:15-16:30	592	F	802	F	846	F	
16:30-16:45	596	F	846	F	906	F	
16:45-17:00	280	F	456	F	504	F	
			Richfield	Avenue Arm			
15:00-15:15	20	С	21	С	12	В	
15:15-15:30	20	С	22	С	26	D	
15:30-15:45	31	D	16	D	38	E	
15:45-16:00	32	D	33	D	39	E	
16:00-16:15	42	E	46	E	45	E	
16:15-16:30	35	E	46	E	44	E	
16:30-16:45	28	С	26	D	21	С	
16:45-17:00	60	F	51	F	47	E	

Table 5: Bridge Street / Church Street / Church Road - AM Peak Period

Time	2021	Base	2028	Base	2028 Base plus Development		
Time	Delay (s)	LoS	Delay (s)	Los	Delay (s)	Los	
	Church Street Arm						
08:00-08:15	68	E	20	В	20	В	
08:15-08:30	74	E	20	В	20	В	
08:30-08:45	49	D	18	В	18	В	
08:45-09:00	49	D	19	В	46	D	
09:00-09:15	50	D	18	В	18	В	
09:15-09:30	52	D	18	В	18	В	
09:30-09:45	54	D	20	С	19	В	
09:45-10:00	50	D	21	С	20	С	
			Bridge S	treet Arm			
08:00-08:15	75	E	116	F	120	F	
08:15-08:30	129	F	215	F	214	F	
08:30-08:45	132	F	207	F	207	F	
08:45-09:00	127	F	200	F	200	F	
09:00-09:15	147	F	242	F	243	F	
09:15-09:30	143	F	205	F	207	F	
09:30-09:45	128	F	212	F	215	F	
09:45-10:00	123	F	197	F	196	F	
			Church	Road Arm			
08:00-08:15	20	В	51	D	54	D	
08:15-08:30	17	В	52	D	49	D	
08:30-08:45	19	В	42	D	41	D	
08:45-09:00	20	В	47	D	50	D	
09:00-09:15	18	В	46	D	49	D	
09:15-09:30	16	В	24	С	24	С	
09:30-09:45	20	С	80	E	80	F	
09:45-10:00	20	В	134	F	124	F	

Table 6: Bridge Street / Church Street / Church Road - PM Peak Period

Time	2021	Base	2028	2028 Base		2028 Base plus Development	
rime	Delay (s)	LoS	Delay (s)	Los	Delay (s)	Los	
	Church Street Arm						
15:00-15:15	80	E	82	F	0	Α	
15:15-15:30	79	E	80	F	71	Е	
15:30-15:45	50	D	50	D	50	D	
15:45-16:00	69	E	70	E	71	E	
16:00-16:15	61	E	61	E	61	E	
16:15-16:30	67	E	69	E	69	Е	
16:30-16:45	79	E	79	E	79	Е	
16:45-17:00	76	E	78	E	77	E	
			Bridge S	treet Arm			
15:00-15:15	65	E	79	E	76	E	
15:15-15:30	122	F	137	F	136	F	
15:30-15:45	148	F	152	F	152	F	
15:45-16:00	129	F	128	F	129	F	
16:00-16:15	153	F	153	F	153	F	
16:15-16:30	148	F	148	F	148	F	
16:30-16:45	129	F	128	F	128	F	
16:45-17:00	119	F	110	F	111	F	
			Church	Road Arm			
15:00-15:15	140	F	177	F	176	F	
15:15-15:30	395	F	524	F	518	F	
15:30-15:45	639	F	850	F	841	F	
15:45-16:00	904	F	1204	F	1192	F	
16:00-16:15	1181	F	1576	F	1563	F	
16:15-16:30	1382	F	1829	F	1812	F	
16:30-16:45	1464	F	1736	F	1734	F	
16:45-17:00	899	F	899	F	900	F	