

# **WATERLOO-EXETER:**

**HOURLY FROM LONDON;  
HALF-HOURLY AXMINSTER-EXETER;  
AND A NEW EAST DEVON STATION AT  
BROADCLYST**

**A PAPER TO EXAMINE THE NECESSARY  
ASSOCIATED INFRASTRUCTURE CHANGES  
TO ACHIEVE THESE GOALS  
IN THE LIGHT OF THE  
DECEMBER 2004 SWT TIMETABLE**

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## THE NEW TIMETABLE

I begin by producing the December 2004 SWT timetable, showing all stations Yeovil Junction-Exeter St David's. All trains are shown provided they reach Yeovil from the east.

<b>Waterloo</b>					0710	0820	0920	1020
<b>Basingstoke</b>				0707	0757	0907	1007	1107
<b>Salisbury</b>		0610	0711	0805	0843	0948	1048	1148
<b>Yeovil Junction</b>	0615	0708	0804	0902	0929	1035	1135	1235
<b>Crewkerne</b>	0624	0717			0938	1044	----	1244
<b>Axminster</b>	0655	0737			0952	1105	1155	1304
<b>Honiton</b>	0706	0748			1003	1116	1206	1315
	0600	0715	0749		0900	1004	1117	1207
<b>Feniton</b>	----	0720	0755		0905	1009	1122	----
<b>Whimple</b>	----	0725	0801		0910	1014	1127	----
<b>Pinhoe</b>	----	0732	0807		0917	1021	1134	----
<b>Exeter Central</b>	0615	0736	0812		0921	1025	1138	1222
<b>Exeter St David's</b>	0619	0745	0816		0927	1030	1143	1229
<b>Paignton</b>					1128			
<b>Plymouth</b>							1352	

<b>Waterloo</b>	1120	1220	1320	1420	1520		1620	1650
<b>Basingstoke</b>	1207	1307	1407	1507	1607		1707	1737
<b>Salisbury</b>	1248	1348	1448	1548	1648		1800	1823
<b>Yeovil Junction</b>	1333	1435	1533	1635	1733		1847	1906
<b>Crewkerne</b>		1444		1644			1857	
<b>Axminster</b>		1504		1704		1823	1910	
<b>Honiton</b>		1515		1715		1834	1921	
		1516	1600	1716	1730	1838	1931	
<b>Feniton</b>		1522	1605	----	1735	1843	1936	
<b>Whimple</b>		1527	1610	----	1740	1848	1941	
<b>Pinhoe</b>		1533	1617	----	1747	1855	1948	
<b>Exeter Central</b>		1538	1621	1732	1751	1859	1952	
<b>Exeter St David's</b>		1542	1626	1736	1756	1904	1957	
<b>Paignton</b>				1839				
<b>Plymouth</b>		1654						

<b>Waterloo</b>	1720	1750	1820	1920	2020	2120
<b>Basingstoke</b>	1807	1838	1907	2008	2110	2210
<b>Salisbury</b>	1853	1924	1953	2053	2200	2256
<b>Yeovil Junction</b>	1940	2008	2040	2140	2252	2343
<b>Crewkerne</b>	1949		2049	2149	2301	
<b>Axminster</b>	2003		2111	2203	2324	
<b>Honiton</b>	2014		2122	2214	2335	
	2015		2123		2336	
<b>Feniton</b>	----		2129		2341	
<b>Whimple</b>	----		2134		2346	
<b>Pinhoe</b>	----		2140		2353	
<b>Exeter Central</b>	2030		2145		2357	
<b>Exeter St David's</b>	2034		2149		0002	
<b>Paignton</b>						
<b>Plymouth</b>						

<b>Plymouth</b>									
<b>Paignton</b>									
<b>Exeter St David's</b>		0510		0640		0800	0826		1010
<b>Exeter Central</b>		0514		0644		0808	0830		1014
<b>Pinhoe</b>		0519		0649		0813	----		1021
<b>Whimple</b>		0526		0656		0820	----		1027
<b>Feniton</b>		0531		0701		0825	----		1033
<b>Honiton</b>		0537		0709		0831	0845		1039
		0540	0620	0710			0846		1040
<b>Axminster</b>		0551	0631	0721			0857		1051
<b>Crewkerne</b>		0604	0644	0736			0910		1104
<b>Yeovil Junction</b>	0515	0620	0654	0720	0750	0820	0920	1020	1120
<b>Salisbury</b>	0602	0707	0740	0809	0837	0912	1015	1115	1215
<b>Basingstoke</b>	0651	0758	0828	0854	0927	0954	1054	1154	1254
<b>Waterloo</b>	0742	0843	0915	0949	1019	1049	1149	1249	1349

<b>Plymouth</b>							1445		
<b>Paignton</b>				1235					
<b>Exeter St David's</b>		1210		1340	1410	1530	1610	1640	1730
<b>Exeter Central</b>		1214		1344	1414	1534	1614	1644	1744
<b>Pinhoe</b>		1219		----	1419	1539	1619	1649	1749
<b>Whimple</b>		1226		----	1426	1546	1626	1656	1756
<b>Feniton</b>		1231		----	1431	1551	1631	1701	1801
<b>Honiton</b>		1237		1401	1437	1557	1637	1707	1807
		1238		1402	1438		1638		1808
<b>Axminster</b>		1249		1413	1449		1649		1818
<b>Crewkerne</b>		1303		----	1503		1703		
<b>Yeovil Junction</b>	1220	1320	1350	1434	1520	1620	1720		
<b>Salisbury</b>	1315	1415	1435	1515	1615	1715	1807		
<b>Basingstoke</b>	1354	1454	1527	1554	1656	1754	1854		
<b>Waterloo</b>	1449	1549	1619	1649	1745	1846	1949		

<b>Plymouth</b>				1750					
<b>Paignton</b>				1910					
<b>Exeter St David's</b>		1810	1910	2010		2230			
<b>Exeter Central</b>		1814	1914	2014		2234			
<b>Pinhoe</b>		1819	----	2027		2239			
<b>Whimple</b>		1826	----	2034		2246			
<b>Feniton</b>		1831	----	2039		2251			
<b>Honiton</b>		1837	1929	2045		2257			
		1838	1930	2046	2219	2258			
<b>Axminster</b>		1849	1941	2057	2230	2309			
<b>Crewkerne</b>		1915	2008	2110	2243	2322			
<b>Yeovil Junction</b>	1820	1925	2020	2120	2301	2332			
<b>Salisbury</b>	1920	2020	2120	2207	2348	0007			
<b>Basingstoke</b>	2008	2108	2208	2306					
<b>Waterloo</b>	2101	2204	2257						

## FULL WORKING TIMETABLE

The public timetable on the previous 2 pages was derived from the following working timetable, which shows Chard Junction loop passing-times (only where trains cross), full details for trains crossing at Honiton (shown 'X') and works to half minutes.

<b>Waterloo</b>						0710	0820	0920	1020	
<b>Basingstoke</b>				0707		0757	0907	1007	1107	
<b>Salisbury</b>			0610	0711	0805	0843	0948	1048	1148	
<b>Yeovil Junction</b>		0615	0708	0804	0902	0929	1035	1135	1235	
<b>Crewkerne</b>		0624½	0717½			0938½	1044½	-----	1244½	
<i>Chard Junction</i>		0633	0726				1053		1253	
		0637½	0730				1057½		1257	
<b>Axminster</b>		0655	0737½			0952	1105	1155	1304½	
<b>Honiton</b>		0705½	0748			1002½	1115½	1205½	1315	
			X							
	0600	0715	0749½			0900	1004	1117	1207	1316½
<b>Feniton</b>	-----	0720½	0755½			0905½	1009½	1122½	-----	1322
<b>Whimple</b>	-----	0725½	0801			0910½	1014½	1127½	-----	1327
<b>Pinhoe</b>	-----	0732	0807½			0917	1021	1134	-----	1333½
<b>Exeter Central</b>	0614½	0736	0811½			0921	1025	1138	1221½	1337½
	0616½	0742	0813½			0924½	1027	1140	1226	1339½
<b>Exeter St David's</b>	0619	0745	0816			0927	1029½	1143	1228½	1342
<b>Paignton</b>							1128			
<b>Plymouth</b>									1352	
<b>Waterloo</b>	1120	1220	1320		1420	1520			1620	1650
<b>Basingstoke</b>	1207	1307	1407		1507	1607			1707	1737
<b>Salisbury</b>	1248	1348	1448		1548	1648			1800	1823
<b>Yeovil Junction</b>	1333	1435	1533		1635	1733			1847½	1906
<b>Crewkerne</b>		1444½			1644½				1857	
<i>Chard Junction</i>		1453			1653					
		1457			1657				1905	
<b>Axminster</b>		1504½			1704½			1823	1910½	
<b>Honiton</b>		1515			1715			1833½	1921	
								X	X	
		1516½		1600	1716½		1730	1838	1931	
<b>Feniton</b>		1522		1605½	-----		1735½	1843½	1936½	
<b>Whimple</b>		1527		1610½	-----		1740½	1848½	1941½	
<b>Pinhoe</b>		1533½		1617	-----		1747	1855	1948	
<b>Exeter Central</b>		1537½		1621	1731½		1751	1859	1952	
		1539½		1623	1733½		1753	1901	1954	
<b>Exeter St David's</b>		1542		1626	1736		1756	1904	1957	
<b>Paignton</b>					1839					
<b>Plymouth</b>		1654								

<b>Waterloo</b>	1720	1750	1820	1920	2020	2120
<b>Basingstoke</b>	1807	1838½	1907	2008	2110	2210
<b>Salisbury</b>	1853	1924	1953	2053	2200	2256
<b>Yeovil Junction</b>	1940	2008	2040	2140	2252	2343
<b>Crewkerne</b>	1949½		2049½	2149½	2301½	
<i>Chard Junction</i>			2058		2310	
	1957		2104		2316	
<b>Axminster</b>	2003		2111½	2203	2324	
<b>Honiton</b>	2013½		2122	2214	2334½	
	2015		2123½		2336	
<b>Feniton</b>	-----		2129		2341½	
<b>Whimple</b>	-----		2134		2346½	
<b>Pinhoe</b>	-----		2140½		2353	
<b>Exeter Central</b>	2029½		2144½		2357	
	2031½		2146½		2359	
<b>Exeter St David's</b>	2034		2149		0002	
<b>Paignton</b>						
<b>Plymouth</b>						

<b>Plymouth</b>									
<b>Paignton</b>									
<b>Exeter St David's</b>		0510			0640		0800	0826	1010
<b>Exeter Central</b>		0514½			0644½		0808½	0830½	1014½
<b>Pinhoe</b>		0519½			0649½		0813½	-----	1021
<b>Whimple</b>		0526			0656		0820	-----	1027½
<b>Feniton</b>		0531½			0701½		0825½	-----	1033
<b>Honiton</b>		0537			0708½		0831	0845	1038½
					X				
		0540	0620		0710			0846½	1040
<b>Axminster</b>		0551	0631		0721			0857½	1051
<i>Chard Junction</i>									
			0636½		0729				1056½
<b>Crewkerne</b>		0604	0644		0736½		0910½		1104
<b>Yeovil Junction</b>	0515	0620	0654	0720	0750	0820	0920½	1020	1120
<b>Salisbury</b>	0601½	0706½	0740	0808½	0836½	0911½	1014½	1114½	1214½
<b>Basingstoke</b>	0650½	0757½	0827½	0854	0926½	0954	1054	1154	1254
<b>Waterloo</b>	0742	0843	0915	0949	1019	1049	1149	1249	1349

<b>Plymouth</b>								1445	
<b>Paignton</b>				1235					
<b>Exeter St David's</b>		1210		1340	1410	1530	1610	1640	1730
<b>Exeter Central</b>		1214½		1344½	1414½	1534½	1614½	1644½	1744½
<b>Pinhoe</b>		1219½		-----	1419½	1539½	1619½	1649½	1749½
<b>Whimple</b>		1226		-----	1426	1546	1626	1656	1756
<b>Feniton</b>		1231½		-----	1431½	1551½	1631½	1701½	1801½
<b>Honiton</b>		1237		1401	1437	1557	1637	1707	1807
		1238½		1402½	1438½		1638½		1808½
<b>Axminster</b>		1249½		1413½	1449½		1649½		1818
<i>Chard Junction</i>									
		1255		-----	1455		1655		
<b>Crewkerne</b>		1303½		-----	1503½		1703½		
<b>Yeovil Junction</b>	1220	1320	1350	1434	1520		1620	1720	
<b>Salisbury</b>	1314½	1414½	1435	1514½	1614½		1714½	1806½	
<b>Basingstoke</b>	1354	1454	1526½	1554	1655½		1754	1854	
<b>Waterloo</b>	1449	1549	1619	1649	1745		1846	1949	

<b>Plymouth</b>			1750			
<b>Paignton</b>				1910		
<b>Exeter St David's</b>	1810	1910	2010		2230	
<b>Exeter Central</b>	1814½	1914½	2014½		2234½	
<b>Pinhoe</b>	1819½	-----	2027½		2239½	
<b>Whimble</b>	1826	-----	2034		2246	
<b>Feniton</b>	1831½	-----	2039½		2251½	
<b>Honiton</b>	1837	1929	2045		2257	
		X	X			
	1838½	1930½	2046½	2219	2258½	
<b>Axminster</b>	1849½	1941½	2057½	2230	2309½	
<i>Chard Junction</i>	1856	1948				
	1906	1958½	2103		2315	
<b>Crewkerne</b>	1915½	2008	2110½	2243	2322½	
<b>Yeovil Junction</b>	1820	1925½	2020	2120½	2301	2332½
<b>Salisbury</b>	1919½	2019½	2119½	2207	2348	0007
<b>Basingstoke</b>	2007½	2107½	2207½	2306		
<b>Waterloo</b>	2101	2204	2257			

## ADDING BROADCLYST

The next working timetable shows what will happen if a new East Devon station at Broadclyst is opened without any new infrastructure. It would not be possible for all trains to call as some down trains must arrive Pinhoe at the times they do in order to allow an east-bound train to depart. The only way these trains could call would be to omit a call at Feniton or Whimble instead. **Changed times are shown in red.** (Honiton crossing details are omitted in this timetable).

<b>Waterloo</b>					0710	0820	0920	1020
<b>Basingstoke</b>				0707	0757	0907	1007	1107
<b>Salisbury</b>		0610	0711	0805	0843	0948	1048	1148
<b>Yeovil Junction</b>	0615	0708	0804	0902	0929	1035	1135	1235
<b>Crewkerne</b>	0624½	0717½			0938½	1044½	-----	1244½
<i>Chard Junction</i>	0633	0726				1053		1253
	0637½	0730				1057½		1257
<b>Axminster</b>	0655	0737½			0952	1105	1155	1304½
<b>Honiton</b>		0705½	0748		1002½	1115½	1205½	1315
	0557½	0715	0749½		0900	1004	1117	1207
<b>Feniton</b>	-----	0720½	0755½		0905½	1009½	1122½	-----
<b>Whimble</b>	-----	0725½	0801		0910½	1014½	1127½	-----
<b>Broadclyst</b>	0608½	0730	0805½		0915	-----	1132	-----
<b>Pinhoe</b>	-----	0734½	0810		0919½	1021	1136½	-----
<b>Exeter Central</b>	0614½	0738½	0814		0923½	1025	1140½	1221½
	0616½	0742	0816		0925½	1027	1142½	1226
<b>Exeter St David's</b>	0619	0745	0818½		0928	1029½	1145	1228½
<b>Paignton</b>					1128			
<b>Plymouth</b>							1352	

<b>Waterloo</b>	1120	1220	1320	1420	1520		1620	1650
<b>Basingstoke</b>	1207	1307	1407	1507	1607		1707	1737
<b>Salisbury</b>	1248	1348	1448	1548	1648		1800	1823
<b>Yeovil Junction</b>	1333	1435	1533	1635	1733		1847½	1906
<b>Crewkerne</b>		1444½		1644½			1857	
<i>Chard Junction</i>		1453		1653				
		1457		1657			1905	
<b>Axminster</b>		1504½		1704½		1823	1910½	
<b>Honiton</b>		1515		1715		1833½	1921	
		1516½	1600	1716½	1725½	1838	1931	
<b>Feniton</b>		1522	1605½	-----	1731	1843½	1936½	
<b>Whimple</b>		1527	1610½	-----	1736	1848½	1941½	
<b>Broadclyst</b>		1531½	-----	1727½	1740½	1853	1946	
<b>Pinhoe</b>		1536	1617	-----	1745	1857½	1950½	
<b>Exeter Central</b>		1540	1621	1733½	1749	1901½	1954½	
		1542	1623	1735½	1751	1903½	1956½	
<b>Exeter St David's</b>		1544½	1626	1738	1754	1906	1959	
<b>Paignton</b>				1839				
<b>Plymouth</b>		1654						

<b>Waterloo</b>	1720	1750	1820	1920	2020	2120		
<b>Basingstoke</b>	1807	1838½	1907	2008	2110	2210		
<b>Salisbury</b>	1853	1924	1953	2053	2200	2256		
<b>Yeovil Junction</b>	1940	2008	2040	2140	2252	2343		
<b>Crewkerne</b>	1949½		2049½	2149½	2301½			
<i>Chard Junction</i>			2058		2310			
		1957	2104		2316			
<b>Axminster</b>	2003		2111½	2203	2324			
<b>Honiton</b>	2013½		2122	2214	2334½			
	2015		2123½		2336			
<b>Feniton</b>	-----		2129		2341½			
<b>Whimple</b>	-----		2134		2346½			
<b>Broadclyst</b>	-----		2138½		2351			
<b>Pinhoe</b>	-----		2143		2355½			
<b>Exeter Central</b>	2029½		2147		2359½			
	2031½		2149		0001½			
<b>Exeter St David's</b>	2034		2151½		0004			
<b>Paignton</b>								
<b>Plymouth</b>								

<b>Plymouth</b>									
<b>Paignton</b>									
<b>Exeter St David's</b>		0507½		0637½	0800	0824		1010	
<b>Exeter Central</b>		0512		0642	0806	0828½		1014½	
<b>Pinhoe</b>		0517		0647	0811	-----		1021	
<b>Broadclyst</b>		0521½		0651½	0815½	0835		-----	
<b>Whimple</b>		0526		0656	0820	-----		1027½	
<b>Feniton</b>		0531½		0701½	0825½	-----		1033	
<b>Honiton</b>		0537		0708½	0831	0845		1038½	
		0540	0620	0710		0846½		1040	
<b>Axminster</b>		0551	0631	0721		0857½		1051	
<i>Chard Junction</i>									
			0636½	0729				1056½	
<b>Crewkerne</b>		0604	0644	0736½		0910½		1104	
<b>Yeovil Junction</b>	0515	0620	0654	0720	0750	0820	0920½	1020	1120
<b>Salisbury</b>	0601½	0706½	0740	0808½	0836½	0911½	1014½	1114½	1214½
<b>Basingstoke</b>	0650½	0757½	0827½	0854	0926½	0954	1054	1154	1254
<b>Waterloo</b>	0742	0843	0915	0949	1019	1049	1149	1249	1349

<b>Plymouth</b>							1445
<b>Paignton</b>			1235				
<b>Exeter St David's</b>	1210		1340	1407½	1527½	1610	1637½ 1730
<b>Exeter Central</b>	1214½		1344½	1412	1532	1614½	1642 1742
<b>Pinhoe</b>	1219½		-----	1417	1537	1619½	1647 1747
<b>Broadclyst</b>	-----		1351	1421½	1541½	-----	1651½ 1751½
<b>Whimple</b>	1226		-----	1426	1546	1626	1656 1756
<b>Feniton</b>	1231½		-----	1431½	1551½	1631½	1701½ 1801½
<b>Honiton</b>	1237		1401	1437	1557	1637	1707 1807
	1238½		1402½	1438½		1638½	1808½
<b>Axminster</b>	1249½		1413½	1449½		1649½	1818
<i>Chard Junction</i>							
	1255			1455		1655	
<b>Crewkerne</b>	1303½		-----	1503½		1703½	
<b>Yeovil Junction</b>	1220	1320	1350	1434	1520	1620	1720
<b>Salisbury</b>	1314½	1414½	1435	1514½	1614½	1714½	1806½
<b>Basingstoke</b>	1354	1454	1526½	1554	1655½	1754	1854
<b>Waterloo</b>	1449	1549	1619	1649	1745	1846	1949

<b>Plymouth</b>			1750				
<b>Paignton</b>				1910			
<b>Exeter St David's</b>	1807½	1908		2010		2227½	
<b>Exeter Central</b>	1812	1912½		2014½		2232	
<b>Pinhoe</b>	1817	-----		2027½		2237	
<b>Broadclyst</b>	1821½	1919		-----		2241½	
<b>Whimple</b>	1826	-----		2034		2246	
<b>Feniton</b>	1831½	-----		2039½		2251½	
<b>Honiton</b>	1837	1929		2045		2257	
	1838½	1930½		2046½	2219	2258½	
<b>Axminster</b>	1849½	1941½		2057½	2230	2309½	
<i>Chard Junction</i>	1856	1948					
	1906	1958½		2103		2315	
<b>Crewkerne</b>	1915½	2008		2110½	2243	2322½	
<b>Yeovil Junction</b>	1820	1925½	2020	2120½	2301	2332½	
<b>Salisbury</b>	1919½	2019½	2119½	2207	2348	0007	
<b>Basingstoke</b>	2007½	2107½	2207½	2306			
<b>Waterloo</b>	2101	2204	2257				

## HOURLY WATERLOO-EXETER

I now turn to an examination of how the December 2004 timetable could be modified to provide an hourly service to Exeter, on the assumption that times between Waterloo and Yeovil remain unchanged.

The new timetable is, in fact, rather time-wasteful in both directions. SWT say this will aid reliability west of Salisbury, but whilst this is largely true it is occasioned by the new pattern dictating the use of both Chard Junction and Tisbury loops in virtually all services.

In the table below I have taken current and new times for the typical off-peak pattern, with the current departure-times changed so they match the new departure-times for ease of comparison. It is easy to see why the new timetable requires an extra 10 min being added between Waterloo and Exeter and no fewer than an additional 21 min being added in the up direction between Exeter and Waterloo.

**X** = Current times (but changed to new London/Exeter departure times for easier comparison)  
**Y** = New, December 2004, times

(Arrival times from London for stations west of Salisbury)

	<b>X</b>	<b>Y</b>	
<b>Waterloo</b>	1220	1220	
<b>Basingstoke</b>	1308	1307	
<b>Salisbury</b>	1341	1340	
	1344	1348	4 min extra at Salisbury
<b>Tisbury</b>	1358	1402	
<b>Gillingham</b>	1409	1413	
<b>Yeovil Junction</b>	1429	1433	
<b>Crewkerne</b>	1440	1444	
<b>Axminster</b>	1453	1503	6 min extra Chard Junction
<b>Honiton</b>	1505	1515	
<b>Exeter Central</b>	1528	1538	
<b>Exeter St David's</b>	1532	1542	
<b>TOTAL EXTRA TIME</b>			10 min extra Waterloo-Exeter

	<b>X</b>	<b>Y</b>	
<b>Exeter St David's</b>	1210	1210	
<b>Exeter Central</b>	1214	1214	
<b>Honiton</b>	1238	1238	
<b>Axminster</b>	1249	1249	
<b>Crewkerne</b>	1302	1303	1 min extra to Crewkerne
<b>Yeovil Junction</b>	1312	1320	7 min extra at Yeovil Junction
<b>Gillingham</b>	1334	1342	
<b>Tisbury</b>	1344	1352	
<b>Salisbury</b>	1359	1415	8 min extra Tisbury loop
	1403	1420	1 min extra at Salisbury
<b>Basingstoke</b>	1437	1454	
<b>Waterloo</b>	1528	1549	4 min extra recovery at Waterloo
<b>TOTAL EXTRA TIME</b>			21 min Exeter-Waterloo

Although I shall be dealing with Chard Junction it is not in my remit to discuss Tisbury loop or the additional time at Salisbury *etc*, as anything east of Yeovil Junction is to be taken as fixed.

However, it has to be asked what if new infrastructure is implemented for an hourly extension to Exeter and an additional hourly Exeter-Axminster shuttle based on the new SWT timetable, and then at a later stage further infrastructure changes east of Yeovil were implemented by SWT permitting, say, fast running around Tisbury and abolishing the need to wait at Tisbury loop? Would not trains then arrive/depart Yeovil at different times meaning the new infrastructure would then be in the wrong place?

Well, fortunately the 8 min spent in Tisbury loop only affects up services. So trains would always arrive Yeovil Junction from Waterloo as planned for December (assuming they left Waterloo at the same time of course) and so any new proposed changes west of Yeovil would not be affected.

However, up trains would save the 8 min. It seems fair to say, however, that if this ever came about SWT would have to accept that Exeter departures would have to remain unchanged and trains would arrive Salisbury 8 min earlier and a path arranged to permit earlier access into Waterloo.

## The Detail

Returning to the details of the new timetable, down trains depart Yeovil Junction for Exeter at 35 min past the hour (XX35) whilst up trains leave for Waterloo at XX20 and it is this that requires use of Chard Junction loop for the trains to cross. This is time-consuming in the down direction, for a non-stop run from Crewkerne to Axminster takes only 12 min whereas the December 04 down services will generally take 18½ min owing to the wait at Chard Junction. However it is also time-consuming in the up direction, for whilst up trains pass the down train at speed at Chard Junction and take only 13 min from Axminster to Crewkerne, the Chard Junction crossing-time being fixed, they arrive Yeovil Junction at XX11½ and wait there 8½ min for the standard departure time of XX20. In short, because of Chard Junction being where it is, 6 or 7 min will be wasted on most trains in each direction – every train if the pattern became hourly.

An hourly service is not in fact possible with the current infrastructure because the down train at the above standard pattern would have to cross the next up train around Whimple. That is why, when SWT puts in one little hourly cycle from Waterloo to Exeter at 0820, 0920 and 1020 it only works because there is no up train to pass at Chard Junction on the 'middle' hour and the 0920 also only calls Axminster and Honiton in order to reach Pinhoe before the next up departure. Incidentally the timing is so tight that even a Broadclyst stop would not be permitted in the 0920 for that reason.

For an hourly service to work, therefore, there must be at least one extra loop added. The cheapest option would be just one loop around Whimple, as mentioned above, but this does not permit the Axminster shuttle to be added, as will be seen later.

## Options

To look at the options I now show a series of examples showing in each case down trains on the left, reading down, and up trains on the right, reading up. This makes it easier to see where trains would cross.

In these examples more separate station arrivals and departures are shown than in the main timetables above. **Areas where trains must cross are highlighted in red.** I am not examining here the length of any loop – that follows later – but merely its position and am assuming such a loop that would offer reliability.

**EXAMPLE 1:** Current timetable using Chard Junction loop and showing that a new loop would be required from Whimple towards Feniton if services were hourly regular-interval.

READ	DOWN			READ	UP
dep	1020	<b>Waterloo</b>	arr	1549	1649
dep	1107	<b>Basingstoke</b>	arr	1454	1554
dep	1148	<b>Salisbury</b>	arr	1414½	1514½
Arr	1233	<b>Yeovil Junction</b>	dep	1320	1420
dep	1235		arr	1311½	1411½
Arr	1243½	<b>Crewkerne</b>	dep	1303½	1403½
dep	1244½		arr	1302½	1402½
Arr	1253	<i>Chard Junction</i>	dep	1255	1355
dep	1257		arr		
Arr	1303	<b>Axminster</b>	dep	1249½	1349½
dep	1304½		arr	1248	1348
Arr	1315	<b>Honiton</b>	dep	1238½	1338½
dep	1316½		arr	1237	1337
dep	1322	<b>Feniton</b>	dep	1231½	1331½
dep	1327	<b>Whimple</b>	dep	1226	1326
dep	1331½	<b>Broadclyst</b>	dep	1221½	1321½
Arr	1335½	<b>Pinhoe</b>	dep	1217	1317
dep	1336		arr	1216½	1316½
Arr	1340	<b>Exeter Central</b>	dep	1212	1312
dep	1342		arr	1210	1310
Arr	1344½	<b>Exeter St David's</b>	dep	1207½	1307½
READ	DOWN			READ	UP

**EXAMPLE 2:** A loop is constructed at Axminster towards Chard Junction to avoid use of Chard Junction itself and save the time spent there. The subsequent speed-up then moves the second required loop further west, this time between Pinhoe and Broadclyst.

READ	DOWN			READ	UP
dep	1020	<b>Waterloo</b>	arr	1549	1649
dep	1107	<b>Basingstoke</b>	arr	1454	1554
dep	1148	<b>Salisbury</b>	arr	1414½	1514½
Arr	1233	<b>Yeovil Junction</b>	dep	1320	1420
dep	1235		arr	1318	1418
Arr	1243½	<b>Crewkerne</b>	dep	1310	1410
dep	1244½		arr	1309	1409
Arr		<i>Chard Junction</i>	dep	1302½	1402½
dep	1252½		arr		
arr	1256½	<b>Axminster</b>	dep	1257	1357
dep	1258		arr	1255½	1355½
arr	1308½	<b>Honiton</b>	dep	1246	1346
dep	1310		arr	1244½	1344½
dep	1315½	<b>Feniton</b>	dep	1239	1339
dep	1320½	<b>Whimple</b>	dep	1233½	1333½
dep	1325	<b>Broadclyst</b>	dep	1229	1329
arr	1329	<b>Pinhoe</b>	dep	1224½	1324½
dep	1329½		arr	1224	1324
arr	1333½	<b>Exeter Central</b>	dep	1219½	1319½
dep	1335½		arr	1217½	1317½
arr	1338	<b>Exeter St David's</b>	dep	1215	1315
READ	DOWN			READ	UP

**EXAMPLE 3:** As example 2 shows the second loop so far west, is it possible to arrange a slightly different stopping-pattern on the services to allow trains to cross just west of Pinhoe so that no second loop would be required at all? **This example shows it is theoretically possible, but would never be sufficiently reliable.** On one hour the down all-stations would arrive Pinhoe XX29 whilst an up faster service omitting Pinhoe, Whimble and Feniton would not pass Pinhoe until XX32, which is reasonable, if tight, but the other hour the down fast service would pass Pinhoe XX24 whilst the up all-stations is at the platform waiting to depart.

	READ	DOWN			READ	UP
dep	1020	1120	<b>Waterloo</b>	arr	1549	1649 1749
dep	1107	1207	<b>Basingstoke</b>	arr	1454	1554 1654
dep	1148	1248	<b>Salisbury</b>	arr	1414½	1514½ 1614½
arr	1233	1333	<b>Yeovil Junction</b>	dep	1320	1420 1520
dep	1235	1335		arr	1318	1418 1518
arr	1243½	1343½	<b>Crewkerne</b>	dep	1310	1410 1510
dep	1244½	1344½		arr	1309	1409 1509
arr			<i>Chard Junction</i>	dep	1302½	1402½ 1502½
dep	1252½	1352½		Arr		
arr	1256½	1356½	<b>Axminster</b>	dep	1257	1357 1457
dep	1258	1358		arr	1255½	1355½ 1455½
arr	1308½	1408½	<b>Honiton</b>	dep	1246	1346 1446
dep	1310	1410		arr	1244½	1344½ 1444½
dep	1315½	-----	<b>Feniton</b>	dep	1239	----- 1439
dep	1320½	-----	<b>Whimble</b>	dep	1233½	----- 1433½
dep	1325	1421	<b>Broadclyst</b>	dep	1229	1334½ 1429
arr	1329	-----	<b>Pinhoe</b>	dep	1224½	----- 1424½
dep	1329½	-----		arr	1224	----- 1424
arr	1333½	1427	<b>Exeter Central</b>	dep	1219½	1328 1419½
dep	1335½	1429		arr	1217½	1326 1417½
arr	1338	1431½	<b>Exeter St David's</b>	dep	1215	1323½ 1415
	READ	DOWN			READ	UP

**EXAMPLE 4:** So, with example 3 in mind, can any other stops be removed to further this case? Well, the irony is that were Broadclyst omitted in example 3 it would work, but that will clearly not be an acceptable omission – and in any case it would still be too tight for reliability. Crewkerne would be the only other one that might have a train only every second hour, so what does this do? This example, below, shows that it again works at Pinhoe, if rather too tight for comfort, but whilst it would obviate the need for a new loop in that area it dramatically changes the loop at Axminster as on even hours trains would need to depart XX55 in the down direction yet would not arrive from the west until XX58. The Axminster loop would need to run several miles towards Honiton as well as towards Chard Junction. **In reality, to reach a situation where no new loop is needed in the ‘far west,’ Crewkerne would have to be omitted every second hour in the all-stations train, the other service would have to run non-stop Honiton to Exeter Central and arrival and departure patterns would also be quite ‘skew’ at Exeter, making any shuttle to Axminster very difficult to add. Add to this the longer loop at Axminster and these options are clearly both non-starters.**

4(a) – Omitting Crewkerne but retaining Broadclyst – still too tight at Pinhoe:

	READ	DOWN			READ	UP	
Dep	1020	1120	<b>Waterloo</b>	arr	1549	1649	1749
Dep	1107	1207	<b>Basingstoke</b>	arr	1454	1554	1654
Dep	1148	1248	<b>Salisbury</b>	arr	1414½	1514½	1614½
Arr	1233	1333	<b>Yeovil Junction</b>	dep	1320	1420	1520
Dep	1235	1335		arr	1318	1418	1518
Arr	-----	1343½	<b>Crewkerne</b>	dep	-----	1410	-----
Dep	-----	1344½		arr	-----	1409	-----
Arr			<i>Chard Junction</i>	dep	1305	1402½	1505
Dep	1249½	1352½		Arr			
Arr	1253½	1356½	<b>Axminster</b>	dep	1259½	1357	1459½
Dep	1255	1358		arr	1258	1355½	1458
Arr	1305½	1408½	<b>Honiton</b>	dep	1248½	1346	1448½
Dep	1307	1410		arr	1247	1344½	1447
Dep	1312½	-----	<b>Feniton</b>	dep	1241½	-----	1441½
Dep	1317½	-----	<b>Whimple</b>	dep	1236	-----	1436
Dep	1322	1421	<b>Broadclyst</b>	dep	1231½	1334½	1431½
Arr	1326	-----	<b>Pinhoe</b>	dep	1227	-----	1427
Dep	1326½	-----		arr	1226½	-----	1426½
Arr	1330½	1427	<b>Exeter Central</b>	dep	1222	1328	1422
Dep	1332½	1429		arr	1220	1326	1420
Arr	1335	1431½	<b>Exeter St David's</b>	dep	1217½	1323½	1417½
	READ	DOWN			READ	UP	

4(b) – Omitting Crewkerne and Broadclyst - alright at Pinhoe but, with other downsides, poor overall:

	READ	DOWN			READ	UP	
Dep	1020	1120	<b>Waterloo</b>	arr	1549	1649	1749
Dep	1107	1207	<b>Basingstoke</b>	arr	1454	1554	1654
Dep	1148	1248	<b>Salisbury</b>	arr	1414½	1514½	1614½
Arr	1233	1333	<b>Yeovil Junction</b>	dep	1320	1420	1520
Dep	1235	1335		arr	1318	1418	1518
Arr	-----	1343½	<b>Crewkerne</b>	dep	-----	1410	-----
Dep	-----	1344½		arr	-----	1409	-----
Arr			<i>Chard Junction</i>	dep	1305	1402½	1505
Dep	1249½	1352½		Arr			
Arr	1253½	1356½	<b>Axminster</b>	dep	1259½	1357	1459½
Dep	1255	1358		arr	1258	1355½	1458
Arr	1305½	1408½	<b>Honiton</b>	dep	1248½	1346	1448½
Dep	1307	1410		arr	1247	1344½	1447
Dep	1312½	-----	<b>Feniton</b>	dep	1241½	-----	1441½
Dep	1317½	-----	<b>Whimple</b>	dep	1236	-----	1436
Dep	1322	-----	<b>Broadclyst</b>	dep	1231½	-----	1431½
Arr	1326	-----	<b>Pinhoe</b>	dep	1227	-----	1427
Dep	1326½	-----		arr	1226½	-----	1426½
Arr	1330½	1425½	<b>Exeter Central</b>	dep	1222	1330	1422
Dep	1332½	1427½		arr	1220	1328	1420
Arr	1335	1430	<b>Exeter St David's</b>	dep	1217½	1325½	1417½
	READ	DOWN			READ	UP	

## THE BEST CASES

The above therefore shows that there are only two options worth considering: Example 1, using Chard Junction and having a new loop from Whimble towards Feniton; and Example 2, having a loop at Axminster, avoiding use of Chard Junction, and a second loop between Pinhoe and Broadclyst. I now re-name these Examples A and B and repeat them here:

### EXAMPLE A:

READ	DOWN		READ	UP
Dep	1020	<b>Waterloo</b>	Arr	1549 1649
Dep	1107	<b>Basingstoke</b>	Arr	1454 1554
Dep	1148	<b>Salisbury</b>	Arr	1414½ 1514½
Arr	1233	<b>Yeovil Junction</b>	Dep	1320 1420
Dep	1235		Arr	1311½ 1411½
Arr	1243½	<b>Crewkerne</b>	Dep	1303½ 1403½
Dep	1244½		Arr	1302½ 1402½
Arr	1253	<i>Chard Junction</i>	Dep	1255 1355
Dep	1257		Arr	
Arr	1303	<b>Axminster</b>	Dep	1249½ 1349½
Dep	1304½		Arr	1248 1348
Arr	1315	<b>Honiton</b>	Dep	1238½ 1338½
Dep	1316½		Arr	1237 1337
Dep	1322	<b>Feniton</b>	Dep	1231½ 1331½
Dep	1327	<b>Whimble</b>	Dep	1226 1326
Dep	1331½	<b>Broadclyst</b>	Dep	1221½ 1321½
Arr	1335½	<b>Pinhoe</b>	Dep	1217 1317
Dep	1336		Arr	1216½ 1316½
Arr	1340	<b>Exeter Central</b>	Dep	1212 1312
Dep	1342		Arr	1210 1310
Arr	1344½	<b>Exeter St David's</b>	Dep	1207½ 1307½
READ	DOWN		READ	UP

### EXAMPLE B:

READ	DOWN		READ	UP
Dep	1020	<b>Waterloo</b>	Arr	1549 1649
Dep	1107	<b>Basingstoke</b>	Arr	1454 1554
Dep	1148	<b>Salisbury</b>	Arr	1414½ 1514½
Arr	1233	<b>Yeovil Junction</b>	Dep	1320 1420
Dep	1235		Arr	1318 1418
Arr	1243½	<b>Crewkerne</b>	Dep	1310 1410
Dep	1244½		Arr	1309 1409
Arr		<i>Chard Junction</i>	Dep	1302½ 1402½
Dep	1252½		Arr	
Arr	1256½	<b>Axminster</b>	Dep	1257 1357
Dep	1258		Arr	1255½ 1355½
Arr	1308½	<b>Honiton</b>	Dep	1246 1346
Dep	1310		Arr	1244½ 1344½
Dep	1315½	<b>Feniton</b>	Dep	1239 1339
Dep	1320½	<b>Whimble</b>	Dep	1233½ 1333½
Dep	1325	<b>Broadclyst</b>	Dep	1229 1329
Arr	1329	<b>Pinhoe</b>	Dep	1224½ 1324½
Dep	1329½		Arr	1224 1324
Arr	1333½	<b>Exeter Central</b>	Dep	1219½ 1319½
Dep	1335½		Arr	1217½ 1317½
Arr	1338	<b>Exeter St David's</b>	Dep	1215 1315
READ	DOWN		READ	UP

## AXMINSTER-EXETER SHUTTLE

It is now worth proceeding to the next consideration – the additional Axminster-Exeter shuttle – to see if either Example A or B is better-suited to adding such a service.

### EXAMPLE C (Example A with shuttle):

READ DOWN					READ UP			
Dep		1020		<b>Waterloo</b>	Arr	1549		1649
Dep		1107		<b>Basingstoke</b>	Arr	1454		1554
Dep		1148		<b>Salisbury</b>	Arr	1414½		1514½
Arr		1233		<b>Yeovil Junction</b>	Dep	1320		1420
Dep		1235			Arr	1311½		1411½
Arr		1243½		<b>Crewkerne</b>	Dep	1303½		1403½
Dep		1244½			Arr	1302½		1402½
Arr		1253		<i>Chard Junction</i>	Dep	1255		1355
Dep		1257			Arr			
Arr		1303		<b>Axminster</b>	Dep	1249½		1349½
Dep	1224½	1304½	1324½		Arr	1248	1328	1348 1428
Arr	1235	1315	1335	<b>Honiton</b>	Dep	1238½	1318½	1338½ 1418½
	X	X	X			X	X	X X
Dep	1246½	1316½	1346½		Arr	1237	1307	1337 1407
Dep	1252	1322	1352	<b>Feniton</b>	Dep	1231½	1301½	1331½ 1401½
Dep	1257	1327	1357	<b>Whimble</b>	Dep	1226	1256	1326 1356
Dep	1301½	1331½	1401½	<b>Broadclyst</b>	Dep	1221½	1251½	1321½ 1351½
Arr	1305½	1335½	1405½	<b>Pinhoe</b>	Dep	1217	1247	1317 1347
Dep	1306	1336	1406		Arr	1216½	1246½	1316½ 1346½
Arr	1310	1340	1410	<b>Exeter Central</b>	Dep	1212	1242	1312 1342
Dep	1312	1342	1412		Arr	1210	1240	1310 1340
Arr	1314½	1344½	1414½	<b>Exeter St David's</b>	Dep	1207½	1237½	1307½ 1337½
	READ	DOWN				READ	UP	

### EXAMPLE D (Example B with shuttle, modified at Honiton and the Whimble loop):

READ DOWN					READ UP			
Dep		1020		<b>Waterloo</b>	Arr	1549		1649
dep		1107		<b>Basingstoke</b>	Arr	1454		1554
dep		1148		<b>Salisbury</b>	Arr	1414½		1514½
Arr		1233		<b>Yeovil Junction</b>	Dep	1320		1420
dep		1235			Arr	1318		1418
Arr		1243½		<b>Crewkerne</b>	Dep	1310		1410
dep		1244½			Arr	1309		1409
Arr				<i>Chard Junction</i>	Dep	1302½		1402½
dep		1252½			Arr			
arr		1256½		<b>Axminster</b>	Dep	1256½		1356½
dep	1232	1258	1332		Arr	1255	1321½	1355 1421½
arr	1242½	1308½	1342½	<b>Honiton</b>	Dep	1245½	1312	1345½ 1412
	X	X	X			X	X	X X
dep	1244	1314	1344		Arr	1240½	1310½	1340½ 1410½
dep	1249½	1319½	1349½	<b>Feniton</b>	Dep	1235	1305	1335 1405
dep	1254½	1324½	1354½	<b>Whimble</b>	Dep	1229½	1259½	1329½ 1359½
dep	1259	1329	1359	<b>Broadclyst</b>	Dep	1225	1255	1325 1355
arr	1303	1333	1403	<b>Pinhoe</b>	Dep	1220½	1250½	1320½ 1350½
dep	1303½	1333½	1403½		Arr	1220	1250	1320 1350
arr	1307½	1337½	1407½	<b>Exeter Central</b>	Dep	1215½	1245½	1315½ 1345½
dep	1309½	1339½	1409½		Arr	1213½	1243½	1313½ 1343½
arr	1312	1342	1412	<b>Exeter St David's</b>	Dep	1211	1241	1311 1341
	READ	DOWN				READ	UP	

## **EXAMPLE D WINS**

Firstly, the good news is that a half-hourly shuttle between Exeter and Axminster will be possible using the new infrastructure that must be provided in order to obtain an hourly Waterloo-Exeter service. That infrastructure needs to be 'tweaked' and not in quite the same place, but no more will be required because Honiton loop would not be used in the hourly Exeter service (Examples A or B) and that alone permits the shuttle.

I now use **Example C** as Example A with the shuttle added and **Example D** as Example B with the shuttle added.

In Example C the shuttles have to cross the up and down Waterloo services at Honiton and the up and down shuttles themselves then have to cross each other at the new loop around Whimple. Whilst there is some flexibility – though half-hourly is obviously desirable – it all falls down because the up shuttle cannot arrive Axminster until XX28 and has to leave XX24½. Having stock standing at Axminster for 56½ min every hour is a non-starter! Not only is it costly in rolling-stock but it would be in the way and need shunting.

It will also be noted that the shuttle has to stand at Honiton almost 12 min in each direction and so whilst it is half-hourly between Exeter and Honiton it is then 20-40 from there to Axminster. Clearly Example A is simply not effective and can be ignored. It would have been the cheaper of the two options, requiring only one new loop, but would not work.

**Example D** is a clear winner, but sadly has a small downside in that the 6 or 7 min time-saving brought about by not having to use Chard Junction loop is retained through to Honiton but then largely lost between there and Exeter, because Waterloo services have to wait there 5 min rather than the usual 1½ min. This pattern needs more explanation as the loop is also slightly moved from where it was in Example B.

In Example B down trains depart Honiton XX10 and up trains arrive from Exeter at XX44½. Adding a shuttle to make this half-hourly means departures from Honiton at XX10 and XX40 are before the arrivals from Exeter at XX14½ and XX44½. If one of the shuttles is moved it then would have to cross another at a place without a loop – apart from the fact it would destroy the half-hourly pattern. The only way it could be made to work would be an extension of the Honiton loop almost to Feniton – and that in addition to the new loop between Broadclyst and Pinhoe.

It would not even end there, for working to this standard half-hourly pattern would mean trains would only have a 2½ min turn-round at Axminster – clearly another non-starter!

Now when trains cross at Honiton the normal method of working is that Train A arrives, then Train B arrives 2 min later. Train B then waits 1½ min and leaves first and finally Train A leaves 1½ min after that. Ideally, therefore, the Waterloo train would be Train B so that it is only held 1½ min, with the shuttle held 5 min, but, as described above, that leads to the Waterloo pattern in Example B on top of which it is impossible to add the shuttle.

If, however the trains are reversed and the down Waterloo waits 5 min and the up shuttle is given the 1½ min, it means down Waterloo trains now depart XX13½ instead of XX10 and up Waterloo trains have to arrive from Exeter XX10½ instead of XX14½.

This in turn means that making this a half-hourly pattern allows trains to arrive Honiton from Exeter XX10½ and XX40½ and depart for Exeter XX13½ and XX43½ - a good working pattern. In fact to give standard patterns in all directions it requires a few half-min adjustments to that, so that in reality down trains will depart Honiton XX14 and XX44 and up Waterloo trains will depart XX45½. This last is useful as it in fact gives all up services

an extra half-minute between Axminster and Crewkerne, which could be useful if there is a slow turn-out from any new loop east of Axminster.

All this in turn puts the up shuttle into Axminster at XX21½ and allows it to leave XX32 – a perfectly acceptable 10½-min turn-round.

There is, however, now a change to the required new loop. Whereas before it would have been between Broadclyst and Pinhoe it now has to be closer to Honiton – in fact between Whimple and Broadclyst.

### **Length of Loops**

This is always a vital matter for reliability, but it becomes more important than ever as more services are added, because there is no fall-back option west of Chard Junction as every loop will always be occupied when the half-hourly service is in operation.

At Axminster both down Waterloo services arrive, and up services depart, at XX56½. If the loop started at the west end of the platforms and extended 3 miles towards Chard Junction, arranged with a slow turn-out in the up direction but permitting down trains to run at maximum speed through to Axminster, up trains would be timed off the east end just after XX00 whilst down services would be timed into the loop at XX54. Thus if the down train were running up to 5 min late it would not affect the up.

If the up were 5 min late off the loop at Whimple it would gain back some time at Honiton and probably arrive Axminster XX58, not affecting the down. It is unlikely the up would in fact be 5 min late, because for that the previous down would have to have been 10 min late at Whimple. This would only happen when the down was late enough to be held at Chard Junction. This would make it around 13 min late at Honiton, but that would still allow the shuttle to get to Axminster in time to turn round and it would mean the down Waterloo arriving Whimple around 9 min late making the up 4 min late – safe, as described above.

**In short, a 3-mile Axminster loop would seem about the minimum for robustness, but any extra would be a bonus. However, as Chard Junction is only 5 miles from Axminster would it start to be more cost-effective to have the loop from Axminster throughout, thereby abolishing two sets of points (the east end of a 3-mile Axminster loop and the current west end of the Chard Junction loop)?**

Turning to the other new loop – Broadclyst to Whimple – it would seem to be sufficiently robust to run it from immediately east of Broadclyst (allowing the new station to have just one platform) to the east end of Whimple station. This would, of course, mean putting back the second platform there, but it would be rather unsafe operationally to terminate the loop just west of Whimple as that would give rise to another ‘Templecombe situation’, where a delayed up train would have to wait for a late down train to call at Whimple, and depart, before it could be released. **This loop would also, therefore, be about 3 miles in length.**

**I therefore repeat here the ‘final’ solution – Example D:**

READ DOWN					READ UP				
Dep		1020		<b>Waterloo</b>	Arr	1549		1649	
dep		1107		<b>Basingstoke</b>	Arr	1454		1554	
dep		1148		<b>Salisbury</b>	Arr	1414½		1514½	
Arr		1233		<b>Yeovil Junction</b>	Dep	1320		1420	
dep		1235			Arr	1318		1418	
Arr		1243½		<b>Crewkerne</b>	Dep	1310		1410	
dep		1244½			Arr	1309		1409	
Arr				<i>Chard Junction</i>	Dep	1302½		1402½	
dep		1252½			Arr				
arr		1256½		<b>Axminster</b>	Dep	1256½		1356½	
dep	1232	1258	1332		Arr	1255	1321½	1355	1421½
arr	1242½	1308½	1342½	<b>Honiton</b>	Dep	1245½	1312	1345½	1412
	X	X	X			X	X	X	X
dep	1244	1314	1344		Arr	1240½	1310½	1340½	1410½
dep	1249½	1319½	1349½	<b>Feniton</b>	Dep	1235	1305	1335	1405
dep	1254½	1324½	1354½	<b>Whimple</b>	Dep	1229½	1259½	1329½	1359½
dep	1259	1329	1359	<b>Broadclyst</b>	Dep	1225	1255	1325	1355
arr	1303	1333	1403	<b>Pinhoe</b>	Dep	1220½	1250½	1320½	1350½
dep	1303½	1333½	1403½		Arr	1220	1250	1320	1350
arr	1307½	1337½	1407½	<b>Exeter Central</b>	Dep	1215½	1245½	1315½	1345½
dep	1309½	1339½	1409½		Arr	1213½	1243½	1313½	1343½
arr	1312	1342	1412	<b>Exeter St David’s</b>	Dep	1211	1241	1311	1341
	READ	DOWN				READ	UP		

This does not clash with new standard-pattern Wessex Trains services over the Exmouth Junction-Exeter St David’s section, so there is no reason why all trains cannot proceed to St David’s unless platform occupation presents a problem.

**Overall Timetable Comparisons**

Earlier in this paper I showed a table comparing current times with the new ones. I now repeat this below with the new times, as above, added for the Waterloo service. It will be seen that Waterloo to Axminster and Honiton only lose 4 min compared to today whilst the journey-times to Exeter are kept to the 10 min longer that the December 2004 requires, despite a new station at Broadclyst.

In the up direction Honiton, Axminster and Crewkerne would be speeded up 7 or 8 min over the December 2004 timetable and removing the recovery time approaching Waterloo it is likely that Honiton-Waterloo, for example, would take exactly 3 hours – though that is still 10 min longer than today. Nothing can be done about the excessive Exeter-Waterloo time, but as described earlier, the reasons are outside the geographical scope of this paper and change could only come with infrastructure changes around Tisbury.

At least one can say that nothing is slower, despite a new station at Broadclyst, and the bonus of a half-hourly Exeter-Axminster service and an hourly one to Waterloo is considerable.

There is another aspect to consider: that the times shown in the table below are those for the normal Waterloo services that call all stations between Exeter and Salisbury. Currently the fastest Waterloo-Exeter Central train takes 3h 03m and the fastest up service only 3h 02m. Under the new December 2004 service the fastest down to Exeter Central takes 3h 02m and the fastest up 3h 05m – though admittedly only one a day. With an hourly regular-interval timetable the down will take 3h 18m and the up 3h 34m.

However, only 7 or 8 min can be saved by not calling Feniton, Whimple and Pinhoe and the December 2004 3h 05m up timing only occurs by not only omitting them, but also not calling Crewkerne, Sherborne, Templecombe, Gillingham and Tisbury! Such a later Exeter departure than standard and a rush to Salisbury in this way could not be achieved with the half-hourly shuttle at the western end, and one has to accept that such one-offs are bound to vanish with the bonus of a regular-interval service.

As to Feniton, Whimple and Honiton, their increase in frequency from every 2 hours to half-hourly might seem excessive but if they remained only in the new shuttle for local purposes then everyone wanting east of Axminster would have to change there and wait around half-an-hour. As there are currently many through journeys made between even Pinhoe and Waterloo it seems imperative that all these stations are retained in the London service. Granted, every other London service would probably be sufficient, but that would then unbalance the half-hourly local pattern. In any case this would then start to put trains into the Whimple-Broadclyst loop at the wrong times.

**X** = Current times (but changed to new London/Exeter departure times for easier comparison)

**Y** = New, December 2004, times

**Z** = New times with Broadclyst added and adjustments made for hourly service + Axminster shuttle

(Arrival times from London for stations west of Salisbury)

	<b>X</b>	<b>Y</b>		<b>Z</b>
<b>Waterloo</b>	1220	1220		1220
<b>Basingstoke</b>	1308	1307		1307
<b>Salisbury</b>	1341	1340		1340
	1344	1348	4 min extra at Salisbury	1348
<b>Tisbury</b>	1358	1402		1402
<b>Gillingham</b>	1409	1413		1413
<b>Yeovil Junction</b>	1429	1433		1433
<b>Crewkerne</b>	1440	1444		1444
<b>Axminster</b>	1453	1503	6 min extra Chard Junction	1457
<b>Honiton</b>	1505	1515		1509
<b>Exeter Central</b>	1528	1538		1538
<b>Exeter St David's</b>	1532	1542		1542
<b>TOTAL EXTRA TIME</b>			10 min extra Waterloo-Exeter	

	<b>X</b>	<b>Y</b>		<b>Z</b>
<b>Exeter St David's</b>	1210	1210		1211
<b>Exeter Central</b>	1214	1214		1215
<b>Honiton</b>	1238	1238		1246
<b>Axminster</b>	1249	1249		1256
<b>Crewkerne</b>	1302	1303	1 min extra to Crewkerne	1310
<b>Yeovil Junction</b>	1312	1320	7 min extra at Yeovil Junction	1320
<b>Gillingham</b>	1334	1342		1342
<b>Tisbury</b>	1344	1352		1352
<b>Salisbury</b>	1359	1415	8 min extra Tisbury loop	1415
	1403	1420	1 min extra at Salisbury	1420
<b>Basingstoke</b>	1437	1454		1454
<b>Waterloo</b>	1528	1549	4 min extra recovery at Waterloo	1549
<b>TOTAL EXTRA TIME</b>			21 min Exeter-Waterloo	

I now put all the above together to arrive at a new timetable for the route.

## THE NEW TIMETABLE

<b>Waterloo</b>										0710
<b>Basingstoke</b>							0700			0757
<b>Salisbury</b>			0610		0711		0748			0843
<b>Yeovil Junction</b>		0615	0708		0804		0835			0935
<b>Crewkerne</b>		0624	0717				0844			0944
<b>Axminster</b>		0658	0737			0832	0858	0932	0958	1032
<b>Honiton</b>		0709	0748			0843	0909	0943	1009	1043
	0554	0714	0749	0814		0844	0914	0944	1014	1044
<b>Feniton</b>	0559	0719	0755	0819		0849	0919	0949	1019	1049
<b>Whimple</b>	0604	0724	0801	0824		0854	0924	0954	1024	1054
<b>Broadclyst</b>	0609	0729	0805	0829		0859	0929	0959	1029	1059
<b>Pinhoe</b>	0613	0733	0810	0833		0903	0933	1003	1033	1103
<b>Exeter Central</b>	0618	0738	0814	0838		0908	0938	1008	1038	1108
<b>Exeter St David's</b>	0622	0742	0819			0912	0942	1012	1042	1112
<b>Paignton</b>										1133
<b>Plymouth</b>										

<b>Waterloo</b>	0820		0920		1020		1120		1220	
<b>Basingstoke</b>	0907		1007		1107		1207		1307	
<b>Salisbury</b>	0948		1048		1148		1248		1348	
<b>Yeovil Junction</b>	1035		1135		1235		1335		1435	
<b>Crewkerne</b>	1044		1144		1244		1344		1444	
<b>Axminster</b>	1058	1132	1158	1232	1258	1332	1358	1432	1458	1532
<b>Honiton</b>	1109	1143	1209	1243	1309	1343	1409	1443	1509	1543
	1114	1144	1214	1244	1314	1344	1414	1444	1514	1544
<b>Feniton</b>	1119	1149	1219	1249	1319	1349	1419	1449	1519	1549
<b>Whimple</b>	1124	1154	1224	1254	1324	1354	1424	1454	1524	1554
<b>Broadclyst</b>	1129	1159	1229	1259	1329	1359	1429	1459	1529	1559
<b>Pinhoe</b>	1133	1203	1233	1303	1333	1403	1433	1503	1533	1603
<b>Exeter Central</b>	1138	1208	1238	1308	1338	1408	1438	1508	1538	1608
<b>Exeter St David's</b>	1142	1212	1242	1312	1342	1412	1442	1512	1542	1612
<b>Paignton</b>										
<b>Plymouth</b>			1354						1654	

<b>Waterloo</b>	1320		1420		1520		1620	1650		1720
<b>Basingstoke</b>	1407		1507		1607		1707	1737		1807
<b>Salisbury</b>	1448		1548		1648		1800	1823		1853
<b>Yeovil Junction</b>	1535		1635		1735		1847	1906		1940
<b>Crewkerne</b>	1544		1644		1744		1857			1949
<b>Axminster</b>	1558	1632	1658	1732	1758	1832	1910			2005
<b>Honiton</b>	1609	1643	1709	1743	1809	1843	1921			2016
	1614	1644	1714	1744	1814	1844	1924		1954	2018
<b>Feniton</b>	1619	1649	1719	1749	1819	1849	1929		1959	2023
<b>Whimple</b>	1624	1654	1724	1754	1824	1854	1934		2004	2028
<b>Broadclyst</b>	1629	1659	1729	1759	1829	1859	1939		2009	2033
<b>Pinhoe</b>	1633	1703	1733	1803	1833	1903	1943		2013	2037
<b>Exeter Central</b>	1638	1708	1738	1808	1838	1908	1948		2018	2042
<b>Exeter St David's</b>	1642	1712	1742	1812	1842	1912	1952		2022	2046
<b>Paignton</b>										
<b>Plymouth</b>			1839							

<b>Waterloo</b>	1750	1820	1920	2020	2120
<b>Basingstoke</b>	1838	1907	2008	2110	2210
<b>Salisbury</b>	1924	1953	2053	2200	2256
<b>Yeovil Junction</b>	2009	2040	2140	2252	2343
<b>Crewkerne</b>		2049	2149	2301	
<b>Axminster</b>		2111	2203	2324	
<b>Honiton</b>		2122	2214	2335	
<b>Broadclyst</b>		2123		2336	
<b>Feniton</b>		2129		2341	
<b>Whimble</b>		2134		2346	
<b>Broadclyst</b>		2138		2351	
<b>Pinhoe</b>		2143		2355	
<b>Exeter Central</b>		2147		2400	
<b>Exeter St David's</b>		2152		0004	
<b>Paignton</b>					
<b>Plymouth</b>					

<b>Plymouth</b>										
<b>Paignton</b>										
<b>Exeter St David's</b>		0507			0641	0711		0811		0911
<b>Exeter Central</b>		0512			0645	0715		0815	0845	0915
<b>Pinhoe</b>		0517			0650	0720		0820	0850	0920
<b>Broadclyst</b>		0521			0655	0725		0825	0855	0925
<b>Whimble</b>		0526			0659	0729		0829	0859	0929
<b>Feniton</b>		0531			0705	0735		0835	0905	0935
<b>Honiton</b>		0537			0711	0741*		0841	0911	0941
		0540	0620		0712	0752		0845	0912	0945
<b>Axminster</b>		0551	0631		0723	0802		0856	0922	0956
<b>Crewkerne</b>		0604	0644		0736			0910		1010
<b>Yeovil Junction</b>	0515	0620	0654	0720	0750		0820	0920		1020
<b>Salisbury</b>	0602	0707	0740	0809	0837		0912	1015		1115
<b>Basingstoke</b>	0651	0758	0828	0854	0927		0954	1054		1154
<b>Waterloo</b>	0742	0843	0915	0949	1019		1049	1149		1249

\* = detaches a portion to form  
the 0814 Honiton-Exeter

<b>Plymouth</b>										
<b>Paignton</b>										1210
<b>Exeter St David's</b>	0941	1011	1041	1111	1141	1211	1241	1311	1341	1411
<b>Exeter Central</b>	0945	1015	1045	1115	1145	1215	1245	1315	1345	1415
<b>Pinhoe</b>	0950	1020	1050	1120	1150	1220	1250	1320	1350	1420
<b>Broadclyst</b>	0955	1025	1055	1125	1155	1225	1255	1325	1355	1425
<b>Whimble</b>	0959	1029	1059	1129	1159	1229	1259	1329	1359	1429
<b>Feniton</b>	1005	1035	1105	1135	1205	1235	1305	1335	1405	1435
<b>Honiton</b>	1011	1041	1111	1141	1211	1241	1311	1341	1411	1441
	1012	1045	1112	1145	1212	1245	1312	1345	1412	1445
<b>Axminster</b>	1022	1056	1122	1156	1222	1256	1322	1356	1422	1456
<b>Crewkerne</b>		1110		1210		1310		1410		1510
<b>Yeovil Junction</b>		1120		1220		1320		1420		1520
<b>Salisbury</b>		1215		1315		1415		1515		1615
<b>Basingstoke</b>		1254		1354		1454		1554		1654
<b>Waterloo</b>		1349		1449		1549		1649		1745

<b>Plymouth</b>				1445						1750
<b>Paignton</b>										
<b>Exeter St David's</b>	1441	1511	1541	1611	1641	1711	1741	1811	1841	1921
<b>Exeter Central</b>	1445	1515	1545	1615	1645	1715	1745	1815	1845	1925
<b>Pinhoe</b>	1450	1520	1550	1620	1650	1720	1750	1820	1850	1930
<b>Broadclyst</b>	1455	1525	1555	1625	1655	1725	1755	1825	1855	1935
<b>Whimble</b>	1459	1529	1559	1629	1659	1729	1759	1829	1859	1939
<b>Feniton</b>	1505	1535	1605	1635	1705	1735	1805	1835	1905	1945
<b>Honiton</b>	1511	1541	1611	1641	1711	1741	1811	1841	1911	1951
	1512	1545	1612	1645	1712	1745	1812	1845		1952
<b>Axminster</b>	1522	1556	1622	1656	1722	1756	1822	1856		2003
<b>Crewkerne</b>		1610		1710		1810		1916		2017
<b>Yeovil Junction</b>		1620		1720		1820		1926		2027
<b>Salisbury</b>		1715		1807		1920		2020		2120
<b>Basingstoke</b>		1754		1854		2008		2108		2208
<b>Waterloo</b>		1846		1949		2101		2204		2257

<b>Plymouth</b>			
<b>Paignton</b>	1915		
<b>Exeter St David's</b>	2015		2227
<b>Exeter Central</b>	2019		2232
<b>Pinhoe</b>	2024		2237
<b>Broadclyst</b>	2029		2241
<b>Whimble</b>	2033		2246
<b>Feniton</b>	2039		2251
<b>Honiton</b>	2045		2257
	2046	2219	2258
<b>Axminster</b>	2057	2230	2309
<b>Crewkerne</b>	2110	2243	2322
<b>Yeovil Junction</b>	2120	2301	2332
<b>Salisbury</b>	2207	2348	0007
<b>Basingstoke</b>	2306		
<b>Waterloo</b>			

### **Notes:**

Although, as said earlier, the general pattern does not clash with Wessex Trains services, there are two or three cases a day in each direction when the SWT service is off-pattern, where, on the current Wessex drafts, there would be a potential clash. However this would not be serious as it would only imply either a slight delay between Pinhoe and Exeter on the down, or trains leaving rather earlier from St David's on the up and waiting time at Pinhoe.

The times for arrivals and departures at Paignton and Plymouth are based on advance details for all operators over the section west of Exeter.

The only train that does not reach St David's is the 0814 ex Honiton and the 0845 return from Exeter Central. This is simply because the same unit must work both in order to commence the shuttle – the other unit at that time being at Honiton – and so there is no time to reach St David's and return.

In the down evening peak all services from Waterloo (from 1620) call at all stations between Basingstoke and Salisbury and for that reason cannot depart Salisbury for Yeovil and beyond at the standard time. This means they have to pass up services at different places. This affects the 1811 from Exeter from east of Axminster but what would be the

1911 and 2011 simply become impossible to path and so have to work off-pattern (at 1921 and 2015 from St David's).

Similarly in the morning it is impossible to change the 0610 from Salisbury to arrive Exeter Central at the standard time of 0808 as there is no other path to get it out of Salisbury slightly earlier. This in turn prevents a 0741 Exeter St David's-Axminster running and also prevents the 0711 reaching Axminster in time to form an 0758 to Exeter. This would lead to a 90 min gap at Axminster in the morning peak just when most needed, hence my suggested solution of the 0711 having both shuttle units together and dropping one at Honiton before continuing to Axminster. This way at least Honiton gets half-hourly to Exeter and Axminster has an 0832.

## **IMPROVEMENTS**

### **DOWN**

<b>Flow</b>	<b>Current</b>	<b>December 04</b>	<b>Proposed Timetable</b>
Waterloo-Yeovil	14	17	17
Waterloo-Feniton	8	7	13
Waterloo-Whimple	7	7	13
Waterloo-Broadclyst	0	0	13
Waterloo-Pinhoe	4	7	13
Waterloo-Exeter	10	10	13
Salisbury-Exeter	11	11	15
Axminster-Exeter	12	13	27
Honiton-Exeter	13	17	30
Feniton-Exeter	11	13	30
Whimple-Exeter	10	13	30
Broadclyst-Exeter	0	0	30
Pinhoe-Exeter	7	13	30

### **UP**

<b>Flow</b>	<b>Current</b>	<b>December 04</b>	<b>Proposed Timetable</b>
Yeovil-Waterloo	14	19	18
Feniton-Waterloo	8	8	14
Whimple-Waterloo	7	5	14
Broadclyst-Waterloo	0	0	14
Pinhoe-Waterloo	4	8	14
Exeter-Waterloo	11	10	14
Exeter-Salisbury	13	12	16
Exeter-Axminster	14	13	27
Exeter-Honiton	16	16	28
Exeter-Feniton	14	13	28
Exeter-Whimple	13	13	28
Exeter-Broadclyst	0	0	28
Exeter-Pinhoe	10	13	28

## Rolling Stock

SWT could not say at this stage what the formation of trains will be except that they thought 'a number' would be 6-cars west of Salisbury. For the new standard pattern to work the services that extend to Paignton or Plymouth must be 6-car as far as Exeter so that they can drop a portion there to form the next Waterloo departure.

**My estimate is that as far as the main-line stock is concerned this timetable would probably require only two more 'trains' – but that could well mean 4 units, though I rather think 3 would be sufficient.** That is rather good considering the increase in service-level, but is partly because the stock does not have to spend any time shuttling to and from Honiton as it currently does in the peaks and also because the standard pattern has decent turn-rounds of 29 min at Exeter St David's – robust, yet much more efficient than in some cases today where units wait in the sidings for lengthy periods.

**As to the shuttle, that, clearly, requires just two units.** These have to work to standard timings but I believe that any modern units with a slighter lower performance-level than a Class 159 gain from having a less-lengthy 'door cycle' and so will easily match the required times.

Overall, there is probably some scope for considerable savings for SWT anyway, as currently everything works from Salisbury depot involving long empty movements in the morning. With the need for a base at Exeter for the shuttle it would probably become cost-effective to have a separate SWT depot at Exeter, staff-wise, and thereby keep more units there at night.

## CONCLUSION

The above suggestions are by no means perfect. I would have preferred to have been able to recommend a solution whereby every second hour a Waterloo train ran fast after Yeovil, calling only Axminster, Honiton and Broadclyst, which could give a regular-interval 3h 04m timing to Exeter (though it would still be 3h 19m in the up direction). This would also still offer through services to Feniton *etc* every two hours – though admittedly it would then make the Exeter-Axminster shuttle 3 trains every 2 hours rather than half-hourly.

However it has to be accepted that this is impossible and one either has today's "roughly-every-2-hours-plus-bits-&-pieces" service, which *can* offer the occasional fast train, or one has a regular-interval hourly service that serves everywhere, and does it well.

In any case, with the huge growth one could expect with the half-hourly shuttle in the west, let alone the hourly Waterloo link from all stations, who knows what the future could afford? Eventual complete doubling of Honiton-Pinhoe perhaps? Then things could start to change again and more windows of opportunity would be opened.

However, that is for the future. We have waited too many years for something decent west of Salisbury and one can but hope that the opportunity will be grasped to achieve something affordable and worthwhile now.

**Barry S Doe**  
**29/03/04**