

ANNUAL RETURN INFORMATION REQUIREMENTS

SUPPLEMENTARY INFORMATION - Cost Base

Table J1: Water infrastructure standard costs

Description	Ofwat Reference JR 99	Units & format	Field Type	a		b		c	
				Grassland	EJG	Rural/suburban highway	EJG	Urban Highway	EJG

Mains laying										
J1.1	Nominal bore 100mm	KD3AL1	£/m (1dp)		47.4	B2	88.2	B2	100.8	B2
J1.2	Nominal bore 150mm	KD3AL2	£/m (1dp)		56.5	B2	103.3	B2	112.4	B2
J1.3	Nominal bore 200mm	KD3AL3	£/m (1dp)		59.9	B2	106.8	B2	123.1	B2
J1.4	Nominal bore 300mm	KD3AL4	£/m (1dp)		90.8	B2	134.0	B2	148.9	B2
J1.5	Nominal bore 450mm	KD3AL5	£/m (1dp)		145.9	B2	246.2	B2	299.9	B2
J1.6	Nominal bore 600mm	KD3AL6	£/m (1dp)		207.3	B2	321.1	B2	371.2	B2

a		b		c		d		e		f	
Cement Mortar	EJG	Epoxy Resin	EJG	Sliplining	EJG	Pipe insertion	EJG	Pipe bursting	EJG	Other	EJG

Mains Rehabilitation															
J1.7	Nominal bore 100mm	KD3AL7	£/m (1dp)			46.9	B2	49.8	B3	0.0	N	59.1	B2	0.0	N
J1.8	Nominal bore 150mm	KD3AL8	£/m (1dp)			49.3	B2	61.7	B3	0.0	N	69.1	B2	0.0	N
J1.9	Nominal bore 200mm	KD3AL9	£/m (1dp)			51.7	B2	62.4	B3	0.0	N	82.1	B2	0.0	N
J1.10	Nominal bore 300mm	KD3AL10	£/m (1dp)			57.7	B2			0.0	N			0.0	N
J1.11	Nominal bore 450mm	KD3AL11	£/m (1dp)							0.0	N			0.0	N
J1.12	Nominal bore 600mm	KD3AL12	£/m (1dp)							0.0	N			0.0	N

a		b	
Long Side	EJG	Short side	EJG

Communication pipes								
J1.13	New	KD3AL13	£/unit (1dp)		363.8	B2	198.9	B2
J1.14	Renew	KD3AL14	£/unit (1dp)		425.1	B2	392.5	B2

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Table J2: Water mains - projected expenditure

Description	Ofwat Reference JR 99	Units & format	Field Type	Forecast proportion of expenditure during the period 2003/4-06/7
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Mains laying or replacement					
J2.1	Rural field	KD3BL1	% (0dp)	I	21
J2.2	Rural\suburban highway	KD3BL2	% (0dp)	I	26
J2.3	Urban highway	KD3BL3	% (0dp)	I	19

Mains rehabilitation					
J2.4	Cement mortar	KD3BL4	% (0dp)	I	0
J2.5	Epoxy resin	KD3BL5	% (0dp)	I	4
J2.6	Sliplining	KD3BL6	% (0dp)	I	7
J2.7	Pipe insertion	KD3BL7	% (0dp)	I	0
J2.8	Pipe bursting	KD3BL8	% (0dp)	I	23
J2.9	Other	KD3BL9	% (0dp)	I	0

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SUPPLEMENTARY INFORMATION - Cost Base

Table J2: Water mains - projected expenditure

Issues with data
The sum of lines 1 to 9 should equal 100%

Problem ?
N

Solution
No solution required

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SUPPLEMENTARY INFORMATION - Cost Base

Table J3: Sewerage infrastructure standard costs

Description	Ofwat Reference JR 99	Units & format	Field Type	a		b		c	
				Grassland	EJG	Rural/suburban highway	EJG	Urban Highway	EJG

Sewer laying

J3.1	Diameter 150mm	KD3CL1	£/m (1dp)	I	125	B2	189	B2	237	B2
J3.2	Diameter 225mm	KD3CL2	£/m (1dp)	I	152	B2	228	B2	275	B2
J3.3	Diameter 300mm	KD3CL3	£/m (1dp)	I	165	B2	272	B2	309	B2
J3.4	Diameter 450mm	KD3CL4	£/m (1dp)	I	202	B2	323	B2	384	B2
J3.5	Diameter 600mm	KD3CL5	£/m (1dp)	I	249	B2	388	B2	469	B2
J3.6	Diameter 900mm	KD3CL6	£/m (1dp)	I	399	B2	631	B2	731	B2

a		b		c		d	
Polyethylene	EJG	Insituform	EJG	Pipe bursting	EJG	Man entry	EJG

Sewer Rehabilitation

J3.7	Diameter 150mm	KD3CL7	£/m (1dp)	I
J3.8	Diameter 225mm	KD3CL8	£/m (1dp)	I
J3.9	Diameter 300mm	KD3CL9	£/m (1dp)	I
J3.10	Diameter 450mm	KD3CL10	£/m (1dp)	I
J3.11	Diameter 600mm	KD3CL11	£/m (1dp)	I
J3.12	Diameter 900mm	KD3CL12	£/m (1dp)	I

122	B2
138	B2
161	B2
219	B2
284	B2

410	B2
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SUPPLEMENTARY INFORMATION - Cost Base

Table J4: Sewerage infrastructure - projected expenditure

Description	Ofwat Reference JR 99	Units & format	Field Type	Forecast proportion of expenditure during the period 2003-04-2006-07
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Sewer laying or replacement

J4.1	Rural field	KD3DL1	% (0dp)		23
J4.2	Rural\suburban highway	KD3DL2	% (0dp)		37
J4.3	Urban highway	KD3DL3	% (0dp)		28

Sewer rehabilitation

J4.4	Polyethylene lining	KD3DL4	% (0dp)		0
J4.5	Insituform	KD3DL5	% (0dp)		11
J4.6	Pipe bursting	KD3DL6	% (0dp)		0
J4.7	Man entry	KD3DL7	% (0dp)		1
J4.8	Other	KD3DL8	% (0dp)		0

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SUPPLEMENTARY INFORMATION - Cost Base

Table J4: Sewerage infrastructure - projected expenditure

Description	Ofwat Reference JR 99	Units & format	Field Type	Forecast proportion of expenditure during the period 2003-04-2006-07
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Issues with data

The sum of lines 1 to 8 should equal 100%

Problem ?
N

Solution

No solution required

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SUPPLEMENTARY INFORMATION - Cost Base

Table J5: Water non-infrastructure standard costs

Description		Ofwat Reference JR 99	Units & format	Field Type	Standard Cost Estimates	EJG
Water treatment works						
J5.1	New treatment works type SW1, 12MI/d	G51	£/MI/d (1dp)	I	234201	B2
J5.2	New treatment works type SW1, 5MI/d	G52	£/MI/d (1dp)	I	410921	B2
J5.3	New treatment works type SW2, 30MI/d	KD3E1	£/MI/d (1dp)	I	173485	B2
J5.4	New filtration system at treatment works, type SW2, 10MI/d	-	£/MI/d (1dp)	I	98990	B2
J5.5	New filtration system at treatment works, type SW2, 30MI/d	KD3E2	£/MI/d (1dp)	I	82304	B2
Storage						
J5.6	New service reservoir 1MI	-	£/MI (1dp)	I	301735	B2
J5.7	New service reservoir 4MI	KD3E5	£/MI (1dp)	I	174865	B2
J5.8	Refurbishment of service reservoir 6MI	KD3E6	£/MI (1dp)	I	28964	B2
Pumping stations						
J5.9	Variable speed Pumps 1 - 3 MI/d	-	£/MI/d (1dp)	I	0	N
J5.10	Variable speed Pumps 6 - 9 MI/d	KD3E7	£/MI/d (1dp)	I	0	N
J5.11	Variable speed pump motors 20 MI/d	-	£/MI/d (1dp)	I	0	N
J5.12	New fixed speed pumpset 20MI/d	-	£/MI/d (1dp)	I	0	N
J5.13	New fixed speed pumpset 10MI/d	KD3E12	£/MI/d (1dp)	I	0	N
Management & General						
J5.14	Extension to Office accomodation	-	£/sqm (1dp)	I	0	N
J5.15	Satellite stations and transmission station	-	£/outstation (1dp)	I	0	N

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ANNUAL RETURN INFORMATION REQUIREMENTS

SUPPLEMENTARY INFORMATION - Cost Base

Table J5: Water non-infrastructure standard costs

					10	
					Standard Cost Estimates	
					Comment Necessary Y/N	Comment
Description	Ofwat Reference JR 99	Units & format	Field Type			
Water treatment works						
J5.1	New treatment works type SW1, 12MI/d	G51	£/MI/d (1dp)	I	N	
J5.2	New treatment works type SW1, 5MI/d	G52	£/MI/d (1dp)	I	N	
J5.3	New treatment works type SW2, 30MI/d	KD3E1	£/MI/d (1dp)	I	N	
J5.4	New filtration system at treatment works, type SW2, 10MI/d	-	£/MI/d (1dp)	I	N	
J5.5	New filtration system at treatment works, type SW2, 30MI/d	KD3E2	£/MI/d (1dp)	I	N	
Storage						
J5.6	New service reservoir 1MI	-	£/MI (1dp)	I	N	
J5.7	New service reservoir 4MI	KD3E5	£/MI (1dp)	I	N	
J5.8	Refurbishment of service reservoir 6MI	KD3E6	£/MI (1dp)	I	N	
Pumping stations						
J5.9	Variable speed Pumps 1 - 3 MI/d	-	£/MI/d (1dp)	I	N	SW have no relevant costs for this - see commentary
J5.10	Variable speed Pumps 6 - 9 MI/d	KD3E7	£/MI/d (1dp)	I	N	SW have no relevant costs for this - see commentary
J5.11	Variable speed pump motors 20 MI/d	-	£/MI/d (1dp)	I	N	SW have no relevant costs for this - see commentary
J5.12	New fixed speed pumpset 20MI/d	-	£/MI/d (1dp)	I	N	SW have no relevant costs for this - see commentary
J5.13	New fixed speed pumpset 10MI/d	KD3E12	£/MI/d (1dp)	I	N	SW have no relevant costs for this - see commentary
Management & General						
J5.14	Extension to Office accommodation	-	£/sqm (1dp)	I	N	SW have no relevant costs for this - see commentary
J5.15	Satellite stations and transmission station	-	£/outstation (1dp)	I	N	SW have no relevant costs for this - see commentary

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Table J6: Non-infrastructure standard sewerage costs

Description		Ofwat Reference JR 99	Units & format	Field Type	Standard Cost Estimates	EJG
Sewage structures						
J6.1	Storage tank to combined sewer overflow 750m3	KD3FL1	£/unit (1dp)	I	386577	B2
Sewage pumping stations						
J6.2	Replacement pumps and motors 12kW	KD3FL2	£/kW (1dp)	I	1671	B3
J6.3	Replacement pumps and motors 30kW	KD3FL3	£/kW (1dp)	I	795	B3
J6.4	Replacement pumps and motors 100kW	KD3FL4	£/kW (1dp)	I	387	B3
Treatment Works						
J6.5	Primary treatment works p.e. 10,000	KD3FL5	£/kgBOD5/d (1dp)	I	1483	B2
J6.6	Additional secondary treatment p.e. 5,000	KD3FL6	£/kgBOD5/d (1dp)	I	3033	B2
J6.7	Additional secondary treatment p.e. 60,000	-	£/kgBOD5/d (1dp)	I	956	B2
J6.8	New secondary treatment works p.e. 5,000	KD3FL8	£/kgBOD5/d (1dp)	I	5874	B2
J6.9	New secondary treatment works p.e. 70,000	-	£/kgBOD5/d (1dp)	I	1705	B2
J6.10	Reconstruction of preliminary treatment p.e. 25,000	KD3FL10	£/kgBOD5/d (1dp)	I	396	B2
J6.11	First time rural sewage treatment p.e. 200	KD3FL11	£/kgBOD5/d (1dp)	I	19047	B2
J6.12	Additional nutrient removal p.e. 12,000	KD3FL12	£/kgBOD5/d (1dp)	I	557	B3
J6.13	Additional nutrient removal p.e. 40,000	KD3FL13	£/kgBOD5/d (1dp)	I	216	B3
J6.14	Additional ammonia removal p.e. 2,000	KD3FL14	£/kgBOD5/d (1dp)	I	2193	B3
J6.15	Additional UV disinfection p.e. 5,000	KD3FL15	£/kgBOD5/d (1dp)	I	0	N
J6.16	Additional UV disinfection p.e. 40,000	KD3FL16	£/kgBOD5/d (1dp)	I	0	N

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Table J6: Non-infrastructure standard sewerage costs

					10	
					Standard Cost Estimates	
Description	Owat Reference JR 99	Units & format	Field Type	Comment Necessary Y/N	Comment	
Sewage structures						
J6.1	Storage tank to combined sewer overflow 750m3	KD3FL1	£/unit (1dp)	I	N	
Sewage pumping stations						
J6.2	Replacement pumps and motors 12kW	KD3FL2	£/kW (1dp)	I	N	EJG is low due to limited amount of data.
J6.3	Replacement pumps and motors 30kW	KD3FL3	£/kW (1dp)	I	N	EJG is low due to limited amount of data.
J6.4	Replacement pumps and motors 100kW	KD3FL4	£/kW (1dp)	I	N	EJG is low due to limited amount of data.
Treatment Works						
J6.5	Primary treatment works p.e. 10,000	KD3FL5	£/kgBOD5/d (1dp)	I	N	
J6.6	Additional secondary treatment p.e. 5,000	KD3FL6	£/kgBOD5/d (1dp)	I	N	
J6.7	Additional secondary treatment p.e. 60,000	-	£/kgBOD5/d (1dp)	I	N	
J6.8	New secondary treatment works p.e. 5,000	KD3FL8	£/kgBOD5/d (1dp)	I	N	
J6.9	New secondary treatment works p.e. 70,000	-	£/kgBOD5/d (1dp)	I	N	
J6.10	Reconstruction of preliminary treatment p.e. 25,000	KD3FL10	£/kgBOD5/d (1dp)	I	N	
J6.11	First time rural sewage treatment p.e. 200	KD3FL11	£/kgBOD5/d (1dp)	I	N	
J6.12	Additional nutrient removal p.e. 12,000	KD3FL12	£/kgBOD5/d (1dp)	I	N	EJG is low due to limited amount of data.
J6.13	Additional nutrient removal p.e. 40,000	KD3FL13	£/kgBOD5/d (1dp)	I	N	EJG is low due to limited amount of data.
J6.14	Additional ammonia removal p.e. 2,000	KD3FL14	£/kgBOD5/d (1dp)	I	N	EJG is low due to limited amount of data.
J6.15	Additional UV disinfection p.e. 5,000	KD3FL15	£/kgBOD5/d (1dp)	I	N	SW have no relevant costs for this - see commentary
J6.16	Additional UV disinfection p.e. 40,000	KD3FL16	£/kgBOD5/d (1dp)	I	N	SW have no relevant costs for this - see commentary

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Table J7: Composition of investment by asset type- water service

Description	Ofwat Reference JR 98	Units & format	Field Type	Forecast proportion of expenditure during the period 2003-04-2006-07
J7.1 Water resources	TG7L1	% (0dp)	I	2
Water treatment works				
J7.2 New surface water upto and including 10MI/day	-	% (0dp)	I	9
J7.3 New surface water greater than 10MI/d	-	% (0dp)	I	1
J7.4 Upgraded/refurbished surface water upto and including 10MI/day	-	% (0dp)	I	6
J7.5 Upgraded/refurbished surface water greater than 10MI/d	-	% (0dp)	I	4
J7.6 Ground water	TG7L3	% (0dp)	I	4
Treated water storage				
J7.7 New treated water storage	TG7L4	% (0dp)	I	2
J7.8 Refurbished treated water storage		% (0dp)	I	5
J7.9 Pumping stations	TG7L5	% (0dp)	I	2
Mains and Customer Ancillaries				
J7.10 Potable mains	TG7L6	% (0dp)	I	45
J7.11 Communication pipes	TG7L7	% (0dp)	I	2
J7.12 Management & general	TG7L9	% (0dp)	I	18

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Table J7: Composition of investment by asset type- water service

Issues with data

The sum of lines 1 to 12 should equal 100%

Problem ?
N

Solution

No solution required

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SUPPLEMENTARY INFORMATION - Cost Base

Table J8: Composition of investment by asset type- sewerage service

Description		Ofwat Reference JR 98	Units & format	Field Type	Forecast proportion of expenditure during the period 2003-04-2006-07
J8.1	Sewers	TG8L1	% (0dp)	I	27
J8.2	Sewer structures	TG8L2	% (0dp)	I	11
J8.3	Sewage pumping stations	TG8L3	% (0dp)	I	3
Sewage treatment works					
J8.4	Preliminary only	TG8L4	% (0dp)	I	1
J8.5	New primary treatment up-to and including 10,000 p.e.	-	% (0dp)	I	1
J8.6	New primary treatment greater than 10,000 p.e.	-	% (0dp)	I	0
J8.7	Upgraded/refurbished primary treatment upto and including 10,000 p.e.	-	% (0dp)	I	4
J8.8	Upgraded/refurbished primary treatment greater than 10,000 p.e.	-	% (0dp)	I	0
J8.9	New secondary treatment up-to and including 10,000 p.e.	-	% (0dp)	I	5
J8.10	New secondary treatment greater than 10,000 p.e.	-	% (0dp)	I	8
J8.11	Upgraded/refurbished secondary treatment upto and including 10,000 p.e.	-	% (0dp)	I	20
J8.12	Upgraded/refurbished secondary treatment greater than 10,000 p.e.	-	% (0dp)	I	6
J8.13	Tertiary treatment	TG8L7	% (0dp)	I	3
J8.14	Sea outfalls	TG8L8	% (0dp)	I	1
J8.15	Sludge treatment and disposal	TG8L9	% (0dp)	I	10

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Table J8: Composition of investment by asset type- sewerage service

Issues with data

The sum of lines 1 to 15 should equal 100%

Problem ?

N

Solution

No solution required

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