

APPENDICES

**Assessment of the
York Potash Ltd Development Proposals
on
The Day Visitor Economy
of the Whitby Enclave and NYM National Park**

**Report prepared by
Whitby Area Development Trust**

3 February 2015

APPENDIX 1 – STEAM Figures for Whitby Day Visitors

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1) Whitby Day Visits: Number of Visitor Days

STEAM - TREND REPORT FOR 2011-2013 WHITBY													2011 to 2013	DAY VISITOR	VISITOR DAYS				
VISITOR DAYS BY:		MONTH AND QUARTER											CALENDAR YEAR		QUARTER				
KEY		DAY VISITOR											TOTAL						Annual Change
An increase of 3% or more		VISITOR DAYS IN MILLIONS / PERCENTAGE CHANGES											TOTAL		Annual Change				
Less than 3% change		Q1			Q2			Q3			Q4			TOTAL		Annual Change			
A Fall of 3% or more		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	% Change	Q1	Q2	Q3	Q4
% Change 2011 to 2013		29.8%	30.5%	2.0%	-1.4%	0.6%	1.1%	-4.7%	0.2%	2.9%	-5.6%	24.3%	22.8%	6.0%	Annual Change	19.1%	0.2%	-1.4%	15.9%
% Change 2012 to 2013		23.8%	29.5%	-5.6%	2.5%	-1.8%	-9.4%	-6.9%	2.7%	-5.7%	-4.7%	18.6%	19.2%	2.4%	Annual Change	13.6%	-4.3%	-3.6%	13.0%
Average Annual Change		14.9%	15.2%	1.0%	-0.7%	0.3%	0.5%	-2.4%	0.1%	1.5%	-2.8%	12.2%	11.4%	3.0%	Annual Change	9.5%	0.1%	-0.7%	7.9%
2011	M	0.168	0.157	0.210	0.279	0.163	0.391	0.457	0.333	0.220	0.140	0.182	0.215	2.916		0.535	0.832	1.011	0.538
2012	M	0.176	0.159	0.227	0.268	0.167	0.436	0.468	0.325	0.240	0.139	0.191	0.222	3.017	3.5%	0.561	0.871	1.034	0.551
2013	M	0.218	0.205	0.214	0.275	0.164	0.395	0.435	0.334	0.227	0.132	0.227	0.264	3.090	2.4%	0.637	0.834	0.996	0.623

2) Whitby Day Visits: Economic Impact

STEAM - TREND REPORT FOR 2011-2013 WHITBY													2011 to 2013 Historic Prices		DAY VISITOR		ECONOMIC IMPACT Historic Prices				
ECONOMIC IMPACT BY:		MONTH AND QUARTER											CALENDAR YEAR		QUARTER						
KEY		DAY VISITOR											TOTAL						% Change		
An increase of 3% or more		ECONOMIC IMPACT £M - IN HISTORIC PRICES / PERCENTAGE CHANGES											TOTAL		% Change		QUARTER				
Less than 3% change		Q1			Q2			Q3			Q4										
A Fall of 3% or more		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL		% Change		Q1	Q2	Q3	Q4
% Change 2011 to 2013		39.3%	40.0%	9.5%	5.8%	8.0%	8.5%	2.2%	7.6%	10.5%	1.3%	33.4%	31.8%	13.8%	Annual Change	27.8%	7.5%	5.8%	24.4%		
% Change 2012 to 2013		27.9%	33.8%	-2.5%	5.8%	1.4%	-6.4%	-3.9%	6.0%	-2.6%	-1.6%	22.5%	23.1%	5.8%	Annual Change	17.3%	-1.1%	-0.5%	16.7%		
Average Annual Change		19.6%	20.0%	4.8%	2.9%	4.0%	4.3%	1.1%	3.8%	5.2%	0.6%	16.7%	15.9%	6.9%	Annual Change	13.9%	3.8%	2.9%	12.2%		
2011	£M	5.280	4.957	6.605	8.775	5.132	12.30	14.39	10.49	6.937	4.413	5.743	6.770	91.79	Annual Change	16.84	26.21	31.82	16.92		
2012	£M	5.751	5.189	7.415	8.772	5.463	14.27	15.31	10.65	7.866	4.540	6.254	7.249	98.72	7.5%	18.35	28.50	33.82	18.04		
2013	£M	7.354	6.941	7.233	9.284	5.542	13.35	14.71	11.29	7.663	4.469	7.662	8.923	104.42	5.8%	21.53	28.18	33.66	21.05		

3) Whitby Day Visits: Direct Employment (Full Time Equivalent)

STEAM - TREND REPORT FOR 2011-2013 WHITBY													2011 to 2013		DAY VISITOR		DIRECT EMPLOYMENT				
EMPLOYMENT BY:		MONTH AND QUARTER											CALENDAR YEAR		QUARTER						
KEY		DAY VISITOR											TOTAL						% Change		
An increase of 3% or more		DIRECT EMPLOYMENT IN FULL TIME EQUIVALENTS (FTEs) / PERCENTAGE CHANGES											TOTAL		% Change		QUARTER				
Less than 3% change		Q1			Q2			Q3			Q4										
A Fall of 3% or more		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL		% Change		Q1	Q2	Q3	Q4
% Change 2011 to 2013		36.1%	36.8%	7.0%	3.4%	5.5%	6.0%	-0.1%	5.1%	7.9%	-1.0%	30.4%	28.8%	11.2%	Annual Change	24.9%	5.0%	3.4%	21.5%		
% Change 2012 to 2013		27.6%	33.5%	-2.7%	5.6%	1.2%	-6.7%	-4.1%	5.8%	-2.8%	-1.8%	22.2%	22.8%	5.5%	Annual Change	17.0%	-1.4%	-0.7%	16.4%		
Average Annual Change		18.0%	18.4%	3.5%	1.7%	2.8%	3.0%	0.0%	2.6%	4.0%	-0.5%	15.2%	14.4%	5.6%	Annual Change	12.5%	2.5%	1.7%	10.8%		
2011	FTEs	665	624	831	1,105	646	1,549	1,811	1,321	873	555	723	852	963	Annual Change	707	1,100	1,335	710		
2012	FTEs	709	640	914	1,082	674	1,759	1,887	1,313	970	560	771	894	1,014	5.3%	754	1,171	1,390	741		
2013	FTEs	905	854	890	1,142	682	1,642	1,810	1,389	943	550	942	1,097	1,070	5.5%	883	1,155	1,380	863		

APPENDIX 2 – HGV EFFECT ON A171 GUISBOROUGH TO WHITBY

Effect of YPL HGV construction traffic on A171 Guisborough to Whitby (without contingency allowance)

(Note: CREST Traffic survey 2007 showed 40-45% of Whitby visitor traffic uses Links 10B, 12 & 13. Link 17 is used by 85% of Whitby visitor traffic.)

<u>CONSTRUCTION YEAR 1</u>	Jan 2015 base HGV moves per day	Year 1 YPL HGV movements			Increase in HGV Moves			Minutes between HGVs		
		Daily Average			over Jan 2015 base			for 12hrs / day, Mon-Fri		
		Lowest month	Highest month	Full year	Lowest month	Highest month	Average for year	Lowest month	Highest month	Full year
Link 10B (Guisbro bypass E)	440*	118	505	289	27%	115%	66%	6.1	1.4	2.5
Link 12 (Guisbro-Scaling)	414	115	400	247	28%	97%	60%	6.3	1.8	2.9
Link 13 (Scaling-Whitby)	368	110	258	168	30%	70%	46%	6.5	2.8	4.3
Link 17 (Cross Butts, Whitby)	452	88	159	127	19%	35%	28%	8.2	4.5	5.7

<u>CONSTRUCTION YEAR 2</u>	Jan 2015 base HGV moves per day	Year 2 YPL HGV movements			Increase in HGV Moves			Minutes between HGVs		
		Daily Average			over Jan 2015 base			for 12hrs / day, Mon-Fri		
		Lowest month	Highest month	Full year	Lowest month	Highest month	Average for year	Lowest month	Highest month	Full year
Link 10B (Guisbro bypass E)	440	171	379	236	39%	86%	54%	4.2	1.9	3.1
Link 12 (Guisbro-Scaling)	414	152	319	203	37%	77%	49%	4.7	2.3	3.5
Link 13 (Scaling-Whitby)	368	130	249	165	35%	68%	45%	5.5	2.9	4.4
Link 17 (Cross Butts, Whitby)	452	108	202	137	24%	45%	30%	6.7	3.6	5.3

<u>CONSTRUCTION YEAR 3</u>	Jan 2015 base HGV moves per day	Year 3 YPL HGV movements			Increase in HGV Moves over Jan 2015 base			Minutes between HGVs for 12hrs / day, Mon-Fri		
		Daily Average			Lowest month	Highest month	Average for year	Lowest month	Highest month	Full year
		Lowest month	Highest month	Full year						
Link 10B (Guisbro bypass E)	440	300	421	373	68%	96%	85%	2.4	1.7	1.9
Link 12 (Guisbro-Scaling)	414	293	353	327	71%	85%	79%	2.5	2.0	2.2
Link 13 (Scaling-Whitby)	368	236	273	255	64%	74%	69%	3.1	2.6	2.8
Link 17 (Cross Butts, Whitby)	452	165	211	194	37%	47%	43%	4.4	3.4	3.7

<u>CONSTRUCTION YEAR 4</u>	Jan 2015 base HGV moves per day	Year 4 YPL HGV movements			Increase in HGV Moves over Jan 2015 base			Minutes between HGVs for 12hrs / day, Mon-Fri		
		Daily Average			Lowest month	Highest month	Average for year	Lowest month	Highest month	Full year
		Lowest month	Highest month	Full year						
Link 10B (Guisbro bypass E)	440	156	314	228	35%	71%	52%	4.6	2.3	3.2
Link 12 (Guisbro-Scaling)	414	154	277	198	37%	67%	48%	4.7	2.6	3.6
Link 13 (Scaling-Whitby)	368	146	238	170	40%	65%	46%	4.9	3.0	4.2
Link 17 (Cross Butts, Whitby)	452	145	204	163	32%	45%	36%	5.0	3.5	4.4

Source: Figures from Table 6.18, Page 81 of York Potash Planning Application: Mine, MTS and MHF Environmental Statement

Part 2 – Mine Technical Chapters – Chapter 6 Traffic & Transport Potash Planning Application Environmental at

<http://planning.northyorkmoors.org.uk/MVM.DMS/Planning%20Application/811000/811019/af%20Environmental%20Statement%20Part%202%20Chapters%2006-10.pdf>

Figures shown in main body of YPL Environmental Statement

* YPL Traffic Assessment uses Jan 2015 Baseline HGV figure of 614 for all of Link 10 but Link 10A=614 (dual carriageway); Link 10B=440 (single carriageway).




APPENDIX 3 – DETAILED TRAFFIC STATISTICS FOR A 171 GUISBOROUGH TO WHITBY

SUMMARY: Annual Average Daily Traffic Flows and Growth on A171 Moor Road to Whitby													
(DfT figures taken from http://www.dft.gov.uk/traffic-counts/ on 22 Dec 2014)													
<u>YPL</u>		<u>DfT figures</u>							<u>Av Annual</u>	<u>YPL Base</u>	<u>YPL Inc</u>	<u>YPL Base</u>	<u>YPL Inc</u>
<u>Link no.</u>	<u>Location</u>	<u>AADF - All Motor Vehicles</u>				<u>Annual % Increase in AADF*</u>			<u>% inc</u>	<u>Jan-15</u>	<u>Year 1</u>	<u>Jan-15</u>	<u>Year 1</u>
		<u>2002-4</u>	<u>2005-7</u>	<u>2008-10</u>	<u>2011-13</u>	<u>2005-7</u>	<u>2008-10</u>	<u>2011-13</u>	<u>2002-13*</u>	<u>All Veh</u>	<u>All Veh</u>	<u>HGV</u>	<u>HGV</u>
10B	Guis. Bypass East	10891	11426	11631	12469	1.6	0.6	2.4	1.2%	9626	12.4%	440	65.7%
12	Guis - Scaling Dam	6531	6202	9297	9721	-1.7	16.6	1.5	4.1%	7531	17.8%	414	59.7%
13	Scaling Dam - Whitby	5751	6149	6578	6699	2.3	2.3	0.6	1.4%	5299	23.6%	368	45.7%
17	Cross Butts, Whitby	12885	12536	13280	13407	-0.9	2.0	0.3	0.3%	10378	12.2%	452	28.1%
21	Mayfield Rd, Whitby	14303	13916	14740	14881	-0.9	2.0	0.3	0.3%	9644	13.1%	623	20.4%
23	Helredale Rd, Whitby	13832	15453	16031	15313	3.9	1.2	-1.5	0.9%	12200	14.8%	555	22.9%
* Calculated using the 3-year averages to minimise effect of single year fluctuations													
Query: ATC changed / malfunction?		Pro-rata											

NOTE re SUBDIVISION OF YPL LINK 10 INTO LINKS 10A & 10B

1. YPL Link 10 is the A171 from the Nunthorpe roundabout, passing Guisborough, to the junction with Link 11, the A173 N to Tocketts Lythe.
 2. YPL Link 12 is the continuation of the A171 to Birk Brow and Scaling Dam - leading eventually to Castleton, Danby, Staithes, Whitby and Robin Hoods Bay.
 3. The A171 / Link 10 is dual carriageway until the main turning to Guisborough, then single carriageway thereafter as traffic levels drop by approx. 33%.
 4. The RHDHV traffic assessment used ATC data from Count Point 18595, which is located on the dual carriageway section between the A1043 and the A173 S – a distance of 2.54 miles.
 5. Count Point 60074 is located on the single carriageway section, between the A173 S and A173 N junctions – a distance of 2.5 miles.
- **Using the data from CP 60074 as Link 10B is a fairer representation of the worst case traffic conditions likely to be encountered on Link 10**

Average Daily Traffic Statistics for A171 Guisboro Bypass - YPL Link 10B (A173 S from Pinchinthorpe to A 173 N to Tocketts Lythe)											
AADF Year	CP	Direction	Pedal Cycles	2-wheeled Motor Vehicles	Cars & Taxis	Buses & Coaches	Light Goods Vehicles	All HGVs	All Motor vehicles	3 yr Av	% Annual Growth
2000	60074	both	35	137	8029	82	985	749	9982		
2001			31	153	8053	80	1019	746	10051		
2002			18	95	9005	92	1050	487	10729		
2003			15	116	9087	96	1184	480	10963	10891	
2004			15	120	9095	82	1193	491	10981		
2005			16	110	9087	82	1252	475	11006		
2006			18	173	9396	113	1379	596	11657	11426	1.6
2007			18	173	9151	123	1522	645	11614		
2008			19	172	8813	136	1522	620	11263		
2009			22	179	8707	136	1551	563	11136	11631	0.6
2010			20	78	10397	120	1477	421	12493		
2011			18	85	10428	125	1562	436	12636		
2012			17	79	10136	123	1639	445	12421	12469	2.4
2013			17	79	9948	113	1759	451	12350		
(Source: DfT Traffic Count Data)							Average growth pa 2002-2013: 1.2%				
				YPL Baseline Jan 15:		YPL Constr Traffic Increase			YPL Traffic Increase		
				HGV&bus	All Veh			HGV	All Veh	HGV	All Veh
NB YPL Baseline uses CP 18593 for all of Link 10 (Source: YPL Planning application) Applying same pro-rata % to derive baseline figure for CP 60074 gives:				614	15538			289	1196	47.1%	7.7%
				440	9626	Yr 1	289	1196	65.7%	12.4%	
						Yr 2	236		53.6%		
						Yr 3	373		84.8%		
						Yr 4	228		51.8%		

Average Daily Traffic Statistics for A171 Guisborough to Scaling Dam (incl Birk Brow) : YPL Link 12												
AADF Year	CP	Direction	Pedal Cycles	2-wheeled Motor Vehicles	Cars & Taxis	Buses & Coaches	Light Goods Vehicles	All HGVs	All Motor vehicles		3 yr Av	% Annual Growth
2000	60075	both	1	24	5361	80	695	653	6813			
2001			4	67	5321	48	708	436	6580			
2002			1	92	5265	62	822	437	6678			
2003			1	20	6110	60	695	477	7362	6531		
2004			0	9	4300	76	721	447	5553			
2005			0	9	4295	77	757	430	5568			
2006			0	21	5076	60	1060	368	6585	6202		-1.7
2007			0	12	4982	76	1006	377	6453			
2008			14	196	7443	49	1045	387	9120			
2009			16	204	7354	49	1065	349	9021	9297		16.6
2010			11	83	8005	118	1145	400	9751			
2011			9	90	8029	123	1211	405	9858			
2012			8	83	7804	121	1271	404	9683	9721		1.5
2013			8	84	7660	111	1364	404	9623			
? ATC malfunction / replaced in 2007/8?									Average growth pa 2002-2013: 4.1%			
(Source: DfT Traffic Count Data)												
YPL Baseline Jan 15:				YPL Constr Traffic Increase				YPL Traffic Increase				
			HGV&bus	All Veh		HGV	All Veh	HGV	All Veh			
			414	7531	Yr 1	247	1338	59.7%	17.8%			
					Yr 2	203		49.0%				
					Yr 3	327		79.0%				
					Yr 4	198		47.8%				
(Source: YPL Planning application)												

Average Daily Traffic Statistics for A171 Scaling Dam to A169 Jn. Whitby (CP at Egton Turning): YPL Link 13												
AADF Year	CP	Direction	Pedal Cycles	2-wheeled Motor Vehicles	Cars & Taxis	Buses & Coaches	Light Goods Vehicles	All HGVs	All Motor vehicles		3 yr Av	% Annual Growth
2000	36762	Both	0	34	3743	40	579	429	4825			
2001			0	37	3747	40	601	435	4860			
2002			1	41	4248	34	671	394	5388			
2003			1	81	4668	45	763	414	5971	5751		
2004			5	152	4496	36	807	402	5893			
2005			1	102	4137	45	723	382	5389			
2006			1	237	5470	61	849	411	7028	6149	2.3	
2007			3	116	4602	59	925	328	6030			
2008			24	292	4962	75	824	381	6534			
2009			27	308	5067	90	828	366	6659	6578	2.3	
2010			27	285	4946	95	847	368	6541			
2011			24	302	4986	87	919	366	6660			
2012			22	282	4984	92	962	368	6688	6699	0.6	
2013			22	293	4984	99	1001	372	6749			
											Average growth pa 2002-2013: 1.4%	

(Source: DfT Traffic Count Data)

YPL Baseline Jan 15:			YPL Constr Traffic Increase			YPL Traffic Increase	
HGV&bus	All Veh		HGV	All Veh	HGV	All Veh	
368	5299		Yr 1	168	1251	45.7%	23.6%
			Yr 2	165		44.8%	
			Yr 3	255		69.3%	
			Yr 4	170		46.2%	

(Source: YPL Planning application)

Average Daily Traffic Statistics for A171 Cross Butts, Whitby: YPL Link 17

AADF Year	CP	Direction	Pedal Cycles	2-wheeled Motor Vehicles	Cars & Taxis	Buses & Coaches	Light Goods Vehicles	All HGVs	All Motor vehicles	3 yr Av	% Annual Growth
2000	56556	both	18	224	10092	89	1358	388	12151		
2001			15	190	10641	108	1266	511	12716		
2002			16	195	10865	125	1327	519	13031		
2003			14	211	11006	112	1489	522	13340	12885	
2004			9	241	9971	100	1434	539	12285		
2005			10	213	10031	102	1484	523	12353		
2006			9	210	10031	111	1593	512	12457	12536	-0.9
2007			10	217	10111	121	1805	545	12799		
2008			10	229	9789	128	1874	536	12556		
2009			13	224	11292	136	1606	446	13704	13280	2.0
2010			13	202	11134	141	1656	448	13581		
2011			11	220	11068	146	1700	435	13569		
2012			11	204	10980	151	1758	434	13527	13407	0.3
2013			13	75	10790	140	1710	411	13126		

(Source: DfT Traffic Count Data)



**Average growth pa
2002-2013: 0.3%**

YPL Baseline Jan 15:		YPL Constr Traffic Increase		YPL Traffic Increase	
HGV&bus	All Veh	HGV	All Veh	HGV	All Veh
452	10378	Yr 1	127	28.1%	12.2%
		Yr 2	137	30.3%	
		Yr 3	194	42.9%	
		Yr 4	163	36.1%	

(Source: YPL Planning application)

Average Daily Traffic Statistics for A171 Mayfield Rd, Whitby: YPL Link 21

AADF Year	CP	Direction	Pedal Cycles	2-wheeled Motor Vehicles	Cars & Taxis	Buses & Coaches	Light Goods Vehicles	All HGVs	All Motor vehicles	3 yr Av	% Annual Growth
2000	77718	both	20	249	11202	99	1507	430	13487		
2001			17	211	11812	120	1405	567	14115		
2002			18	217	12060	138	1473	576	14464		
2003			15	235	12217	125	1653	579	14809	14303	
2004			11	268	11069	111	1591	597	13636		
2005			11	237	11135	113	1647	580	13712		
2006			11	233	11135	123	1768	570	13829	13916	-0.9
2007			11	241	11224	135	2004	603	14207		
2008			11	254	10865	142	2080	597	13938		
2009			15	248	12534	150	1783	494	15209	14740	2.0
2010			15	225	12359	156	1838	496	15074		
2011			13	244	12285	162	1888	484	15063		
2012			11	226	12188	167	1952	481	15014	14881	0.3
2013			14	82	11977	154	1899	455	14567		

(Source: DfT Traffic Count Data)



**Average growth pa
2002-2013: 0.3%**

NB YPL figs used NYCC-supplied counts for 2013 of 766 HGV/12159 all

YPL Baseline Jan 15:		YPL Constr Traffic Increase		YPL Traffic Increase	
HGV&bus	All Veh	HGV	All Veh	HGV	All Veh
623	9644	Yr 1	127	20.4%	13.1%
		Yr 2	137	22.0%	
		Yr 3	194	31.1%	
		Yr 4	163	26.2%	

(Source: YPL Planning application)

Average Daily Traffic Statistics for A171 Helredale Rd, Whitby (inc New Bridge) : YPL Link 23												
AADF Year	CP	Direction	Pedal Cycles	2-wheeled Motor Vehicles	Cars & Taxis	Buses & Coaches	Light Goods Vehicles	All HGVs	All Motor vehicles	3 yr Av	% Annual Growth	
2000	46751	both	70	69	8940	162	1377	543	11091			
2001			76	94	8844	171	1232	482	10823			
2002			59	137	10879	255	1611	402	13284			
2003			52	175	11347	176	1701	410	13809	13832		
2004			43	208	11653	152	1969	420	14402			
2005			36	270	11781	146	2328	459	14984			
2006			57	169	12300	145	2776	501	15891	15453	3.9	
2007			36	174	11820	148	2831	510	15483			
2008			39	181	11986	138	2996	521	15822			
2009			39	177	12165	146	3155	502	16145	16031	1.2	
2010			39	160	12080	156	3224	505	16125			
2011			30	267	11894	274	2404	414	15253			
2012			28	269	11717	304	2709	416	15415	15313	-1.5	
2013			28	282	11720	342	2510	418	15272			
(Source: DfT Traffic Count Data)												
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">↑</div> <div style="text-align: center;">↑</div> <div style="text-align: center;">↓</div> <div style="border: 1px solid black; background-color: yellow; padding: 5px; margin-left: 20px;"> Average growth pa 2002-2013: 0.9% </div> </div>												
{Coach parking incr since West Cliff park reduced / fees increased in 2010 Incr in LGV to suppliers on 2 Business Parks}												
YPL Baseline Jan 15:				YPL Constr Traffic Increase				YPL Traffic Increase				
		HGV&bus	All Veh			HGV	All Veh			HGV	All Veh	
		555	12200			Yr 1	127	1807			22.9%	14.8%
						Yr 2	137			24.7%		
						Yr 3	194			35.0%		
						Yr 4	163			29.4%		
(Source: YPL Planning application)												
* Excluding 31 daily bus movements constr village/mine												