

Kinoulton Road, Cropwell Bishop

Highway Impact Statement

July 2013



www.bancroftconsulting.co.uk

**KINOULTON ROAD, CROPWELL BISHOP
HIGHWAY IMPACT STATEMENT
JULY 2013**

1.0 INTRODUCTION AND BACKGROUND INFORMATION

- 1.1 Bancroft Consulting were appointed by Chris Allsop Holdings Limited to provide highways and transportation advice in respect of a proposed subsoil infill site, to replace a former gypsum extraction site. The site is located at Kinoulton Road in Cropwell Bishop, as shown in **Figure 1**.
- 1.2 The objective of this Highway Impact Statement is to consider how traffic conditions could change at the site following implementation of the proposals. In accordance with current best practice design guidance and planning policy, it will seek to demonstrate whether the proposals would generate any increase in traffic movements over that of the former use and, if necessary, highlight any mitigating improvements that should be required to address any potential highway safety concerns.
- 1.3 The site is located at the rear of the existing 'Old Mill' industrial park consisting of both industrial and office units at the eastern edge of Kinoulton Road, in Cropwell Bishop. The development site measures approximately 5.7 hectares and was previously used for the extraction of gypsum.
- 1.4 The existing gated access is a priority controlled T-junction off Kinoulton Road at the northern edge of the industrial estate. The shared surface access road measures approximately 6.5 metres wide, with kerb radii of approximately 6 metres, and is utilised by both uses.
- 1.5 To the north, Kinoulton Road extends through to Nottingham Road at Cropwell Bishop via a priority controlled T-junction, whilst to the south it is restricted to a 7.5 tonnes weight limit and connects to Colston Road via a crossroad junction. Kinoulton Road is subject to the national speed limit in the vicinity of the site

frontage. On-site measurements indicate that, in the vicinity of the access, the carriageway has a general width of 6 metres with a footway at the western edge.

- 1.6 The nearest bus stops are located approximately 420 metres to the north of the site on Nottingham Road, whilst to the south they are located approximately 630 metres away at Colston Road. These bus stops are served by Route Numbers 22, 50 and the Radcliffe Line, which operate at a combined frequency of approximately three buses every 60 minutes in each direction, from Monday to Saturday. These routes connect the site to Nottingham, West Bridgford, Radcliffe on Trent, Cotgrave and East Bridgford.
- 1.7 To establish appropriate visibility splays at the existing access off Kinoulton Road, a speed survey was carried out on Friday 21 June 2013 between 0918 and 1130 hours. In total 200 vehicles speeds were recorded during the survey period, comprising 100 readings in the northbound direction and 100 readings in the southbound direction. The results of the speed survey (see **Table 1** and **Table 2**) confirmed 85th percentile wet weather vehicle speeds of 37.44mph (60.24kph) in the northbound direction and 35.01mph (56.32kph) in the southbound direction.
- 1.8 Visibility splays have been calculated using current best practice guidance contained within MfS2, which recommends at Paragraph 1.3.2 that '*as a starting point for any scheme affecting non-trunk roads, designers should start with MfS*'. Paragraph 10.1.13 of MfS2 provides a detailed formula for calculating visibility splays, taking into account the percentage of HGV movements and vehicle speeds. The above results show that the vehicle speeds in the northbound direction were clearly above 60kph. Hence, in accordance with Table 10.1 of MfS2, the DMRB based perception time and deceleration rate values were incorporated into the formula when calculating the required visibility splay to the south. This results in visibility splays measuring 2.4 x 59 metres to the north and 2.4 x 93 metres to the south being required from the site access. In line with Figure DG2a of the 6C's Design Guide, the splays should be taken to a point 1 metre into the carriageway to reflect the vehicle tracking. These visibility splay calculations are shown within **Table 3** and **Table 4**.

3.3 Based on the above trip rates, the previous 5.7 hectares of gypsum extraction activity would have generated the following weekday peak hour and daily traffic movements:

▪ morning peak	3 arrive	2 depart	5 total
▪ evening peak	1 arrive	5 depart	6 total
▪ daily	31 arrive	32 depart	63 total

The existing daily site traffic generation profile is contained within **Table 5**.

Proposed subsoil infill activity

3.4 Details of the proposed use traffic generation have been calculated using a 'first-principles' approach that is based on the overall tonnage being processed and the typical vehicles involved in transporting the subsoil. For the purposes of this calculation all vehicles have been assumed to be fully loaded.

3.5 It has been assumed that all **materials would be delivered to the site via 8 wheeled rigid trucks at 32 tonne gross vehicle weight, with a loading capacity of circa 20 tonnes**. Online research, including Midland Quarry Products, confirms that this is the most regularly used type of vehicle for this form of delivery. Whilst some loads may be delivered via larger or smaller vehicles with higher load capacities, the use of the 8 wheeled rigid goods vehicle represents a reasonable assessment of vehicle movements. **Given the nature of activity generating demand for infill at the site, it is not envisaged that the site would be fully operational all year round**. Hence, the total amount of annual incoming loads have been assumed to take place over 26 week period (or 156 working days), thereby providing a robust assessment of potential goods vehicle movements.

3.6 Vehicle movements for deliveries at the proposed development have therefore been calculated as follows:

▪ 80,000 tonnes over 3 years		
@ 20 tonnes loads	=	4000 vehicle loads or 1333 per year
▪ 1333 vehicle loads/156	=	9 vehicles per day
	=	18 total daily movements

- 3.7 As confirmed by the Client, there shall be a total of three staff employed on-site. This would include one Machine Operator, one Banksman and one Environmental Manager (part-time). This could equate to a total of **6 daily car/LGV based movements**. This takes into account the fact that not all staff could be on-site each day and that some might travel by non-car modes, whilst also recognising that there could be additional movements associated with occasional visitors and multiple trips by staff.
- 3.8 The above calculations demonstrate that the proposed development could generate up to 24 daily movements, or an average of 2 to 3 movements per hour based on a typical 10 hour working day. Comparing this against the 63 daily movements and a peak of 6 hourly movements (1700 to 1800 hours) associated with the previous use, demonstrates that the proposals would represent a significant reduction in overall traffic movements. Given these results, it is considered that the proposed development would not generate any intensification of movements within the surrounding highway network and no further detailed assessment of off-site impact should be required.

Highway Safety

- 3.9 To establish the extent of accidents that have occurred in the vicinity of the site since the start of 2009, the 'Crashmap' website was examined (www.crashmap.co.uk). The data shows that there have been no accidents in the vicinity of the site, but two accidents occurred further afield.
- 3.10 The first accident was at the Nottingham Road/Kinoulton Road junction, and occurred in September 2011. The incident was classified as slight with no pedestrian or cyclist involvement. This accident is an isolated incident that was not part of any trend at the junction and can therefore be dismissed. The remaining accident (in the vicinity of the Colston Road/Kinoulton Road junction) occurred in June 2009 and was classified as slight. There is no trend in accidents at this location and as an isolated incident it can also reasonably be dismissed. It is therefore evident that there are no existing highway safety issues in the vicinity of the site and, particularly given the predicted decrease in vehicle activity, no reason to conclude that this situation would change as a result of the proposals.

Site access

3.11 **Drawing Number F13073/01** demonstrates the extent of achievable visibility splays from the existing site access at Kinoulton Road. This shows that the required visibility splay to the north (59 metres) is achievable within highway land. On-site observations shown that this splay would not be affected in the vertical alignment. To the south, the required visibility splay would overrun a public footpath and hedge. Nottinghamshire County Council's highway boundary plan, as contained within **Appendix B**, confirms that the hedge and footpath are outside of public ownership. As shown, a splay of 32 metres to the south is achievable from the site access which is clearly below standard. However, the proposed development would result in a reduction in traffic movements compared with the existing gypsum extraction site, and no existing highway safety issues exist in the vicinity of the site. Therefore, the existing access arrangement should be satisfactory for the proposed purposes at the site.

4.0 SUMMARY AND CONCLUSIONS

4.1 Bancroft Consulting were appointed by Chris Allsop Holdings Limited to provide highways and transportation advice in respect of a proposed subsoil infill site, to replace a former gypsum extraction site. The site is located at Kinoulton Road in Cropwell Bishop.

4.2 This assessment clearly demonstrates how the proposed development would generate a significant overall decrease in traffic movements when compared with the former gypsum extraction activities. Hence there would be no intensification of movements through the site access and local highway network, and the local highway authority should be content that no further detailed assessment is required.

4.3 The 'crashmap' website shows that there have been no accidents in the immediate vicinity of the site. However, two accidents occurred locally to the site within the past three years. Both incidents were classed as slight, did not involve pedestrians or cyclists, and were not part of any trend. It is therefore evident that there are no existing highway safety issues in the vicinity of the site and, particularly given the predicted decrease in vehicle activity, no reason to conclude that this situation would change as a result of the proposals.

- 4.4 **Drawing Number F13073/01** demonstrates the extent of achievable visibility splays from the existing site access at Kinoulton Road. This shows that the required visibility splay to the north is achievable within highway land. To the south, the required visibility splay would overrun a public footpath and hedge which are outside of public highway land. As shown, a splay of 32 metres to the south is achievable from the site access which is clearly below standard. However, the proposed development would result in a reduction in traffic movements compared with the former gypsum extraction site, and no existing highway safety issues exist in the vicinity of the site. Therefore, the existing access arrangement should be satisfactory for the proposed purposes at the site.
- 4.5 In conclusion, this Highway Impact Statement demonstrates that the net reduction in traffic movements arising from the proposals should ensure there is no detrimental impact at the site access or within the surrounding highway network. The proposals would be generally in accordance with current policy and best practice guidance and should therefore be acceptable to the local highway authority.

observed speed mph x	no. of readings f	fx	fx ²
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	0	0	0
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	1	24	576
25	1	25	625
26	0	0	0
27	0	0	0
28	3	84	2352
29	8	232	6728
30	5	150	4500
31	5	155	4805
32	12	384	12288
33	8	264	8712
34	8	272	9248
35	10	350	12250
36	6	216	7776
37	7	259	9583
38	4	152	5776
39	0	0	0
40	5	200	8000
41	3	123	5043
42	4	168	7056
43	5	215	9245
44	3	132	5808
45	1	45	2025
46	0	0	0
47	0	0	0
48	0	0	0
49	0	0	0
50	1	50	2500
51	0	0	0
52	0	0	0
53	0	0	0
54	0	0	0
55	0	0	0
56	0	0	0
57	0	0	0
58	0	0	0
59	0	0	0
60	0	0	0
61	0	0	0
62	0	0	0
63	0	0	0
64	0	0	0
65	0	0	0
66	0	0	0
67	0	0	0
68	0	0	0
69	0	0	0
70	0	0	0
71	0	0	0
72	0	0	0
73	0	0	0
74	0	0	0
75	0	0	0
76	0	0	0
77	0	0	0
78	0	0	0
79	0	0	0
80	0	0	0
Total Σ	100	3500	124896

SPEED READINGS

location: **Kinoulton Road, Cropwell Bishop**
direction: **Northbound**
day: **Friday**
date: **21.06.13**
time: **0918 to 1130**

SUMMARY

mean	35.00 mph	56.32 kph
85 %ile	39.92 mph	64.23 kph
wet 85 %ile	37.44 mph	60.24 kph

Mean speed

$$\bar{x} = \frac{\sum fx}{\sum f} = 35.00 \text{ mph}$$

Standard deviation

$$S_x = \sqrt{\frac{1}{\sum f - 1} \times \left[\sum fx^2 - \frac{(\sum fx)^2}{\sum f} \right]} = 4.92 \text{ mph}$$

85 percentile dry weather spot speed

$$\bar{x} + S_x = 39.92 \text{ mph}$$

85 percentile wet weather journey speed

$$\bar{x} + S_x - 2.478 = 37.44 \text{ mph}$$

checks: 85%ile/mean = 1.14
should be 1.1 to 1.25

S.D./mean = 0.14
should be approx 1/6 (0.17)

TABLE 1: KINOULTON ROAD NORTHBOUND SPEED SURVEY RESULTS

observed speed mph x	no. of readings f	fx	fx ²
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	0	0	0
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	2	48	1152
25	1	25	625
26	1	26	676
27	1	27	729
28	4	112	3136
29	6	174	5046
30	10	300	9000
31	9	279	8649
32	11	352	11264
33	10	330	10890
34	9	306	10404
35	7	245	8575
36	9	324	11664
37	6	222	8214
38	4	152	5776
39	5	195	7605
40	1	40	1600
41	0	0	0
42	3	126	5292
43	0	0	0
44	0	0	0
45	0	0	0
46	0	0	0
47	0	0	0
48	0	0	0
49	0	0	0
50	1	50	2500
51	0	0	0
52	0	0	0
53	0	0	0
54	0	0	0
55	0	0	0
56	0	0	0
57	0	0	0
58	0	0	0
59	0	0	0
60	0	0	0
61	0	0	0
62	0	0	0
63	0	0	0
64	0	0	0
65	0	0	0
66	0	0	0
67	0	0	0
68	0	0	0
69	0	0	0
70	0	0	0
71	0	0	0
72	0	0	0
73	0	0	0
74	0	0	0
75	0	0	0
76	0	0	0
77	0	0	0
78	0	0	0
79	0	0	0
80	0	0	0
Total Σ	100	3333	112797

SPEED READINGS

location: **Kinoulton Road, Cropwell Bishop**
 direction: **Southbound**
 day: **Friday**
 date: **21.06.13**
 time: **0918 to 1130**

SUMMARY

mean 33.33 mph 53.63 kph
 85 %ile 37.48 mph 60.31 kph
 wet 85 %ile 35.01 mph 56.32 kph

Mean speed

$$\bar{x} = \frac{\sum fx}{\sum f} = 33.33 \text{ mph}$$

Standard deviation

$$S_x = \sqrt{\frac{1}{\sum f - 1} \times \left[\sum fx^2 - \frac{(\sum fx)^2}{\sum f} \right]} = 4.15 \text{ mph}$$

85 percentile dry weather spot speed

$$\bar{x} + S_x = 37.48 \text{ mph}$$

85 percentile wet weather journey speed

$$\bar{x} + S_x - 2.478 = 35.01 \text{ mph}$$

checks: 85%ile/mean = 1.12
 should be 1.1 to 1.25

S.D./mean = 0.12
 should be approx 1/6 (0.17)

TABLE 2: KINOULTON ROAD SOUTHBOUND SPEED SURVEY RESULTS

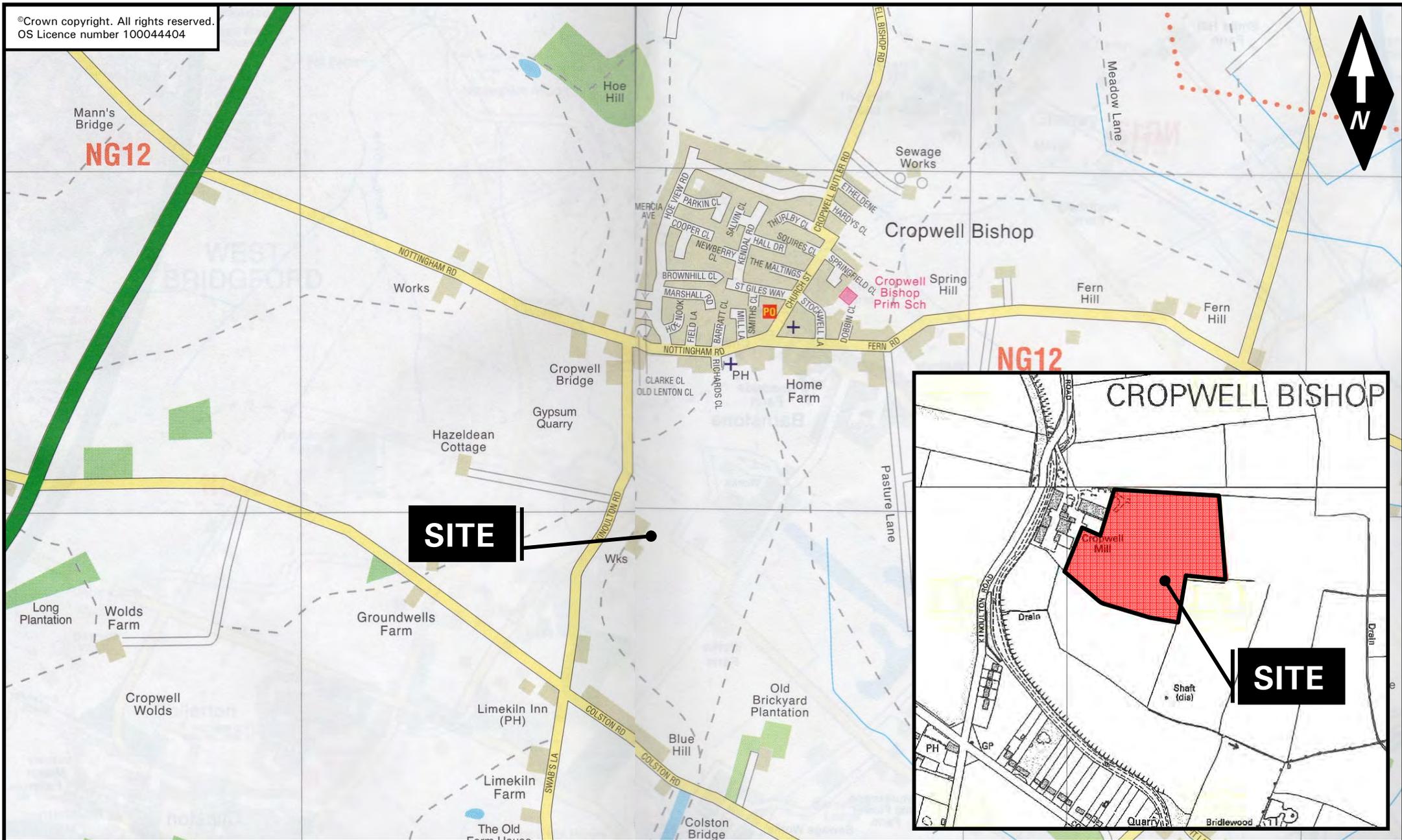
Vehicle speeds	35.01 mph 56.33 kph 15.65 v (m/s) 244.85 v ²				
Perception time	1.5 t (s) 23.47 v x t				
Deceleration	0.375 g 3.68 d (m/s) 7.36 2d				
SSD =	23.47	+	v² / 2d 33.28	=	56.75
SSD Bonnet Adjusted	59.15				

	MfS	DMRB	Norfolk	
	1.5	2	2	t (s)
	0.45	0.25	0.25	g
	4.41	2.45	2.45	

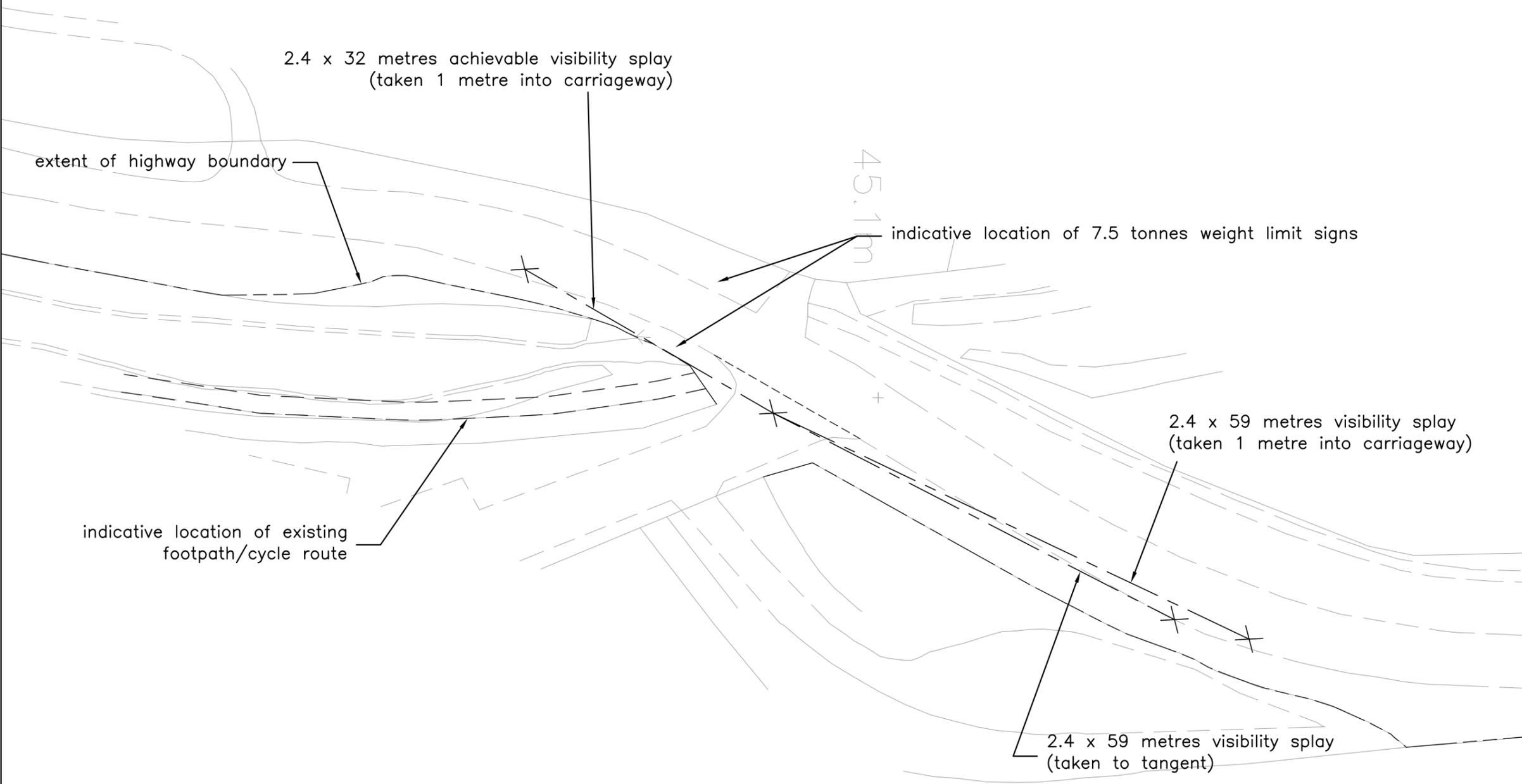
TABLE 4: MANUAL FOR STREETS VISIBILITY CALCULATOR - KINOULTON ROAD SOUTHBOUND SPEEDS

Time Period	Trip Rates (per hectare)		Traffic Generation - 5.7 hectares		
	Arrive	Depart	Arrive	Depart	Total
07:00-08:00	0.846	0.233	5	1	6
08:00-09:00	0.613	0.423	3	2	5
09:00-10:00	0.655	0.486	4	3	7
10:00-11:00	0.359	0.529	2	3	5
11:00-12:00	0.423	0.465	2	3	5
12:00-13:00	0.296	0.359	2	2	4
13:00-14:00	0.529	0.529	3	3	6
14:00-15:00	0.655	0.634	4	4	8
15:00-16:00	0.486	0.317	3	2	5
16:00-17:00	0.396	0.579	2	3	5
17:00-18:00	0.183	0.823	1	5	6
18:00-19:00	0.000	0.244	0	1	1
Daily	5.441	5.621	31	32	63

TABLE 5: PREVIOUS GYPSUM EXTRACTION DEVELOPMENT TRAFFIC GENERATION PROFILE



SCALE: Do Not Scale	CLIENT: CHRIS ALLSOP HOLDINGS LTD	JOB TITLE: KINOULTON ROAD, CROPWELL BISHOP	 transport consultancy services	
DATE: 25.06.13	TITLE: SITE LOCATION	JOB NUMBER: F13073		
DRAWN: AG				



NOTES:

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REV.	DATE	DESCRIPTION	DRN	CHK'D
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CLIENT
CHRIS ALLSOP HOLDINGS LIMITED

CONTRACT
KINOULTON ROAD, CROPWELL BISHOP

TITLE
ACHIEVABLE VISIBILITY AT EXISTING SITE ACCESS

bancroftconsulting
transport consultancy services

Bancroft Consulting Ltd
Jarodale House
7 Gregory Boulevard
Nottingham
NG7 6LB
t 0115 9602919
f 0115 9648201
e office@bancroftconsulting.co.uk

DRAWN BY	
NAME (PRINT)	DATE
AG	24.06.13
CHECKED BY	
NAME (PRINT)	DATE
CJB	24.06.13

SCALE 1:500@A3	STATUS PRELIMINARY
DRG. NO. F13073/01	REV

**APPENDIX A – TRICS OUTPUT DATA
(PREVIOUS GYPSUM EXTRACTION DEVELOPMENT)**

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : H - QUARRY
 VEHICLES

Selected regions and areas:

05	EAST MIDLANDS	
	NR NORTHAMPTONSHIRE	1 days
09	NORTH	
	DH DURHAM	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Site area
Actual Range:	10.00 to 22.80 (units: hect)
Range Selected by User:	10.00 to 40.00 (units: hect)

Public Transport Provision:

Selection by:	Include all surveys
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Date Range:	01/01/05 to 09/11/10
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This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	2 days
Wednesday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Free Standing (PPS6 Out of Town)	3
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This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Out of Town	3
-------------	---

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

B2 3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less 1 days
1,001 to 5,000 2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000 2 days
75,001 to 100,000 1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0 2 days
1.1 to 1.5 1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 3 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

- | | | |
|---|---|---|
| 1 | DH-02-H-01 LIMESTONE QUARRY
STONYBECK LANE
BISHOP MIDDLEHAM
NEAR DURHAM
Free Standing (PPS6 Out of Town)
Out of Town
Total Site area: 10.00 hect
Survey date: TUESDAY 02/12/08 | DURHAM

Survey Type: MANUAL
DURHAM |
| 2 | DH-02-H-02 QUARRY
HART VILLAGE

HARTLEPOOL
Free Standing (PPS6 Out of Town)
Out of Town
Total Site area: 22.80 hect
Survey date: TUESDAY 09/11/10 | DURHAM

Survey Type: MANUAL
NORTHAMPTONSHIRE |
| 3 | NR-02-H-01 GRAVEL QUARRY
WOLLASTON ROAD
WELLINGBOROUGH
BOZEAT
Free Standing (PPS6 Out of Town)
Out of Town
Total Site area: 14.50 hect
Survey date: WEDNESDAY 26/11/08 | NORTHAMPTONSHIRE

Survey Type: MANUAL |

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

Bancroft Consulting Mercury House, New Basford Nottingham

Licence No: 539501

RANK ORDER for Land Use 02 - EMPLOYMENT/H - QUARRY
VEHICLESRanking Type: TOTALS Time Range: 14:30-15:00
Under 6 Surveys Included, 15th/85th Percentile Not HighlightedMedian ValuesArrivals: 0.414
Departures: 0.276
Totals: 0.690

Rank	Site-Ref	Description	Town/City	Area	AREA	Day	Date	Trip Rate (Sorted by Totals)			Travel Plan
								Arrivals	Departures	Totals	
1	DH-02-H-01	LIMESTONE QUAR	NEAR DURHAM	DURHAM	10.00	Tue	02/12/08	0.500	1.000	1.500	
2	NR-02-H-01	GRAVEL QUARRY	BOZEAT	NORTHAMPTONSHIRE	14.50	Wed	26/11/08	0.414	0.276	0.690	
3	DH-02-H-02	QUARRY	HARTLEPOOL	DURHAM	22.80	Tue	09/11/10	0.088	0.175	0.263	

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : H - QUARRY
 VEHICLES

Selected regions and areas:

05	EAST MIDLANDS	
	NR NORTHAMPTONSHIRE	1 days
09	NORTH	
	DH DURHAM	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Site area
Actual Range:	10.00 to 22.80 (units: hect)
Range Selected by User:	10.00 to 40.00 (units: hect)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 09/11/10

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	2 days
Wednesday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Free Standing (PPS6 Out of Town)	3
----------------------------------	---

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Out of Town	3
-------------	---

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

B2 3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less 1 days
1,001 to 5,000 2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000 2 days
75,001 to 100,000 1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0 2 days
1.1 to 1.5 1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 3 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

- | | | | |
|---|---|------------------|---------------------|
| 1 | DH-02-H-01 LIMESTONE QUARRY
STONYBECK LANE
BISHOP MIDDLEHAM
NEAR DURHAM
Free Standing (PPS6 Out of Town)
Out of Town
Total Site area: 10.00 hect
Survey date: TUESDAY 02/12/08 | DURHAM | Survey Type: MANUAL |
| 2 | DH-02-H-02 QUARRY
HART VILLAGE

HARTLEPOOL
Free Standing (PPS6 Out of Town)
Out of Town
Total Site area: 22.80 hect
Survey date: TUESDAY 09/11/10 | DURHAM | Survey Type: MANUAL |
| 3 | NR-02-H-01 GRAVEL QUARRY
WOLLASTON ROAD
WELLINGBOROUGH
BOZEAT
Free Standing (PPS6 Out of Town)
Out of Town
Total Site area: 14.50 hect
Survey date: WEDNESDAY 26/11/08 | NORTHAMPTONSHIRE | Survey Type: MANUAL |

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/H - QUARRY
 VEHICLES

Calculation factor: 1 hect

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate	No. Days	Ave. AREA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	15.77	0.846	3	15.77	0.233	3	15.77	1.079
08:00 - 09:00	3	15.77	0.613	3	15.77	0.423	3	15.77	1.036
09:00 - 10:00	3	15.77	0.655	3	15.77	0.486	3	15.77	1.141
10:00 - 11:00	3	15.77	0.359	3	15.77	0.529	3	15.77	0.888
11:00 - 12:00	3	15.77	0.423	3	15.77	0.465	3	15.77	0.888
12:00 - 13:00	3	15.77	0.296	3	15.77	0.359	3	15.77	0.655
13:00 - 14:00	3	15.77	0.529	3	15.77	0.529	3	15.77	1.058
14:00 - 15:00	3	15.77	0.655	3	15.77	0.634	3	15.77	1.289
15:00 - 16:00	3	15.77	0.486	3	15.77	0.317	3	15.77	0.803
16:00 - 17:00	2	16.40	0.396	2	16.40	0.579	2	16.40	0.975
17:00 - 18:00	2	16.40	0.183	2	16.40	0.823	2	16.40	1.006
18:00 - 19:00	2	16.40	0.000	2	16.40	0.244	2	16.40	0.244
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.441			5.621			11.062

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 10.00 to 22.80 (units: hect)
 Survey date date range: 01/01/05 - 09/11/10
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

**APPENDIX B – NOTTINGHAMSHIRE COUNTY COUNCIL'S
HIGHWAY BOUNDARY PLAN**



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