REPORT FOR: Traffic and Road Safety Advisory Panel

Date of Meeting:	27 June 2016
Subject:	**INFORMATION REPORT** Proposed Secondary School - Whitchurch Playing Fields, Wemborough Road, Stanmore
Responsible Officer :	Tom McCourt – Corporate Director, Community
Exempt:	No
Wards affected:	Belmont
Enclosures:	**Appendix A –** Transport Assessment **Appendix B –** Travel Plan **Appendix C –** Briefing note

Harrow COUNCIL
LONDON

Section 1 – Summary

This is an information report that explains the transport assessment, travel plan and the proposed transport mitigations for the proposed secondary school at Whitchurch playing fields, Wemborough Road, Stanmore following a Reference from the Planning Committee on 25th May 2016.

FOR INFORMATION

Section 2 – Report

Background

2.1 The Education Funding Agency (EFA) in conjunction with the governors of Avanti House Free School (AHFS) are proposing to build a secondary School on the existing green field land at Whitchurch Playing Fields, Wemborough Road, Stanmore. The playing fields are situated to the north of Wemborough Road and the east of Abercorn Road and are surrounded by a predominately residential area.

2.2 The proposed AHFS is planning to take occupation of the site from the beginning of the 2017/2018 academic year with an annual intake of 180 students per annum from year 7 to year 11 plus sixth form. At full occupation the school will serve 1,260 students supported by 120 full-time equivalent (FTE) staff.

2.3 Directly to the south-east of the site is Whitchurch First and Junior Schools which have recently been granted planning permission for expansion from 695 to 905 pupils to reach full capacity in September 2020. The infant and junior schools are located on the same site. The main entrance to the school site is located on Wemborough Road in Stanmore and this access would also be used by the proposed secondary school.

2.4 Stanburn primary school is also located in close proximity to the site located in Abercorn Road just west of the playing fields and north of the junction with Wemborough Road. This school is not part of the school expansion programme.

2.5 The applicant prepared a transport assessment and travel plan for the proposal for AHFS which can be seen in appendices A & B. This sets out a detailed assessment of the transport implications and mitigations proposed. The highway authority was satisfied that the assessment methodology was robust and that sufficient mitigation measures had been identified to address the main transport impacts of the development.

2.6 The Planning Committee, at its meeting on 17th February 2016, unanimously resolved to grant the planning application subject to the

completion of a section 106 Planning Obligation and referral back to the Planning Committee, in relation specifically to the Travel Plan and the Community Use Agreement, by 31st July 2016.

2.7 The Planning Committee, at its meeting on 25th May 2016, considered the application again and following some concerns expressed about the transport mitigations, requested that the matter be referred to TARSAP for consideration. TARSAP are therefore requested to consider the traffic, parking and public transport implications of the proposed construction of a new School and Sports Hall for Avanti House School on Whitchurch Playing Fields and to provide comments in the form of a Reference to the Planning Committee meeting scheduled for Wednesday 29th June 2016.

Transport assessment

Trip generation / distribution and traffic modelling

2.8 An important aspect of assessing the traffic impact of new development is estimating the additional trips on the network that will be generated. The additional trips generated by the development at full capacity are set out in section 5 of the transport assessment. The methodology compares trip rates using information from similar sites to the proposed site in the TRICS database (The National Standard for Trip Generation Analysis) in order to estimate the trip rates by mode in the AM and PM peaks for the development. Consideration has also been given to the postcode locations of existing pupils at the Krishna Avanti School in the current temporary school site on Beaulieu Drive, Pinner which will move to the new site. This is relevant because many pupils live within 1 km of the proposed site and could walk to school.

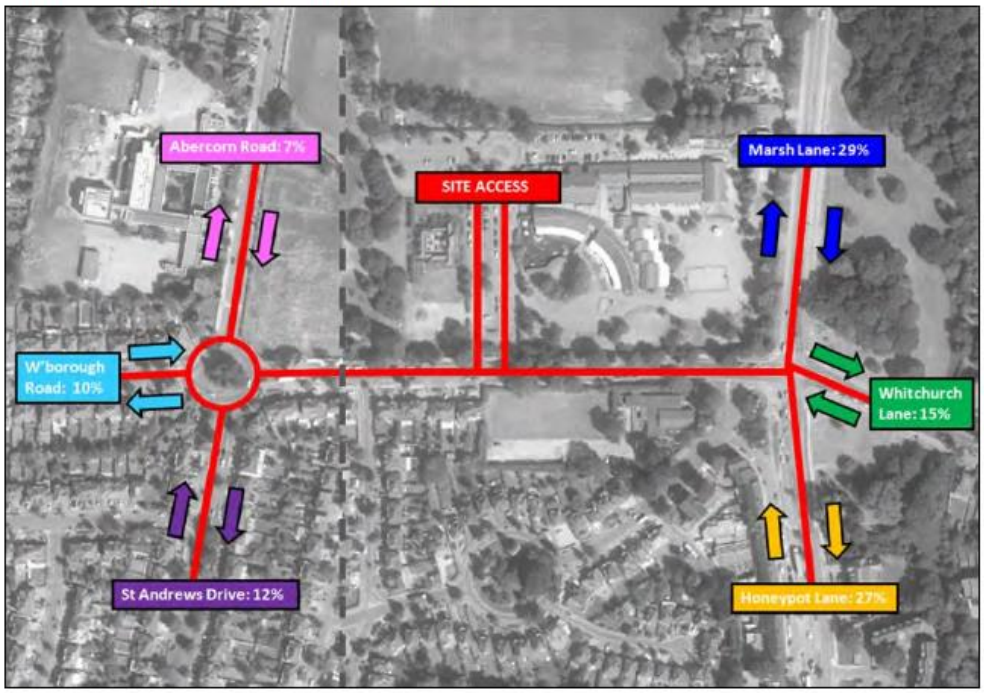
Table 5.1 Weekday Peak Hour Person Trip Generation - Proposed Uses (1,260 students)

Mode of Travel	AM Peak (0800-0900hrs)			PM Peak (1500-1600hrs)		
	Two-Way Trip Rate (per pupil)	Mode Split	No. Movements	Two-Way Trip Rate (per pupil)	Mode Split	No. Movements
Car Occupants	0.168	21.7%	212	0.075	8.7%	95
Cyclists	0.008	1.0%	10	0.008	0.9%	10
Pedestrians	0.246	31.8%	310	0.299	34.7%	377
Public Transport	0.233	30.1%	294	0.360	41.8%	454
School Bus	0.119	15.4%	150	0.119	13.8%	150
TOTALS	**0.774**	**100.0%**	**976**	**0.861**	**100.0%**	**1086**

2.9 The table above indicates the travel mode splits estimated by peak times and shows that travel by car would be limited to 21.7% in the AM peak and 8.7% in the PM peak. A much higher proportion of trips would be by sustainable transport modes (bus, walking or cycling) with 78.3% in the AM peak and 91.2% in the PM peak.

2.10 The distribution of these trips has been assessed by making a comparison with the postcode location data of pupils at the Whitchurch schools which is currently operating in this location.

Figure 11 Distribution of School Related Traffic



2.11 The plan above demonstrates that on this basis 71% of trips would come from the east of the site (Marsh Lane / Honeypot Lane / Whitchurch Lane) and only 29% from the west (Wemborough Road / Abercorn Road / St Andrews Drive).

2.12 The traffic modeling has concentrated on three junctions on Wemborough Road. These are located at the site access, the roundabout at the west of the site (Abercorn Road / St Andrews Drive) and the traffic signals on the east of the site (Marsh Lane / Honeypot Lane). Traffic survey information at these locations was surveyed in 2014 and a traffic growth factor applied based on national TEMPRO (Trip End Model Presentation Program) traffic growth forecasts in order to estimate flows for a future scenario in 2020 when the school would be at full capacity. A base model situation for 2020 and a base + development situation for 2020 (trip generation figures added) are modeled separately. These scenarios are also split into the AM and PM peaks.

2.13 The modeling has shown that the traffic signals in the base 2020 scenario is close to capacity in the AM peak on the main road (Honeypot Lane / Marsh Lane) and over capacity for the Wemborough Road right turn. The table below indicates the typical queue lengths in the peak hours and percentage of capacity used (DoS).

Table 6.1 Whitchurch Lane / Honeypot Lane / Wemborough Road / Marsh Lane – 2020 Base

Arm	AM Peak Hour		PM Peak Hour	
	DoS	Queue	DoS	Queue
Whitchurch Lane Left Ahead	83.5%	14.1	74.7%	12.1
Whitchurch Lane Right	69.2%	2.2	47.9%	1.9
Honeypot Lane Left Ahead	97.8%	16.5	89.4%	13.0
Honeypot Lane Right Ahead	98.1%	17.5	90.5%	14.5
Wemborough Road Left Ahead	89.4%	17.3	73.4%	12.0
Wemborough Road Right	101.7%	9.6	93.0%	7.9
Marsh Lane Left Ahead	96.6%	16.6	91.2%	10.2
Marsh Lane Right Ahead	97.4%	18.4	92.2%	11.3

2.14 In the base + development 2020 scenario the junction is significantly over capacity on the same arms of the junction. On this basis the applicant has proposed a junction improvement to increase capacity at the junction to accommodate the additional traffic. A high proportion of the additional traffic generated by the development (71%) will be travelling through this junction. The table below indicates the typical queue lengths in the peak hours and percentage of capacity used (DoS).

Table 6.2 Whitchurch Lane / Honeypot Lane / Wemborough Road / Marsh Lane – 2020 Base + Development

Arm	AM Peak Hour		PM Peak Hour	
	DoS	Queue	DoS	Queue
Whitchurch Lane Left Ahead	82.1%	14.4	72.8%	11.9
Whitchurch Lane Right	60.8%	1.9	51.9%	1.9
Honeypot Lane Left Ahead	110.1%	32.0	94.4%	15.3
Honeypot Lane Right Ahead	110.3%	34.3	95.2%	17.0
Wemborough Road Left Ahead	87.4%	16.9	76.4%	13.2
Wemborough Road Right	104.5%	11.5	97.9%	10.3
Marsh Lane Left Ahead	108.1%	31.6	91.9%	10.5
Marsh Lane Right Ahead	108.6%	34.8	93.0%	11.6

2.15 It is considered that pedestrian safety would be improved by including a controlled crossing facility over the northern Marsh Lane arm in order to

connect pedestrian traffic from the school with bus stops on the northern side of Whitchurch Lane.

2.16 Detailed investigations have been undertaken at the Wemborough Road / Honeypot Lane / Marsh Lane junction in order to improve capacity and to provide additional controlled pedestrian crossing facilities at the signalised crossroads. An improvement scheme has been developed incorporating an additional controlled pedestrian crossing point on the Marsh Lane arm with highway modifications including carriageway widening on the north, west and southern arms to include additional traffic lanes. Appendix 16 in the Transport Assessment gives details of the proposed scheme. The table below indicates the typical queue lengths in the peak hours and percentage of capacity used (DoS). This demonstrates that the junction improvement would be within capacity taking account of traffic growth and additional trips from the development.

Table 8.1 LINSIG Output – '2020 Base + Development' (Proposed Junction Layout)

Arm	AM Peak Hour		PM Peak Hour	
	DoS	Queue	DoS	Queue
Whitchurch Lane Left Ahead	78.8%	16.4	68.1%	12.7
Whitchurch Lane Right	58.0%	2.0	45.4%	1.9
Honeypot Lane Left Ahead	95.5%	17.1	85.2%	11.7
Honeypot Lane Right Ahead	93.3%	15.3	78.4%	10.9
Wemborough Road Left Ahead	84.1%	19.1	71.7%	14.2
Wemborough Road Right	98.0%	9.7	87.1%	7.9
Marsh Lane Left Ahead	97.2%	20.3	84.8%	9.8
Marsh Lane Right Ahead	97.6%	21.6	85.6%	10.5
Junction PRC (%):	-8.9%		3.3%	

2.17 The total cost of implementing the junction improvement is likely to be in the region of £250,000 - £500,000 subject to the need to divert statutory undertaker's plant. The applicant intends to undertake these works themselves via a section 278 highways agreement owing to the need to introduce the improvement in advance of the new school opening and also because of the limited time available to undertake the development and implementation of the scheme. The highway authority has agreed this approach as it minimises the risk to the Council in project managing and delivering the scheme and the fact that the developer is best placed to manage the risk this poses to its overall project timetable.

2.18 There is a negligible impact on the site access to the development and both scenarios modeled demonstrate sufficient capacity. No improvement is required at this location.

2.19 The modeling has shown that the roundabout (Wemborough Road / Abercorn Road / St Andrews Drive) in the base 2020 scenario has sufficient capacity to operate normally. In the base + development 2020 scenario the roundabout still remains within capacity and there is a minor increase in queuing and delay on the Abercorn Road arm in the AM peak and the Wemborough Road arm in the PM peak. Therefore no improvement is considered necessary at this location.

2.20 The Planning Committee has queried whether an improvement should be undertaken at the roundabout junction and whether the use of traffic signals instead should be considered. The applicant has provided additional information in a briefing note to compare the operation of the roundabout with traffic signals as an alternative. This assessment can be seen in Appendix C. The table below clearly demonstrates that the traffic signals would introduce more queuing and delay at the junction when compared to the existing roundabout.

Table 1 **Wemborough Road / Abercorn Road / St Andrews Drive Roundabout / Signals Queue Comparison**

Approach Arm	AM Peak Ave. Queue		PM Peak Ave. Queue	
	Roundabout	Signals	Roundabout	Signals
Wemborough Road (E)	6.8	14.2	21.3	16.1
St Andrews Drive	2.5	8.5	3.6	7.0
Wemborough Road (W)	3.1	7.8	3.0	6.4
Abercorn Road	10.9	14.0	3.6	12.5
TOTAL:	**23.3**	**44.5**	**31.5**	**42.0**

Arrival / departure times

2.21 The opening hours for the new school will be 07:00 - 17:30 and include a comprehensive range of pre and post-school activities including a breakfast club (07:00 – 08:00) and additional education / training and sporting activities after school which will operate on a daily basis.

2.22 Separate start and finish times by key stage will be introduced and in conjunction with pre and post school activities this will result in staggering the arrival and departure of traffic during the peak periods in order to minimise the impact of school-related trips on the operation of the surrounding transport network at peak times. The table below gives details.

Table 4.1 **Proposed School Start and Finish Times**

Time	Activity	No. Pupil Arrivals / Departures
Morning		
07:00-08:00	Breakfast Club	60
07:45	Key Stage 4 Registration	320
08:15	Key Stage 3 Registration	520
09:45	Key Stage 5 Registration	340
Evening		
15:45	Official KS3 & KS4 end of day	400
16:45	KS3/KS4 After School Clubs end	500
17:30	Official KS5 end of day	360

2.23 The majority of staff and students of AHFS will be arriving and departing at different times to those of the existing Whitchurch Schools, which operate start times of 08:45/08:55 and finish times of 15:15/15:20.

Vehicular access

2.24 During the public consultation process suggestions were made with regard to creating a one way through route from Marsh Lane to Wemborough Road to accommodate vehicular traffic. The proposal was evaluated, however, this approach was not recommended because it would encourage more car trips and would increase usage of an access point which is too close to the existing traffic signals junction. This would cause conflict between vehicles waiting to turn and through traffic increasing delays for all traffic. As Marsh Lane is an important main distributor route in the area with bus routes it is necessary to ensure journey time reliability.

2.25 A significant concern from using this access point would be the inevitable problem caused by parents dropping off and picking up passengers on Marsh Lane and potentially causing significant safety issues with vehicles stopped on a busy route and children potentially crossing between parked cars and queuing vehicles. Such behaviour would be disruptive to traffic flow and effect the operation of the signals as well as resulting in pedestrian safety being compromised. Similar situations in other parts of the transport network have been extremely difficult to enforce and so this has been designed out of the proposed access arrangements for AHFS.

2.26 The existing access to the school from Wemborough Road will be used for the Whitchurch schools and the proposed AHFS. An assessment of capacity at the junction has demonstrated that with the staggered start and finish times it will be able to cope with all the movements at the existing junction without modifications being required.

School Transport

2.27 Whilst a significant proportion of students within the catchment area will be able to use a public bus service, or combination of bus services to travel to school, it is proposed to supplement this with a private school operated bus service to accommodate the estimated demand to travel by bus.

2.28 On this basis at least half of the trips generated by AHFS will be accommodated by either public transport services or a school bus service provided by AHFS. The trip matrix above has indicated that in the AM period 294 trips will use public transport and 150 trips use the school bus. In the PM period 454 trips will use public transport and 150 trips will use the school bus.

2.29 In the travel plan it is proposed that the school minibus service will accommodate 50 students and will run 3 services (150 students in total) in both the AM and PM periods to cater for those students that do not have direct access to a bus route and to reflect the staggered school start / finish times by key stage. A route and details of pick-up / drop-off points have been identified within the School Travel Plan to demonstrate that it is feasible arrangement.

2.30 Planning Committee Members in February and in May queried whether AHFS could increase the number of school-operated minibuses to minimise the number of pupils being brought to school by car. In this regard it is necessary to consider that the trip matrix information above is based upon similar types of development in the TRICS database and reflects what the likely take up of travel by bus will be. As travel choices are ultimately made by the travelling public the use of this database provides a realistic view of the achievable modal split based on other sites that are already in operation. AHFS have indicated the split between public and private bus travel to achieve this proportion of trips by bus.

2.31 The proportion of trips by car is estimated in the trip matrix above as 21.7% in the AM period and 8.7% in the PM period. This is an overall average of 15.2% for the car mode which compares favourably with TfL's latest Travel in London Report 8, issued in 2015, which indicates the proportion of secondary school travel to school in outer London averages 16%. The school travel plan does reflect an on-going commitment to promote the use of school buses to ensure that all opportunities to minimise car journeys are made and will be subject to regular review.

2.32 AHFS have indicated that the school bus is funded by parents and there is no limit on the number of minibuses that could be run to serve the school at Whitchurch Playing Fields.

Public Transport

2.33 The nearest public bus stops to the development site are located on Wemborough Road, the closest being 250m west of the pedestrian entrance to the school. The bus stops further west are provided with bus

shelters, seating, timetable information, with the exception of one stop (BL) which is not provided with a shelter. The stops are served by route 186. To the east of the site, services 79, 186 and 340 stop regularly along Whitchurch Lane (B461) and benefit from shelters, seating and timetable information. The 324 service runs along Abercorn Road / St Andrews Drive to the west of the playing fields. The walking route from the school to the bus stops on the south side of Whitchurch Lane is via two controlled crossing facilities.

2.34 The closest bus stop for Route N98 is located 480m south of the site on Honeypot Lane and is provided with a bus shelter, seating and timetable information. Abercorn Road, west of the school, links bus service 324 which stops approximately 420 metres from the school entrance. The service runs between Stanmore London Underground Station and Brent Cross via Kingsbury. A zebra crossing at the roundabout, south of Abercorn Road allows passengers to cross the road in order to walk to the school.

2.35 The nearest rail / London Underground station to the proposed school is Canons Park, approximately 600 metres (10 minute walk-time) to the east. Canons Park is operated by London Underground on the Jubilee Line located between Stanmore to the north and Queensbury to the south. A service is provided every 5 minutes and bus routes 79, 186 and 340 stop outside the station. Edgware Station (London Underground) is the northern terminus on the Northern Line, approximately 2.4km from the proposed site and is also served by bus services 79, 186 and 340. Services arrive in Edgware every 12 minutes.

2.36 Transport for London (TfL), in their capacity as the regional transport authority responsible for the provision of public transport, have assessed the impact of additional bus passengers from the development on the existing bus routes in the area based on the trip matrix above. Their assessment is that only route 186 experiences capacity concerns at peak times and is the only route that requires some mitigating measures.

2.37 TfL have confirmed that Mayoral funds are available to mitigate the public transport impacts of free school developments, and they will contribute £75,000 to operate an additional AM and PM peak service on route 186. The bus will be double-deck and accommodate 87 seated passengers. This is considered sufficient to accommodate the additional trips generated by the development. Appendix C provides further details.

2.38 TFL have also indicated that if additional capacity is required this fund will provide the means to pay for additional services. Therefore it is possible to review where the demand is generated after the school opens and still be able to make any necessary changes.

<u>Pedestrians</u>

2.39 Pedestrian infrastructure within the vicinity of the site is of a good standard with an illuminated local footway network accommodating the main pedestrian desire lines in the area.

2.40 Wemborough Road has a “pelican” pedestrian crossing located approximately10 metres from the main site entrance to the playing fields which provides a crossing facility by the main access to the existing Whitchurch Schools, playing fields and proposed development.

2.41 A range of pedestrian crossing facilities are in place around Stanburn School in Abercorn Road. All the approaches to the roundabout at Wemborough Road / Abercorn Road have crossing facilities provided. Wemborough Road (west side) and Abercorn road have “zebra” pedestrian crossings and Wemborough road (east side) and St Andrews Drive have pedestrian refuge islands. There is also another pedestrian refuge island further along Abercorn Road just north of Stanburn School.

2.42 Located to the east of the site is a signalised crossroad junction at Marsh Lane / Whitchurch Lane (B461) / Honeypot Lane (A4140) and Wemborough Road which has pedestrian crossing points with tactile paving and pedestrian refuge islands on all arms of the junction. The Honeypot Lane crossing point is provided with a staggered controlled pedestrian phase.

2.43 As a consequence of the development generating additional pedestrian traffic there is a need to provide an additional controlled crossing point at the traffic signals on the Marsh Lane arm, explained previously, owing to the increase in pedestrian movements and greater need to access the bus stops on Whitchurch Lane.

Cycling

2.44 Cycling has a low mode share in the trip matrix above which reflects the low take up of cycling in Harrow currently. There is, however, a network of cycle routes in the area connecting with key destinations in the borough which are signed and have advisory cycle lane markings in the vicinity of the proposed school. These provide the opportunity for students / parents / staff to cycle to and from school on dedicated routes during school times.

2.45 The traffic signals junction Marsh Lane / Whitchurch Lane (B461) / Honeypot Lane (A4140) and Wemborough Road has advanced stop lines and holding areas on all arms of the junction to assist cyclists turning at the junction.

2.46 Where dedicated cycle routes are not present, carriageway widths are wide enough to accommodate both cyclists and vehicles and forward visibility is good enough to provide adequate inter-visibility between cyclists and vehicles.

Parking (within development)

2.47 There is no prescriptive car parking standard within the London Plan or Harrow Council’s Development Management Policies document in respect of education-based land uses. It is proposed therefore to provide a total of 69 parking spaces (including 5% disabled provision, 10% active electric vehicle charging points and 10% passive electric vehicle charging

points). This level of parking is considered appropriate based on site specific demand for the school and any proposed 'out of hours' leisure activities. The disabled and electric vehicle provision accords with London Plan standards and reflects consultation with the GLA. The implementation of the School Travel Plan will seek to minimise travel by car, and thereby reduce impact on parking accumulation within the car park.

2.48 The figure of 69 car parking spaces has been derived on the basis of the travel behaviour of existing AHFS staff. The current AHFS Travel Plan indicates that 53% of staff travel by car with a further 24% of staff car sharing. In terms of preferred mode of travel, 41% of staff said they would prefer to travel by car, whilst 41% would prefer to car share. An average of these figures would see a 63.3% proportion of staff arriving / departing school by car. On the basis that the school will be targeting a 6% modal shift away from car travel as part of achieving a STARS 'Gold' accredited Travel Plan, it should be expected that the proportion of staff travelling to and from school by car will fall to c. 57.3%. Applying this to 120 FTE staff would therefore require a parking supply of 69 spaces.

2.49 Whilst it is envisaged that the proportion of staff driving to school may increase further over time, it is considered that 69 parking spaces will provide sufficient parking for staff, visitors and for activities outside of school hours. The level of parking is considered a balance, such that it does not represent an over-supply of parking that would encourage staff to travel to school by car.

2.50 Specific guidance in respect of cycle parking is provided in the adopted London Plan Further Alterations (March 2015) document. It is proposed to provide 1 long-term cycle parking space per 8 students / staff plus an additional short stay space per 100 students. In this regard, at full capacity, the school will provide as a minimum covered long-stay cycle parking for 173 cycles and 12 additional short stay spaces. This will support cycle trips undertaken by pupils and staff, which is expected to be in the order of 10 movements during the peak hour periods. This is anticipated to increase significantly through the Travel Planning process, which will focus in particular on cycle training, maintenance and safety.

<u>Parking (access road and car parks)</u>

2.51 Parking demand data was obtained in order to gauge current parking levels within the existing car parks and access road to the south of the site in order to assess the impact of the development on the availability of parking spaces. The car parks have a total of 102 spaces and is the optimum location for school related set-down / pick-up activity, in order to reduce the risk of these activities occurring on the public highway and being in conflict with through traffic.

2.52 Appendix 15 in the Transport Assessment gives details of the parking accumulation calculations. Under existing traffic conditions the car parking spaces reach capacity during the AM peak at 08:45 and during

the PM peak at 15:00 & 15:15 for the periods at the start and end of the Whitchurch Schools days.

2.53 The car parking accumulation predicted in the future takes account of the AHFS traffic, picking up and dropping off, based on staggered start and finish times as explained previously, combined with the additional traffic linked to the expansion of the Whitchurch schools. This has highlighted that there is a significant shortfall in capacity at 08:45 – 09:00 and 15:00 – 15:30 of over 50 vehicles which is predominantly caused by the expansion of Whitchurch Schools rather than the additional traffic generated by AHFS. It is suggested in the assessment that the AHFS travel plan mitigates any potential impact of AHFS traffic by encouraging further travel by sustainable modes to reduce car usage.

2.54 The STP for Whitchurch School, which was recently revised following the approval of the school expansion for that school, does indicate an action to introduce parking controls into the existing parking areas and access road in 2016/17 and the council's traffic team is currently investigating the development of a scheme to be funded from funds for highway measures related to school travel plans in this year's TFL local implementation plan programme of works.

2.55 This area of land is not highway but is land in the ownership of the Council. The introduction of a parking scheme would therefore require the creation of an off street parking places order to control traffic and could be enforced by the Council's parking enforcement team.

School Travel Plan (STP)

2.56 Harrow places a strong emphasis on developing School Travel Plans in order to promote sustainable travel modes including walking, cycling and the use of public transport to reduce travel by car as well as delivering health benefits and a reduction in air pollution.

2.57 AHFS is committed to implementing a TfL STARS accredited Travel Plan at the proposed development site and has already achieved STARS 'Gold' accreditation for the 2014/2015 academic year at the existing school at Common Road demonstrating their commitment to travel planning measures and achieving their targets / objectives.

2.58 The key objective of the STP is to set out a package of measures for reducing the number of car trips generated by parents and staff at the school and to improve safety on the school journey. The planning obligation will be secured by way of a Section 106 Agreement.

2.59 Annual travel surveys of staff and students will be conducted, and survey results will be submitted to Harrow Council for monitoring. Following initial occupation, travel surveys will be carried out in the spring term of the 2017/2018 academic year. The School's Travel Plan Coordinator will be responsible for undertaking the initial and subsequent surveys as well as monitoring other aspects of the Travel Plan.

2.60 The TfL STARS accredited Travel Plan will be underpinned by a comprehensive and deliverable Action Plan. The Action Plan will clearly outline a list of actions to be undertaken so as to promote the Travel Plan to students, parents/ carers and staff. The success of the Travel Plan will be judged against TfL STARS accreditation criteria which rewards schools for efforts made toward reducing the travel impact of their activities with three accreditation levels, Bronze, Silver and Gold.

2.61 The school has indicated that it is committed to the regular monitoring and reviews of the STP as a means of ensuring that it meets the aims, objectives and targets as set out within the Plan. The output of the annual monitoring and review process will be a Monitoring Report made available to the Council and other stakeholders.

2.62 If targets are not being met the Schools travel plan coordinator will, in consultation with the Harrow Council School Travel Plan Officers, amend the Action Plan detailing the necessary activities to be undertaken and timescales for the implementation of recommendations/ modifications.

2.63 The council travel planning officers have worked closely with AHFS and their transport consultant to assist them with the development of an appropriate and effective STP document which has been developed in conjunction with the transport assessment. Discussions with Whitchurch School and Stanburn School have been held to ensure there is a coordinated approach to the school travel plans. The main initiatives included in the AHFS STP are:

- Introduce a travel Plan Coordinator responsible for delivering the aims and objectives of the STP,
- Introduce a Travel Plan working Group to review travel plan objectives, targets and surveys,
- Introduce staggered start and finish times for key stages as well as pre and post school activities to spread the arrival / departure rate of students and minimize the impact on the transport network,
- The implementation of a bus service to serve those students within the catchment area of the school that do not have direct access to existing public transport routes,
- Travel Information on the School Website, in the School Prospectus and on notice boards,
- Engage with pupils and parents to promote principles of highway code, and remind parents of parking awareness during school drop off and pick up parents,
- The establishment and operation of a School Car Share scheme,
- Promotion of Walking and Cycling as viable modes of travel amongst students and staff,
- Active encouragement of the use of existing, local public transport services for access to the school,
- The implementation of a personalised sustainable travel planning service,
- Working in partnership with Travel Plan officers at the Council and TPC's at other local schools,

- Use of marshalls on site for both AM and PM pick up / drop off periods every school day to manage traffic flow,
- Provide a staff prescence at key crossing locations to promote safety of staff, students and visitors,
- Parents agreeing and signing a travel plan charter committing to the minimisation of car travel wherever possible.

2.64 The main target used to judge the success of a travel plan is considered to be the change in modal split of trips from cars to non-car modes. The STP sets out an ambition to achieve STARS silver accreditation within 1 year and gold accreditation within 2 years. The table below sets out the proposed modal split targets to achieve this.

Table 7.2 Travel Plan Targets

Mode	Baseline Modal Split*	2017/18 (540 students)	2018/19 (720 students)	2019/20 (900 students)	2020/21 (1080 students)
Car Occupants	15%	12%	9%	9%	9%
Cycle	1%	2%	3%	3%	3%
Walk	33%	34%	35%	35%	35%
Public Transport	36%	37%	38%	38%	38%
School Bus	15%	15%	15%	15%	15%
TOTALS	**100%**	**100%**	**100%**	**100%**	**100%**

2.65 The Planning Committee has queried whether marshaling activities of both AHFS and Whitchurch schools can be coordinated to manage traffic flow more effectively and also asked whether parking controls can be introduced in the parking areas to deter long term parking, particularly sixth form students, to maximize space for drop off and pick up activity.

2.66 With regard to marshaling it is quite clear that the different start and finish times of AHFS and Whitchurch schools will mean that there will not be any simultaneous drop off and pick up activity. Currently Whitchurch School does not organize any marshaling and so AHFS will be the only school providing marshaling for drop off and pick up specifically for AHFS traffic which occurs at different times of the day to both Whitchurch and Stanburn schools.

2.67 As mentioned previously The STP for Whitchurch School indicates an aspiration to introduce parking controls into the existing parking areas and access road to address additional dropping off / picking up associated with the school expansion.

2.68 Currently the Council school travel planners are arranging a meeting with Whitchurch and Stanburn schools to seek a wider commitment to work together on their school travel planning objectives to maximise the impact

of combined initiatives on transport modal shift and that each school will be asked to sign a statement to reinforce this commitment.

2.69 With regard to the sixth form at AHFS they will be subject to Travel Plan monitoring, targets and enforcement. It is anticipated that approximately half of the sixth form will be of driving age at any one time and there could be around 20 sixth formers driving to school. AHFS have indicated that these students will be educated on inconsiderate parking practices and liaison between AHFS and the local community will be maintained to ensure any such issues are highlighted and addressed expediently.

Refuse Collection, Deliveries & Servicing

2.70 Given the nature of the proposed development, the number of service vehicles that will deliver to AHFS on a daily or weekly basis will be minimal. These will be limited to waste collection, deliveries to the canteen and general supplies. A framework Delivery and Servicing Plan (DSP) has been developed and is included as part of the planning submission. Conclusions within the DSP include the following:

- The number of delivery and servicing movements at the Avanti House Secondary School would be minimal.
- The majority of delivery and servicing movements would be undertaken by a vehicle no larger than a transit van, with swept path analysis undertaken for a range of access options.
- Servicing movements would as far as possible be undertaken outside of school start / finish times and would therefore not conflict with access to cycle parking;
- Refuse collection would be undertaken within the school, outside of school operational hours.

2.71 Swept path analysis of vehicles has also been undertaken and appended to the DSP demonstrating that all delivery, servicing, emergency and refuse collection vehicles can enter and exit the development site in a forward direction adequately.

Proposed Construction Activities and mitigation

2.72 The construction works are programmed to take a total of 68 weeks, with a view to the school being operational at the beginning of the 2017/2018 academic year.

2.73 In order to mitigate the impact of construction vehicle movements we would recommend they are restricted during morning and evening peak hours. Measures to protect existing footways and marked pedestrian routes using barriers / signage, as appropriate should also be in place.

2.74 Conflict between construction site traffic and Whitchurch School traffic / pedestrian movements will be avoided wherever possible and in particular during school set-down / pick-up periods, when parents and pupils are most likely to be circulating the car park area.

2.75 The internal traffic will be managed to avoid any congestion within the school site associated with the relocation of the existing car park as this could restrict the movement of traffic within the school grounds.

2.76 The routes are assigned to direct and strategic roads and as such drivers would be expected to comply with the preferred routing method i.e. via the M1 / A41 / A410 Spur Road / A410 London Road / A4140 Marsh Lane and Wemborough Road.

2.77 The contractor must sign up to Harrow Council's Considerate Contractors Scheme, and develop a Construction Management Plan.

2.78 A framework Construction Logistics Plan is included as part of the planning submission and provides swept path analysis to confirm that construction vehicle access can be gained to the site, with the ability to turn on site and depart in forward gear. Any modifications required to the access way to facilitate the movement of construction vehicles to and from the school, will be subject to agreement.

Conclusion

2.79 The proposed school will have an impact on the existing highway network and this has been considered fully within the transport assessment, travel plan and briefing note. It is not considered that there will be any residual cumulative impacts in terms of highway safety or on the operational capacity of the surrounding transport network providing the mitigating measures identified are put in place.

2.80 Details of interventions are summarised in the table below:

Main interventions	Comments
Junction improvement to the Marsh Lane / Honeypot Lane / Whitchurch Lane / Wemborough Road junction	This required to address the shortfall in capacity demonstrated in the transport modeling in the year 2020 and to accommodate an additional controlled crossing point on Marsh Lane for the predicted increase in pedestrian traffic. The applicant will introduce the scheme via a section 278 agreement (estimated costs range between £250k - £500k).
Transport for London to provide an additional bus on route 186 in the AM and PM peaks	TFL have identified a shortfall in bus capacity and will use mayoral funding (£75k) intended to support free schools public transport to provide additional capacity (87 passengers in both AM and PM peaks).
The school to provide a private school operated bus service to supplement the existing bus network.	This measure is required to to cater for those students that do not have direct access to a bus route to ensure that the travel by bus mode is maximised (150 passengers in both AM and PM peaks)
AHFS to introduce staggered start and	This will minimise the impact on the peak periods of traffic flow and manage the flow of

finish times and on site marshalling during pick up / drop off periods	traffic more effectively at school opening and closing times in the access road and parking areas.
Introduction of a school travel plan, school travel plan coordinator and school travel plan working group	Development of an action plan to achieve STARS silver accreditation by 2017/18 and gold accreditation by 2018/19 The proportion of travel by car mode is proposed to reduce from a base of 15% to 12% and 9% respectively.
Introduce parking controls in existing access road and car parks	This is identified separately in the STP for Whitchurch School and is currently being investigated by the Council's traffic team to implement a scheme in 2016/17.

Section 3 – Further Information

3.1. The purpose of this report is to inform the Panel about the transport implications of the proposed development. Details of the applicant's transport assessment, travel plan and briefing note can be seen in **Appendices A, B & C**.

Section 4 – Financial Implications

4.1. There are no direct financial implications to the council. Any suggested transport mitigations would be taken forward by the applicant.

Section 5 - Equalities implications

5.1 Was an Equality Impact Assessment carried out? No.

5.2 The Transport Local Implementation Plan (LIP) sets out the relevant transport policies and objectives of the Council and was subject to an Equalities Impact Assessment which identified that there was no negative impact on any of the protected groups. The transport mitigations in the report accord with the principles of the Council's LIP.

Section 6 – Council Priorities

6.1 The transport mitigations suggested in the report will contribute to achieving the administration's priorities:

- Making a difference for the vulnerable
- Making a difference for communities
- Making a difference for local businesses
- Making a difference for families

Section 7 - Statutory Officer Clearance

Name: Jessie Man	✔	on behalf of the Chief Financial Officer
Date: 10/06/16		

Ward Councillors notified:	**YES**

Section 8 - Contact Details and Background Papers

Contact:

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Background Papers: