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South Heywood Commercial

Application for non-material amendment (S96a Town & Country Planning Act 1990) to planning permission 16/01399/HYBR for amended wording to Schedule 2 Conditions 10 & 11

Highways Technical Note 1

Comparison of Predicted Traffic Demand Levels

Prepared on behalf of

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1.0 INTRODUCTION & PLANNING CONTEXT

1.1 Overview

1.1.1 This Highways Technical Note (HTN) report has been prepared by Focus Transport Planning (Focus TP) on behalf of Russells South Heywood Limited to set out a review of predicted development traffic demand levels pertaining to the proposed non-material amendment to planning permission 16/01399/HYBR for amended wording to Schedule 2 Condition 10 and 11. The proposals effectively seek a change to the B2 and B8 employment land use ratio associated with the South Heywood Employment Area (SHEA) as defined by Schedule 2 Condition 10 to the hybrid planning consent, as well as an amendment to the parameters plan to extend the employment area into an area originally approved for residential use. The amendment to condition 10 is the relevant element of the proposal for the purposes of this HTN.

1.1.2 The current wording of condition 10 is reproduced below for reference:

> ***"The development hereby permitted shall provide no more than 94,819m2 of floorspace (GIA) for use within Use Class B8 of the Town and Country Planning (Use Classes) order (as amended) and no more than 40,637 m2 of floorspace (GIA) for use within Use Class B2 of the Town and Country Planning (Use Classes) order (as amended)."***
>
> ***Reason: In the interests of the safe operation of the highway network and in compliance with policies T2 and DM1 of the adopted Rochdale Core Strategy and the National Planning Policy Framework.***

1.1.3 The proposed amendment to the wording of the condition seeks the potential for an increase in overall B8 land use at the site, to allow for up to 115,599 sqm of B8 floorspace, with a consequential reduction in B2 floorspace, with the proposed revised condition wording as set out below:

> ***"The development hereby permitted shall provide no more than 115,599m2 of floorspace (GIA) for use within Use Class B8 of the Town and Country Planning (Use Classes) order (as amended) and no more than***

19,861m2 of floorspace (GIA) for use within Use Class B2 of the Town and Country Planning (Use Classes) order (as amended).”

1.1.4 This report has been prepared to consider the traffic generation implications of such a change in development land use mix at the SHEA. The report therefore covers the following matters:

- A review of the historically predicted traffic demand (in terms of total traffic volumes and HGV levels) associated with the SHEA scheme operating in accordance with the consented B2 / B8 land use ratio as set out in original Schedule 2 Condition 10 wording.

- Predicted traffic demand levels (total traffic & HGVs) associated with the proposed amended B2 / B8 land use ratio at SHEA, the subject of this S96a planning application.

- A review of the predicted net change in SHEA related development traffic levels (proposed amended B2 / B8 ratio v consented development B2 / B8 mix) and a commentary on the anticipated network operational and environmental effects of such changes.

2.0 CONSENTED DEVELOPMENT TRAFFIC LEVELS ASSOCIATED WITH SOUTH HEYWOOD EMPLOYMENT AREA

2.1 Consented Development Scheme

2.1.1 The current hybrid planning consent for the wider South Heywood Development Area (Planning Application Ref: 16/01399/HYBR) defines the SHEA development quantum as follows:

- 94,819 sqm (GIA) of B8 (warehouse / distribution) development floorspace:
- 40,637 sqm (GIA) of B2 (general industrial) development floorspace.

2.1.2 This represents a site wide land use ratio of 70% B8 / 30% B2.

2.2 Predicted Traffic Demand Associated with the Consented SHEA

2.2.1 Predicted development traffic levels associated with the SHEA were presented in the original 2016 Transport Assessment (TA) prepared to support the planning application for the wider South Heywood Development Area. At the request of Highways England, the demand estimates set out in the TA report were calculated via reference to highly robust 85th percentile peak hour trip rates as extracted from the TRICS traffic information database at that time. These trip rates are presented in **Table HTN2.1** below for reference (see also **Appendix HTN1**).

Table HTN2.1 – 2016 South Heywood Development Area Transport Assessment 85th Percentile Trip Rates

All Vehicle Trip Rates (Veh / 100sqm)

Veh / 100sqm	AM In	AM Out	AM Total	Int-Pk in	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	0.191	0.119	0.309	0.169	0.137	0.306	0.108	0.200	0.307
B2 Emp	0.665	0.349	1.014	0.371	0.374	0.744	0.165	0.507	0.672

HGV Trip Rates (HGV / 100sqm)

Trip / 100sqm	AM In	AM Out	AM Total	Int-Pk in	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	0.091	0.062	0.153	0.080	0.062	0.142	0.067	0.061	0.128
B2 Emp	0.031	0.029	0.060	0.033	0.038	0.071	0.023	0.016	0.039

2.2.2 In practice it is considered that these historical trip rate estimates are likely to represent a significant over-estimate of ultimate development scheme traffic demand at SHEA, being in excess of both a) 'average' demand values for the identified core land uses and, b) those trip rates recently utilised by Transport for Greater Manchester (TfGM) to inform the Locality Assessments for large-scale employment allocation sites identified in the Greater Manchester Strategic Framework (GMSF). Nevertheless, to allow for ease of comparison and a consistent assessment approach with the original TA work, these historical trip rates have been used for the review of potential changes in development traffic levels presented in the remaining sections of this report.

2.2.3 Application of the 2016 TA historical trip rates to the consented SHEA B2 / B8 development quantum gives rise to the following peak hour development traffic estimates:

Table HTN2.2 – SHEA Consented Peak Hour Traffic Demand Levels

All Vehicle Trip Demand

Vehs	AM In	AM Out	AM Total	Int-Pk in	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	181	113	**293**	160	130	**290**	102	190	**291**
B2 Emp	270	142	**412**	151	152	**302**	67	206	**273**
Total Trips	**451**	**255**	**705**	**311**	**282**	**592**	**169**	**396**	**564**

HGV Trip Demand

HGV	AM In	AM Out	AM Total	Int-Pk in	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	86	59	**145**	76	59	**135**	64	58	**121**
B2 Emp	13	12	**24**	13	15	**29**	9	7	**16**
Total Trips	**99**	**71**	**169**	**89**	**74**	**163**	**73**	**64**	**137**

2.2.4 Review of the above information suggests, that based on the robust absolute worst case 2016 TA trip rates, SHEA related traffic volumes of circa 705 (169 HGVs) vehicle movements and 564 (137 HGVs) vehicle movements could be expected to occur during the traditional weekday AM & PM 'rush hour' peak periods respectively. Such traffic levels, including the parallel off-peak forecasts, can be converted to an illustrative 24hr Annual Average Daily Traffic (AADT) estimate using local conversion factors for TfGM network modelling. These 24hr AADT estimates are as summarised in **Table HTN2.3** below:

Table HTN2.3 - Illustrative SHEA Consented AADT Demand Levels

AADT	Light Veh IN	Light Veh OUT	Light Veh TOTAL	HGV IN	HGV OUT	HGV TOTAL	Total Veh IN	Total Veh OUT	Total Veh TOTAL
B8 Dist	1050	1146	**2190**	1056	822	**1878**	2106	1968	**4068**
B2 Emp	2029	2100	**4126**	171	173	**344**	2200	2273	**4470**
Total Trips	**3079**	**3246**	**6316**	**1272**	**995**	**2222**	**4306**	**4242**	**8538**

3.0 DEVELOPMENT TRAFFIC LEVELS ASSOCIATED WITH PROPOSED AMENDED SOUTH HEYWOOD EMPLOYMENT AREA

3.1 Proposed Amended SHEA Land Use Quantum

3.1.1 The proposed S96a non-material amendment to the South Heywood planning consent seeks a change to the SHEA B2 / B8 employment land use ratio to allow for the following maximum development quantum:

- 115,599 sqm (GIA) of B8 (warehouse / distribution) development floorspace:
- 19,861 sqm (GIA) of B2 (general industrial) development floorspace.

3.1.2 The proposed change does not represent an increase in total development floorspace, but simply an amended site wide land use ratio of 85.3% B8 / 14.7% B2.

3.2 Predicted Traffic Demand Associated with the Proposed Amended SHEA Land Use Ratio

3.2.1 Predicted development traffic levels associated with proposed SHEA land use ratio have been calculated via the application of the historical 2016 South Heywood trip rates to the amended B2 / B8 development quantum set out in para 3.1.1. This exercise identifies the following alternative peak hour development traffic levels:

Table HTN3.1 – Peak Hour SHEA Traffic Demand for Proposed Amended Land Use Ratio

All Vehicle Trip Demand

Vehs	AM In	AM Out	AM Total	Int-Pk in	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	221	138	**357**	195	158	**354**	125	231	**355**
B2 Emp	132	69	**201**	74	74	**148**	33	101	**133**
Total Trips	**353**	**207**	**559**	**269**	**233**	**501**	**158**	**332**	**488**

HGV Trip Demand

HGV	AM In	AM Out	AM Total	Int-Pk in	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	105	72	**177**	92	72	**164**	77	71	**148**
B2 Emp	6	6	**12**	7	8	**14**	5	3	**8**
Total Trips	**111**	**77**	**189**	**99**	**79**	**178**	**82**	**74**	**156**

3.2.2 Review of the above information suggests robust absolute worst case traffic volumes for the amended employment development area of circa 559 (189 HGVs) vehicle movements during the traditional weekday AM 'rush hour' peak and 488 (156 HGVs) vehicle movements during the PM peak. Such traffic levels, including the parallel off-peak forecasts, can be converted to illustrative 24hr Annual Average Daily Traffic (AADT) estimates as summarised in **Table HTN3.2** below:

Table HTN3.2 - Illustrative SHEA AADT Demand Levels for Proposed Amended Land Use Ratio

AADT	Light Veh IN	Light Veh OUT	Light Veh TOTAL	HGV IN	HGV OUT	HGV TOTAL	Total Veh IN	Total Veh OUT	Total Veh TOTAL
B8 Dist	1280	1398	**2670**	1288	1002	**2290**	2568	2400	**4960**
B2 Emp	992	1026	**2017**	84	85	**168**	1075	1111	**2185**
Total Trips	**2271**	**2424**	**4686**	**1371**	**1087**	**2458**	**3643**	**3511**	**7144**

4.0 COMPARISON OF PREDICTED SITE WIDE DEVELOPMENT TRAFFIC DEMAND LEVELS

4.1 Comparison of Predicted Site Wide Peak Hour Traffic Demand

4.1.1 **Table HTN4.1** to this report sets out a comparison of the predicted worst case peak hour trip demand totals at the SHEA: i.e. Proposed S96a Amended Development Quantum v 2016 Consented Development.

Table HTN4.1 – Predicted Net Change in SHEA Peak Hour Traffic Demand Levels: Proposed S96a Amendment v 2016 Consented Development

All Vehicle Trip Demand

Vehs	AM In	AM Out	AM Total	Int-Pk in	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	+40	+25	**+65**	+35	+28	**+64**	+22	+42	**+64**
B2 Emp	-138	-73	**-211**	-77	-78	**-155**	-34	-105	**-140**
Total Trips	**-98**	**-48**	**-146**	**-42**	**-49**	**-91**	**-12**	**-64**	**-76**
%'tage	-21.8%	-18.8%	-20.8%	-13.5%	-17.5%	-15.4%	-7.0%	-16.1%	-13.4%

HGV Trip Demand

HGVs	AM In	AM Out	AM Total	Int-Pk in	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	+19	+13	**+32**	+17	+13	**+30**	+14	+13	**+27**
B2 Emp	-6	-6	**-12**	-7	-8	**-15**	-5	-3	**-8**
Total Trips	**+12**	**+7**	**+19**	**+10**	**+5**	**+15**	**+9**	**+9**	**+18**
%'tage	+12.6%	+9.7%	+11.4%	+10.9%	+6.7%	+9.0%	+12.5%	+14.5%	+13.5%

4.1.2 Review of the results of this exercise demonstrates that the proposed amendment to the SHEA development ratio could be expected to result in an overall net change in peak hour traffic movements of circa -75 to –145 trips per hour or -13.4% to -20.8%.

4.1.3 It is acknowledged that an increase in B8 development quantum (with associated reduction in B2 floorspace) could result in a small net increase in SHEA related HGV volumes of circa 18 – 19 vehicles per hour during traditional rush hour peak periods. In practice such relatively small rises in HGV traffic would be more than off-set by the much larger reductions in predicted total site traffic volumes (net change of -75 to -145 vehicles per hour).

4.1.4 A similar net-change comparison exercise has been carried out for the illustrative AADT traffic estimates, with the results summarised in **Table HTN4.2** below.

Table HTN4.2 – Predicted Net Change in Illustrative SHEA AADT Demand Levels: Proposed S96a Amendment v 2016 Consented Development

Vehs	Total Veh IN	Total Veh OUT	Total Veh TOTAL	HGV IN	HGV OUT	HGV TOTAL
B8 Dist	462	431	**892**	231	180	**412**
B8 Dist	-1125	-1162	**-2285**	-88	-89	**-176**
Total Trips	**-663**	**-731**	**-1394**	**+144**	**+92**	**+236**
%'tage	-15.4%	-17.2%	-16.3%	+11.7%	+9.2%	+10.6%

4.1.5 Review of the results of this illustrative AADT exercise demonstrates similar conclusions, i.e. that increasing the B8 development quantum, with an associated decrease in B2 floorspace, could be expected to result in a small net-increase in HGV trips (circa 235 movements per day), which would be off-set by the sizeable predicted net reduction in overall traffic movements from SHEA (1394 movements). Total development traffic reductions from the SHEA could potentially be of the order of 15% - 17% over the course of the illustrative average day.

5.0 SUMMARY

5.1 The proposed S96a non-material amendment to the South Heywood planning consent seeks a change to the B2 / B8 employment land use ratio associated with the SHEA to allow for the 115,599 sqm (GIA) of B8 (warehouse & distribution) floorspace and 29,861 sqm of B2 (general industrial) development. The proposed change does not represent an increase in total development floorspace, but simply an amended site wide land use ratio to 85.3% B8 / 14.7% B2.

5.2 The effects of this proposed change in development quantum can be expected to be a reduction in total traffic demand to / from the SHEA during both traditional key 'rush hour' peak periods and across the illustrative average day. Whilst the change in development ratio could result in a small net increase in HGV movements, this would be more than off-set by the overall reduction in total development related trips.

5.3 Based on the above review of issues, it is concluded that the proposed S96a amendment would not give rise to any highway operational or environmental concerns. Indeed, it could be reasonably expected that the proposals could potentially result in a net-reduction in overall traffic related effects, when compared to the current consented outline SHEA scheme.



APPENDICES



APPENDIX HTN1

South Heywood Employment Area: Development Traffic Comparison

2016 Outline Planning Consent (85th Percentile Trip Rates)

All Vehicles

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
Resi	0.184	0.502	0.687	0.203	0.198	0.401	0.484	0.309	0.793
B8 Dist	0.191	0.119	0.309	0.169	0.137	0.306	0.108	0.2	0.307
B2 Emp	0.665	0.349	1.014	0.371	0.374	0.744	0.165	0.507	0.672

HGVs

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
1000 Resi	0.008	0.006	0.015	0.005	0.006	0.011	0	0.007	0.007
B8 Dist	0.091	0.062	0.153	0.08	0.062	0.142	0.067	0.061	0.128
B2 Emp	0.031	0.029	0.06	0.033	0.038	0.071	0.023	0.016	0.039

2016 Transport Assessment: Consented Development

Total Employment	135,456	sqm
B8 Development	94,819	70%
B2 Development	40,637	30%

2016 Outline Planning Consent Trip Demand

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	181	113	**293**	160	130	**290**	102	190	**291**
B2 Emp	270	142	**412**	151	152	**302**	67	206	**273**
Total Employment	**451**	**255**	**705**	**311**	**282**	**592**	**169**	**396**	**564**

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	86	59	**145**	76	59	**135**	64	58	**121**
B2 Emp	13	12	**24**	13	15	**29**	9	7	**16**
Total Employment	**99**	**71**	**169**	**89**	**74**	**163**	**73**	**64**	**137**

Revised Development (S96a) B8 Units on Plots 1 & 2

Total Employment	**135,460**	sqm	Plot 1	83,599	sqm	(B8)
B8 Development	115,599	85.3%	Plot 2	32,000	sqm	(B8)
B2 Development	19,861	14.7%	Rest	19,861	sqm	(B2)

S96a Development: South Heywood Employment Area Trip Demand

All Vehicles

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	221	138	**357**	195	158	**354**	125	231	**355**
B2 Emp	132	69	**201**	74	74	**148**	33	101	**133**
Total Employment	**353**	**207**	**559**	**269**	**233**	**501**	**158**	**332**	**488**

HGVs

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	105	72	**177**	92	72	**164**	77	71	**148**
B2 Emp	6	6	**12**	7	8	**14**	5	3	**8**
Total Employment	**111**	**77**	**189**	**99**	**79**	**178**	**82**	**74**	**156**

Difference: S96a Application v 2016 Consent

All Vehicles

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	40	25	**64**	35	28	**64**	22	42	**64**
B2 Emp	-138	-73	**-211**	-77	-78	**-155**	-34	-105	**-140**
Total Employment	**-98**	**-48**	**-146**	**-42**	**-49**	**-91**	**-12**	**-64**	**-76**
Percentage Change	-21.8%	-18.8%	**-20.8%**	-13.5%	-17.5%	**-15.4%**	-7.0%	-16.1%	**-13.4%**

HGVs

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	19	13	**32**	17	13	**30**	14	13	**27**
B2 Emp	-6	-6	**-12**	-7	-8	**-15**	-5	-3	**-8**
Total Employment	**12**	**7**	**19**	**10**	**5**	**15**	**9**	**9**	**18**
Percentage Change	12.6%	9.7%	**11.4%**	10.9%	6.7%	**9.0%**	12.5%	14.5%	**13.5%**

S96a Application Trip Demand By Employment Area Access Point

Hareshill Road / SHLR	Sqm	Sqft
B8 Development	115,599	1,244,338
B2 Development		
	115,599	**1,244,338**

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	221	138	**357**	195	158	**354**	125	231	**355**
B2 Emp	0	0	**0**	0	0	**0**	0	0	**0**
Total Employment	**221**	**138**	**357**	**195**	**158**	**354**	**125**	**231**	**355**

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	105	72	**177**	92	72	**164**	77	71	**148**
B2 Emp	0	0	**0**	0	0	**0**	0	0	**0**
Total Employment	**105**	**72**	**177**	**92**	**72**	**164**	**77**	**71**	**148**

Pilsworth Rd (Plot 3)	Sqm	Sqft
B8 Development		
B2 Development	19,861	213,789
	19,861	**213,789**
	135,460	1,458,127

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	0	0	0	0	0	0	0	0	0
B2 Emp	132	69	201	74	74	148	33	101	133
Total Employment	**132**	**69**	**201**	**74**	**74**	**148**	**33**	**101**	**133**

	AM In	AM Out	AM Total	Int-Pk In	Int-Pk Out	Int-Pk Total	PM In	PM Out	PM Total
B8 Dist	0	0	0	0	0	0	0	0	0
B2 Emp	6	6	12	7	8	14	5	3	8
Total Employment	**6**	**6**	**12**	**7**	**8**	**14**	**5**	**3**	**8**

Main Access	62.6%	66.5%	63.9%	72.6%	68.1%	70.5%	79.2%	69.7%	72.7%
Secondary Access	37.4%	33.5%	36.1%	27.4%	31.9%	29.5%	20.8%	30.3%	27.3%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Main Access	94.5%	92.6%	93.7%	93.4%	90.5%	92.1%	94.4%	95.7%	95.0%
Secondary Access	5.5%	7.4%	6.3%	6.6%	9.5%	7.9%	5.6%	4.3%	5.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%