

# **Darlington Golf Club, Haughton Grange – Construction of new link road to Sparrow Hall Drive**

## **Planning Application Reference 10/00752/OUT**

### **Transport Assessment**

#### **1) Introduction**

In line with the advice in ‘Guidance on Transport Assessment’ (DfT/Communities and Local Government), discussion took place with the applicant in relation to submission of supporting transport information. It was the view that the development had relatively small transport implications and therefore only required a Transport Statement to be submitted in support of the application. A Transport Statement (TS) prepared by Simpson Coulson and Lees, Consulting Engineers, was submitted and the conclusion of this TS was that *‘the impact of the traffic from the proposed access road would be negligible on the local residents’*. Given the low predicted traffic flows the TS was accepted and no highway objections were raised.

There has, however, been significant local objection to the proposal and it was agreed that additional traffic surveys be carried out and a new Assessment prepared. This Assessment has been carried out in line with advice in ‘Guidance on Transport Assessment’

#### **2) Existing Site Information**

##### **2.1) Location**

The Golf Club is located to the North of Sparrow Hall Drive approximately 350m from the nearest residential properties.

Access to the Club is from Whinfield Road via Green Lane and a private road. Green Lane is a bridleway and the Golf Club have vehicular rights of access over this section of the bridleway.

Subsequent to the original surveys in March additional surveys have been undertaken in April and May, both neutral months. The most recent survey in May (Appendix 4) has shown a difference in traffic patterns with a change in the peak hours on Sparrow Hall Drive and an increase in traffic flows to and from the golf club in these peak hours:

*Sparrow Hall Drive – Baseline Flows (May)*

Vehicle Trips – total	Weekday AM Peak (8:00 – 9:00) - 5 day average	<b>163</b>
	Weekday PM Peak (17:00 – 18:00) – 5 day average	<b>193</b>
	Weekend Peak – Saturday (12:00 – 13:00)	<b>155</b>
	Weekend Peak – Sunday ( 12:00 – 13:00)	<b>148</b>

*Golf Club Access Road (May)*

Vehicle Trips (In/Out ) (May)	Weekday AM Peak (8:00 – 9:00) - 5 day average	<b>30</b>
	Weekday PM Peak (17:00 – 18:00) – 5 day average	<b>35</b>
	Weekend Peak – Saturday (12:00 – 13:00)	<b>65</b>
	Weekend Peak – Sunday (12:00 – 13:00)	<b>28</b>
	Peak 5 day average (12:00 – 13:00)	<b>43</b>
	Peak 7 day average (14:00 – 15:00)	<b>44</b>

All of the data obtained for Green Lane has been interrogated to obtain average daily flows ( Appendix 5). This data shows that the maximum five day average traffic flow is 38 vehicles per hour and the maximum seven day average is 37 vehicles per hour.

### 2.2.3) Public Transport/Cycling/Walking

There will be little change to the accessibility of the site. The proposed access to the Golf Club is on a section of Sparrow Hall Drive where visibility is good and as part of the development proposals dropped crossings and tactile paving will be provided on both sides of the road. There have been no reported personal injury accidents in the last five years that have involved pedestrians.

### **3) Impact of the Development**

#### **3.1) Network Capacity**

##### **3.1.1) General**

Within the Guidance on Transport Assessment there are suggested thresholds below which a formal assessment may not be needed. These thresholds are based on scenarios which would typically generate 30 two way peak hour vehicle trips. The results of the survey show that the majority of the hourly flows are below or close to that figure, with 5 day average flows of 30 and 35 in the AM and PM local network peaks (May survey). There are exceptions with hourly flows reaching 69, 60 and 68 at different times on Friday, Saturday and Sunday respectively however these flows do not coincide with peak flows on Sparrow Hall Drive and the combined flows at these times are well below the combined flows in the local network peaks.

The flows obtained by averaging all of the data for Green Lane demonstrates that the majority of the hourly flows range between 20 and 40 vehicles per hour and such flows would be unlikely to have a significant impact on the local highway network.

##### **3.1.2) Sparrow Hall Drive**

Sparrow Hall Drive would be considered as a Link Road (category 4a) in the Hierarchy of Roads in the Darlington Borough Council Design Guide. The Design Guide provides no advice on capacity of such roads. However, Advice Note TA79/99 of the Design Manual for Roads and Bridges does provide advice for Urban Motorways and Urban All Purpose Roads. Capacities for road widths in excess of 6.1m are provided.

Within the descriptions in the Advice Note Sparrow Hall Drive would either be an Urban All Purpose Road 3 (UAP3) or an Urban All Purpose Road 4 (UAP4). For the lowest category, UAP4, where parking and loading is unrestricted, the capacity of a road with a 6.75m carriageway width is 900 vehicles per hour.

The maximum surveyed PM peak hour flow was 210 vehicles per hour (10th May ) the RFC (ratio of flow to capacity) is therefore 0.23 and this represents a significant reserve capacity on the road. The average weekday PM peak flow is 193 vehicles per hour (May), an RFC of 0.21.

With the addition of the traffic from the Golf Club the maximum PM peak hour flow would increase to 255 vehicles per hour and the average weekday PM peak rises to 228 vehicles per hour, RFCs of 0.28 and 0.25 respectively. Even with the added traffic from the Golf Club there is a significant reserve capacity on Sparrow Hall Drive

### **3.4) On Street Parking on Sparrow Hall Drive**

#### **3.4.1) Overflow parking on Sparrow Hall Drive from the Golf Club**

It is considered that there is sufficient parking within the Golf Club site to cater for all events. Also, the significant walking distance between Sparrow Hall Drive and the Club House, approximately 330m, is likely to deter users from parking on Sparrow Hall Drive

#### **3.4.2) General parking**

Concern has been expressed that increased traffic will exacerbate problems caused by on-street parking on Sparrow Hall Drive, in particular at the junction of Sparrow Hall Drive with Whinbush Way. The comments of the Traffic Management Officer at Durham Constabulary have been sought and his response was:

*Parking issues in the vicinity of the junction with Whinbush Way – some years ago parking in the vicinity of the junction were raised as an issue and the junction was provided with yellow zig zag markings with the words KEEP CLEAR therein. These markings were replaced in August 2010 with No Waiting / No Loading / Unloading at any time markings. It is quite sometime now since parking in this vicinity was raised as an issue with myself so have to assume it is no longer an issue. However please accept that under CPE we would no longer be involved with this type of offence.*

The junction of Sparrow Hall Drive with Whinbush Way is protected on both sides of the road by no waiting /no loading restrictions for its first 15m. This ensures that there are no parked vehicles that would restrict movement of manoeuvring vehicles at the junction. On street parking does take place, however the width of Sparrow Hall Drive, approximately 7.1m, is sufficient for vehicles to park on both sides of the road and still allow vehicles to pass freely between them. Forward visibility is good, vehicles travelling in both directions therefore have the opportunity to see approaching vehicles easily.

## **4) Conclusion**

The Assessment has not identified any significant operational or highway safety impacts, and the low traffic flows associated with the development will not have a significant impact on the local highway network





SPARROW HALL DRIVE

	Tue 22/03/2011	Wed 23/03/2011	Thu 24/03/2011	Fri 25/03/2011	Sat 26/03/2011	Sun 27/03/2011	Mon 28/03/2011	5-Day Av	7-Day Av
00:00	9	5	17	17	22	39	13	12	17
01:00	8	3	10	6	13	21	5	6	9
02:00	2	1	0	4	11	21	2	2	6
03:00	5	2	3	3	4	5	3	3	4
04:00	0	2	1	3	4	16	1	1	4
05:00	5	4	4	2	7	6	6	4	5
06:00	11	12	12	10	10	5	16	12	11
07:00	41	45	49	28	20	11	41	41	34
08:00	130	124	110	111	44	21	109	117	93
09:00	141	142	138	159	65	40	146	145	119
10:00	123	116	114	122	130	64	97	114	109
11:00	111	111	105	125	131	115	108	112	115
12:00	136	109	115	116	160	122	130	121	127
13:00	91	113	114	124	143	150	101	109	119
14:00	128	120	100	140	124	125	127	123	123
15:00	131	127	117	136	128	122	124	127	126
16:00	146	120	153	152	108	133	153	145	138
17:00	128	131	169	158	105	116	159	149	138
18:00	185	198	172	183	128	93	202	188	166
19:00	167	128	180	156	124	85	139	154	140
20:00	113	103	116	122	99	84	118	114	108
21:00	96	85	74	74	57	51	83	82	74
22:00	60	28	45	53	55	38	49	47	47
23:00	39	33	26	39	33	30	25	32	32
Totals									
12H,7-19	1491	1456	1456	1554	1286	1112	1497	1491	1407
16H,6-22	1878	1784	1838	1916	1576	1337	1853	1854	1740
18H,6-24	1977	1845	1909	2008	1664	1405	1927	1933	1819
24H,0-24	2006	1862	1944	2043	1725	1513	1957	1962	1864
Am Peak	08:30 166	08:45 159	08:45 149	09:00 159	10:45 141	11:00 115	08:45 152	157	149
Pm Peak	18:00 185	18:00 198	18:30 189	18:00 183	12:00 160	12:45 155	18:00 202	191	182

GREEN LANE

	Thu 24/03/2011	Fri 25/03/2011	Sat 26/03/2011	Sun 27/03/2011	Mon 28/03/2011	Tue 29/03/2011	Wed 30/03/2011	5-Day Av	7-Day Av
00:00			10	0	2	0		1	2
01:00			22	0	0	0		0	3
02:00			11	0	0	0		0	2
03:00			0	0	2	0		1	1
04:00			0	0	0	0		0	0
05:00			0	0	0	2		1	1
06:00			0	0	0	0		0	0
07:00			3	2	0	0		0	1
08:00			3	0	6	2		4	3
09:00			17	10	9	8		9	10
10:00			29	47	28	19		24	28
11:00			45	47	31	22		27	32
12:00			40	17	19	24		22	24
13:00			33	22	20	11		16	19
14:00		69	60	34	36	26		44	45
15:00		27	38	32	42			35	35
16:00		34	25	68	20			27	33
17:00		44	38	19	43			44	39
18:00		30	31	31	13			22	24
19:00		34	28	31	17			26	27
20:00		48	23	35	17			33	32
21:00		64	10	15	16			40	32
22:00		32	1	8	5			19	15
23:00		4	5	4	0			2	3
Totals									
12H,7-19			362	329	267			267	289
16H,6-22			423	410	317			317	345
18H,6-24			429	422	322			322	352
24H,0-24			472	422	326			326	361
Am Peak			10:45 47	10:45 61	11:00 31	10:30 23		27	35
Pm Peak			14:00 60	16:00 68	14:45 47			47	52

SPARROW HALL DRIVE

	combined							5-Day Av	7-Day Av	
	Mon 09/05/2011	Tue 10/05/2011	Wed 11/05/2011	Thu 12/05/2011	Fri 13/05/2011	Sat 14/05/2011	Sun 15/05/2011			
00:00		3	9	13	9	3	17	25	7	11
01:00		1	6	4	5	4	11	13	4	6
02:00		3	4	2	3	4	7	2	3	4
03:00		1	2	2	1	2	6	6	2	3
04:00		9	6	7	6	5	9	5	7	7
05:00		11	13	12	14	9	12	7	12	11
06:00		38	44	37	39	31	15	15	38	31
07:00		127	125	112	107	115	37	23	117	92
08:00		167	163	145	170	170	75	29	163	131
09:00		129	136	120	129	154	131	51	134	121
10:00		83	104	99	101	191	145	128	116	122
11:00		118	108	110	85	153	137	116	115	118
12:00		105	86	104	120	204	155	148	124	132
13:00		129	139	96	125	140	131	135	126	128
14:00		101	116	118	115	124	102	122	115	114
15:00		135	129	143	147	157	121	98	142	133
16:00		172	157	153	143	200	134	102	165	152
17:00		197	210	182	186	188	139	83	193	169
18:00		159	149	149	178	161	129	94	159	146
19:00		101	133	129	152	121	96	75	127	115
20:00		80	84	75	93	86	61	53	84	76
21:00		56	49	52	66	48	62	39	54	53
22:00		20	33	32	54	46	32	36	37	36
23:00		13	14	20	27	32	25	11	21	20
Totals										
12H,7-19		1622	1622	1531	1606	1957	1436	1129	1668	1558
16H,6-22		1897	1932	1824	1956	2243	1670	1311	1970	1833
18H,6-24		1930	1979	1876	2037	2321	1727	1358	2029	1890
24H,0-24		1958	2019	1916	2075	2348	1789	1416	2063	1932
Am										
Peak	08:00	08:00	08:00	08:00	10:00	10:00	10:00			
	167	163	145	170	191	145	128	167	158	
Pm										
Peak	17:00	17:00	17:00	17:00	12:00	12:00	12:00			
	197	210	182	186	204	155	148	196	183	

GREEN LANE

	combined							5-Day Av	7-Day Av	
	Fri 06/05/2011	Sat 07/05/2011	Sun 08/05/2011	Mon 09/05/2011	Tue 10/05/2011	Wed 11/05/2011	Thu 12/05/2011			
00:00			4	5	0	0	0	0	0	1
01:00			0	0	0	0	0	0	0	0
02:00			0	9	0	0	0	0	0	1
03:00			0	19	2	2	0	0	1	3
04:00			0	8	0	0	0	0	0	1
05:00			3	7	1	1	0	1	1	2
06:00			11	4	10	6	7	10	8	8
07:00			24	10	26	7	12	11	14	15
08:00			22	21	20	27	28	43	30	27
09:00			44	26	25	36	21	28	28	30
10:00			39	20	21	20	58	33	33	32
11:00			34	30	29	46	46	11	33	33
12:00	54		65	28	60	37	42	23	43	44
13:00	29		38	35	26	19	24	16	23	27
14:00	34		25	23	26	26	28	48	32	30
15:00	47		50	26	25	47	36	22	35	36
16:00	46		14	16	33	38	59	36	42	35
17:00	53		42	10	15	45	37	26	35	33
18:00	38		25	23	21	17	21	29	25	25
19:00	48		36	12	19	51	21	41	36	33
20:00	34		20	3	6	26	20	13	20	17
21:00	21		9	0	0	19	32	18	18	14
22:00	3		8	0	1	9	13	10	7	6
23:00	3		18	0	1	1	2	0	1	4
Totals										
12H,7-19			422	268	327	365	412	326	358	354
16H,6-22			498	287	362	467	492	408	432	421
18H,6-24			524	287	364	477	507	418	442	431
24H,0-24			531	335	367	480	507	419	443	440
Am										
Peak		09:00	11:00	11:00	11:00	10:00	08:00			
		44	30	29	46	58	43	44	42	
Pm										
Peak	12:00	12:00	13:00	12:00	19:00	16:00	14:00			
	54	65	35	60	51	59	48	54	53	



## Appendix 5

### Combined directional summary of data obtained between 17th March and 16th May 2011

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	5-Day Av	7-Day Av	
00:00	1	5	7	15	8	4	2	7	6	
01:00	0	2	4	6	6	3	0	4	3	
02:00	0	0	0	1	5	8	2	1	2	
03:00	0	0	0	0	7	2	5	1	2	
04:00	0	0	0	0	0	0	2	0	0	
05:00	0	0	0	0	0	1	2	0	0	
06:00	4	2	2	3	2	3	4	3	3	
07:00	10	2	4	4	12	11	10	6	8	
08:00	9	7	10	15	4	10	15	9	10	
09:00	11	11	10	13	10	21	13	11	13	
10:00	13	17	25	18	19	27	20	18	20	
11:00	16	33	19	15	33	36	26	23	25	
12:00	28	30	27	23	45	29	24	31	29	
13:00	20	28	19	20	35	26	28	24	25	
14:00	25	36	24	29	34	35	23	30	29	
15:00	29	47	29	33	50	35	34	38	37	
16:00	28	29	26	33	44	34	17	32	30	
17:00	22	39	27	26	43	32	20	31	30	
18:00	27	30	21	38	40	26	23	31	29	
19:00	29	49	23	36	44	29	14	36	32	
20:00	17	28	17	28	37	22	7	25	22	
21:00	10	18	35	34	29	12	13	25	22	
22:00	11	19	21	42	19	10	7	22	18	
23:00	11	11	15	32	6	6	4	15	12	
<b>Totals</b>										
12H,7-19	237	308	242	266	371	322	253	285	285	
16H,6-22	297	404	319	367	482	389	292	374	364	
18H,6-24	319	435	354	441	507	405	303	411	395	
24H,0-24	320	442	365	463	534	424	317	425	409	
<b>Am Peak</b>	11:00 16	11:00 33	10:00 25	10:00 18	11:00 33	11:00 36	11:00 26	25	27	
<b>Pm Peak</b>	15:00 29	19:00 49	21:00 35	22:00 42	15:00 50	15:00 35	15:00 34	41	39	