

Beeslack Comments:

Midlothian Council

Trip Generation

Please provide further information on how development trip numbers have been arrived at, and how this is informed by re-drawn catchment areas and existing staff and existing trips on the network

Sweco were provided with pupil and staff numbers by the Council.

A pupil mode share was applied using the most recent Hands Up Survey data for the Midlothian area. A staff mode share of 85% car driver was applied based on information provided by the Council.

The development trip numbers assume 100% pupil and staff occupancy.

The pupil distribution was based on catchment information provided by the Council, which included the number of pupils arriving from specific areas within the catchment. Staff distribution was based on the distribution of staff at the existing Beeslack High School.

With respect to staff vehicle movements, existing staff movements were removed from the base traffic flows and the vehicle movements associated with the new school were added on.

With respect to pupil related vehicle movements, it was assumed that vehicle trips associated with the existing school are linked to onward travel for employment and therefore are already on the network surrounding the new site. Notwithstanding this, the vehicle movements associated with pick-up/drop-off were added to the site accesses and to the A703 Seafield Moor Road / Seafield Road / Bush Farm Road junction.

Please confirm the number of trips which have been removed from the network due to these being existing trips on the network, please show how this is derived from existing and proposed trip distribution

38 existing Beeslack High School staff trips have been removed, based on staff travelling to the existing Beeslack High School using the road network within the project study area. The distribution of existing staff has been based on staff origin data for the existing Beeslack High School, as provided by the client. Please see response above for further detail on staff and pupil distribution.

Please confirm if and how many additional bus trips have been added to the road network traffic flows

An additional 8 school bus trips have been added to the road network. It is also assumed that a proportion of pupils will use Lothian Bus services which run between key locations in the catchment area and bus stops adjacent to the new school.

Please confirm how calling of pedestrian stages have been adjusted to reflect changed pedestrian movement assignments and distribution

The models for the signalised junctions surrounding the site assume that the pedestrian stage will be called during every cycle.

Please provide a pedestrian flow development diagram and a vehicle flow diagram which includes all new trips and extra buses

The pupil mode share and associated trips by mode is provided in Table 6.4 (pg47 of the TA). This indicates that c.580 will walk to school. It is assumed that the vast majority of walking trips will

originate from Roslin and Bilston. On that basis, it predicted that the majority of pedestrian movements associated with the site will use the A703 Seafield Moor Road and Seafield Road.

Vehicle flow diagrams are provided in Appendix F.

How is Seafield Moor Road junction being designed? TA suggests this is still to be confirmed

The A703 Seafield Moor Road / Site Access junction will be designed as a 3-arm signalised junction. (Section 2.5.1.1). The preliminary layout will be sent separately.

Please confirm that Park and Stride numbers are correct, is this from staff?

A park and stride value of 48 school pupils (3%) has been calculated based on the Hands Up Scotland 2022 results for Midlothian secondary schools. This refers to children that will be dropped off close to the school, outside of the school grounds, and complete their journey on foot. (Section 6.3.1 of TA).

Some errors are present in the trips table, 35% (not 25%) of trips are walking which contributes 560, and 59% of trips for Bus should be 944, not 784 as stated

Apologies, this is a typo in the report. The walking value should be 35% (560 pupils) and the bus value should be 49% (784).

Please confirm reasoning that only 10% of pupils arrive by car

As outlined in the TA, this is based on the Hands Up Scotland 2022 results for Midlothian secondary schools. (Section 6.3.1 of TA).

Traffic Modelling

Please confirm that the A703 / Site access junction has been modelled with the pedestrian stage appearing every cycle

We confirm that the junction has been run with pedestrian stages running every cycle.

Many of the junctions have Practical Reserve Capacities of well over 100%, this is quite unusual, please confirm the validity of these results, or provide LINSIG and Junctions 10 traffic models for review – confirm that pedestrian stages are called every cycle

JTC data for the A701 junctions was provided by Systra but queue data was not, so models were not able to be calibrated in this regard. The queue data has been requested. The modelling files are provided with this response.

Comments - Active Travel

Active Travel path should be provided on West side of Seafield Moor Road

Midlothian Council advised that an active travel path will not be provided on the west side of Seafield Moor Road but that the existing active travel path on the eastern side would be widened. A formal crossing will be provided at the eastern site access junction, offering a connection to the existing footway on the eastern side of the A703 Seafield Moor Road which links to the wider active travel network.

Cycle Parking – 22 for staff and 320 for pupils, 19 visitors' spaces, 7 for vets – is this excessive considering no off-road cycle route exists to access Beeslack?

Cycle parking has been proposed in line with Council standards. (Section 2.4.2 of TA).

Comments – Traffic Signals

Junctions at A703/ Seafield Road, the new school access junction on the A703 and the A701/ A703 should have coordinated, linked operation

The minimum distance between sets of signalised junctions is 250m, extending to 500m. Generally linked junctions are less than 200m apart (ref to Traffic Signs Manual). Given the distances between the junctions, and the results indicating that the junctions will perform adequately, these have been modelled in isolation.

Comments – EV Charging, Parking & Electrical/ Lighting

214 vehicle spaces are to be provided at the community campus, with 42 spaces at the Vets practice

A total of 234 vehicle parking spaces will be provided at the school site, 21 of which will be designed as accessible bays. (Section 2.5.2.1 of TA).

A total of 42 vehicle parking spaces will be provided at the vet practice, 3 of which will be designed as accessible bays. (Section 2.5.2.2 of TA).

A total of 32 bays will be designed with vehicle charging infrastructure (29 standard and 3 accessible) – this is 12% of total

32 bays within the school development will be designed with EV charging infrastructure, which is c.14% of the total 234 bays.

Transport Scotland

The TA advises that Sustrans' 'Hands Up Scotland' survey data for secondary and special education needs (SEN) schools from 2021 has been utilised for the Midlothian region. Is there more up-to-date information available, and for separate schools? Is there a separate school that might better reflect the mode share for the proposed location / catchment?

The Sustrans 'Hands Up Scotland' data for SEN schools in Midlothian was used as it is the most reliable source of data available at the time of preparing the report. School specific data was not available.

It is noted that no specific calculations / reasoning has been provided regarding how the adjusted pupil mode share value of 35% (for bus) was arrived at. No reasoning has been provided as to why reassignment of walking trips is to bus trips only.

35% bus mode share was taken from the secondary school pupil mode share values in the 'Hands Up' Scotland survey data for secondary schools in Midlothian.

Walking trips have been reassigned to bus as school bus services will be provided and a proportion of pupils will use Lothian Bus services which run between key locations in the catchment area and bus stops adjacent to the new school.

The TA states that "it is assumed that pupils will car-share where possible to do so. Therefore, it has been assumed that there will be 1.5 pupils per private car". No justification / source for assuming 1.5 pupils per private vehicle.

We have applied an occupancy of 1.5 pupils per car based on the Scottish Household Survey car sharing value for all purposes. We sense checked this against the Currie High School Transport Statement, which used a pupil per vehicle occupancy value of 1.4, taken from the Scottish Household Survey. We were unable to locate this data on the Scottish Household Survey website, but it indicates that the value used within our TS is consistent with the methodology used within reports for other similar developments.

No detailed analysis or breakdown has been provided regarding how pupil trips have been worked out based on the catchment areas.

Catchment transport numbers were provided by Midlothian Council, from which a distribution was calculated.

	2026/27	2027/28	2028/29	2029/30	2030/31
Bilston	251	255	263	274	288
Roslin	244	275	298	315	331
Paradykes	422	422	422	422	422

It was assumed that 75% of pupils from Bilston would walk and that 50% from Roslin would walk. The calculated percentage of vehicle trips arriving from each area within the catchment is provided below. The distribution of vehicle trips is weighted according to distance from the school.

Origin	%
Bilston	10%
Roslin	33%
Paradykes	57%
Total	100%