Cambridge Waste Water Treatment Plant Relocation Project
Anglian Water Services Limited

Appendix 17.3: Construction Noise Assessment

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1 Noise and Vibration, Construction Noise Assessment

1.1 Construction Noise Assessment

Construction activities

1.1.1 Construction plant, equipment and methodology are as detailed within the Chapter 2: Project Description for the purposes of assessment of noise and vibration impacts. The following table summarised activities for key aspect of the construction works.

Table 1-1: Construction noise activities

Activity	Duration	Working hours	Activity noise level, dB $L_{Aeq,T}$ at 10m
Proposed WWTP			
Proposed WWTP Phase 1 Enabling works (establish compound, topsoil strip, prepare earthwork embankment)	3.5 months	Core, Exceptional (concrete pours, abnormal load deliveries)	86
Proposed WWTP Phase 2 Enabling works (Earthworks, access road, Horningsea Road junction works)	3.5 months		86
Proposed WWTP (Compound and area external to earth bank area)	48 months		83
Proposed WWTP Water Recycling and STC (area within earth bank area)	48 months		88
Final effluent transfer and outfall			
Enabling, Construct access / haul road	4 weeks	Core	79
Enabling, Setup of site hoarding and compounds	4 weeks		84
Excavate Outfall Trench and FE pipe installation	4 months		79
Outfall, Construct cofferdam and river bank improvements	4 months		78
Outfall, Construct cofferdam and river bank improvements [Piling]	3 weeks		86
Transfer tunnelling			
Enabling, Construct access / haul road	2 months	Core	79
Enabling, Setup of site hoarding and compounds	2 months	Core	84

Activity	Duration	Working hours	Activity noise level, dB $L_{Aeq,T}$ at 10m
Excavate, construction and works at intercept Shaft 1,2	12 months	Core, Exceptional (concrete pours, abnormal load deliveries)	79
Excavate and construct Shaft 3	3 months	Core	78
Excavate and construct Shaft 4	3 months	Core	78
Excavate and construct Shaft 5	3 months	Core	78
Construction of TPS shaft	6 months	Core, Exceptional (concrete pours, abnormal load deliveries)	82
Tunnelling (Tunnel drives from Shaft 3 and Shaft 5)	5 months	Continuous 24/7	80
Shaft Dewatering (Receive shaft dormant while pipe-jacking)	Up to 9 months	Continuous 24/7	69
Recover MTBM at receive shaft	5 days	Core	74
Waterbeach pipeline			
Enabling, Construct access / haul road	4 weeks	Core	79
Enabling, Setup of site hoarding and compounds	4 weeks	Core	84
Compound	> 40 days. Assumed 12 months	Core, Assumed 24/7 for site generators	77
Horizontal Directional Drilling	Worst case 4 weeks per HDD for larger crossings (e.g. at A14 crossing and River Cam, to include setup and demobilisation per site). Shorter durations for road and smaller HDD drill shots.	Continuous 24/7 during drill shot	88
Excavation Trench and Install Pipe	Waterbeach to Low Fen Drove - 12 months Low Fen Drove to A14 - 2 months A14 to existing WWTP - 3 months Assumed 45-50m pipeline installation per day.	Core	79
Decommissioning			
Decommissioning activities	4 months	Core, Exceptional (concrete pours, abnormal load deliveries)	80

1.1.2 Construction plant type and utilisation assumptions for each activity are described in the following table. These assumptions have been developed based on the anticipated works and used to calculate noise levels from construction activities at the representative receptor locations using BS5228-1 methodology.

Table 1-22: Construction activities noise assumptions

Activity	Equipment	BS5228-1 Ref	Plant noise level, dB $L_{Aeq,T}$ at 10m	% on-time	Quantity
Proposed WWTP					
Proposed WWTP Phase 1 Enabling works (establish compound, topsoil strip, prepare earthwork embankment)	D6 and D9 Dozers	C2.10	80	50	5
	25t Dumper	N/A	73	50	4
	35t Dumper	N/A	75	50	4
	35t Excavator	C2.16	75	40	2
	20t Excavator	C2.25	69	40	2
	12t Roller	C5.25	75	20	3
	Towed Roller	C5.25	75	20	2
	Diesel bowsers	N/A	N/A	N/A	1
	Deliveries, Lorry / Dump Truck	C11.10	77	10	2
Proposed WWTP Phase 2 Enabling works (Earthworks, access road, Horningsea Road junction works)	D6 and D9 Dozers	C2.10	80	50	4
	25t Dumper	N/A	73	50	3
	35t Dumper	N/A	75	50	3
	35t Excavator	C2.16	75	40	2
	20t Excavator	C2.25	69	40	4
	12t Roller	C5.25	75	20	3
	Towed Roller	C5.25	75	50	2
	Mobile crane	C4.43	70	50	2
	Wheeled excavator	C4.66	69	40	3
	9t Dumper	N/A	63	50	4
	Mobile access platform	C4.57	67	50	2
	Tarmac paver	C5.31	77	25	1
	Deliveries, Lorry / Dump Truck	C11.10	77	10	2
Proposed WWTP (Compound and external to earthbank area)	35t Excavator	C2.16	75	40	1
	20t Excavator	C2.25	69	40	1
	25t Dumper	N/A	73	50	2
	D6 Dozer	C2.10	80	50	1
	12t Roller	C5.25	75	20	1
	30t Crawler Crane	C4.43	70	50	1
	Site generator	C4.84	74	100	1
	Deliveries, Lorry / Dump Truck	C11.10	77	10	3
	Concrete batching plant and generator	N/A	78	80	1

Activity	Equipment	BS5228-1 Ref	Plant noise level, dB $L_{Aeq,T}$ at 10m	% on-time	Quantity
Proposed WWTP Water Recycling and STC (Within earthbank area)	50t Crawler Crane	C4.39	77	50	1
	30t Crawler Crane	C4.43	70	50	3
	50t Tower Crane	C4.48	76	50	3
	20t Excavator	C2.25	69	40	8
	12t Excavator / 9t Excavator	C2.25	69	40	5
	Wheeled excavator	C4.66	69	40	2
	12t Dump trucks / 6t Dump trucks	C11.10	77	50	10
	12t Roller	C5.25	75	25	4
	Compressors	C5.5	65	50	16
	Site generator	C4.84	74	100	1
	Tool generator	C4.84	74	20	10
	Concrete pump	C4.18	75	50	1
	Telehandler	C2.35	71	50	4
	Sheet piling hammer attachment	C3.8	88	10	1
	Deliveries, Lorry / Dump Truck	C11.10	77	10	10
Final effluent transfer and outfall					
Enabling, Construct access / haul road	30t Excavator	C2.16	75	40	1
	Vibratory compactor	C5.29	82	30	1
	Lorry / Dump Truck	C11.10	77	10	1
	Telescopic handler	C2.35	71	15	1
	Cement mixer truck (discharging)	C4.18	75	25	1
Enabling, Setup of site hoarding and compounds	Lorry / Dump Truck	C11.10	77	10	1
	Hydraulic hammer rig	C3.2	87	20	1
	Tracked excavator	C2.3	78	100	1
	Electric hammer drill	N/A	75	15	1
	Electric saw	N/A	80	10	1
	Wheeled loader (loading lorry)	C6.33	82	25	1

Activity	Equipment	BS5228-1 Ref	Plant noise level, dB $L_{Aeq,T}$ at 10m	% on-time	Quantity
	Handheld cordless nail gun	C4.95	73	20	1
	Mobile crane	C5.37	76	50	1
Excavate Outfall Trench and FE pipe installation	Excavator 50t	C4.63	77	40	1
	Excavator 30t	C2.16	75	40	1
	Excavator 17t	C2.25	69	40	1
	Crawler crane	C5.37	76	20	1
	12t Dumper	C4.4 & C4.5	72	40	1
	Pipe deliveries	C11.10	77	10	1
	Diesel generator	C4.78	66	80	1
	Pumps and settlement tank	C2.45	65	80	1
	Roller	C5.25	75	20	1
	Stone deliveries	C11.10	77	10	1
Outfall, Construct cofferdam and river bank improvements	Excavator 30t	C2.16	75	40	1
	Excavator 4t	C3.20	68	40	1
	10t Dumper	C4.4 & C4.5	72	40	1
	Mobile crane	C5.37	76	20	1
	Pumps and settlement tank	C2.45	65	80	1
	Diesel generator	C4.78	66	80	1
	Concrete pump	C3.25	78	25	1
	Concrete mixer truck	C4.32	78	10	1
Outfall, Construct cofferdam and river bank improvements [Piling]	Excavator 30t	C2.16	75	40	1
	Excavator 4t	C3.20	68	40	1
	10t Dumper	C4.4 & C4.5	72	40	1
	Piling rig (impact)	C3.1	89	25	1
	Sheet piling	C3.8	88	25	1
	Mobile crane	C5.37	76	20	1
	Pumps and settlement tank	C2.45	65	80	1
	Diesel generator	C4.78	66	80	1
	Concrete pump	C3.25	78	25	1
	Concrete mixer truck	C4.32	78	10	1
Transfer tunnelling					
Enabling, Construct access / haul road	30t Excavator	C2.16	75	40	1
	Vibratory compactor	C5.29	82	30	1

Activity	Equipment	BS5228-1 Ref	Plant noise level, dB $L_{Aeq,T}$ at 10m	% on-time	Quantity
	Lorry / Dump Truck	C11.10	77	10	1
	Telescopic handler	C2.35	71	15	1
	Cement mixer truck (discharging)	C4.18	75	25	1
Enabling, Setup of site hoarding and compounds	Lorry / Dump Truck	C11.10	77	10	1
	Hydraulic hammer rig	C3.2	87	20	1
	Tracked excavator	C2.3	78	100	1
	Electric hammer drill	N/A	75	15	1
	Electric saw	N/A	80	10	1
	Wheeled loader (loading lorry)	C6.33	82	25	1
	Handheld cordless nail gun	C4.95	73	20	1
	Mobile crane	C5.37	76	50	1
Excavate, construction and works at intercept Shaft 1,2	22t Excavator	N/A	73	50	1
	Telescopic grab	N/A	71	15	1
	9t excavator	C2.7	70	25	1
	22t Mobile Crane	C5.37	76	50	1
	Concrete Pump	C3.25	78	25	1
	Spoil Wagon / Dump Truck	C11.10	77	10	2
	Telescopic handler	C2.35	71	15	1
	Dewatering pump	C2.45	65	100	1
	Settlement tank	N/A	N/A	N/A	1
	Diesel generator 250kVA	C4.78	66	80	1
	Concrete Truck	C4.32	78	20	1
	Compressor	C5.5	65	50	1
	Over pumping equipment including Generator	C4.78	66	100	1
Excavate and construct Shaft 3	30t Excavator	C2.16	75	40	2
	5t Excavator	C2.7	70	50	1
	Mobile crane	C5.37	76	50	1

Activity	Equipment	BS5228-1 Ref	Plant noise level, dB $L_{Aeq,T}$ at 10m	% on-time	Quantity
	Spoil Wagon / Dump Truck	C11.10	77	10	1
	Telescopic handler	C2.35	71	15	1
	Dewatering pump	C2.45	65	100	1
	Settlement tank	N/A	N/A	N/A	1
	Diesel generator	C4.78	66	80	1
	Lorry / Dump Truck	C11.10	77	5	1
Excavate and construct Shaft 4	30t Excavator	C2.16	75	40	2
	5t Excavator	C2.7	70	50	1
	Mobile crane	C5.37	76	50	1
	Spoil Wagon / Dump Truck	C11.10	77	10	1
	Telescopic handler	C2.35	71	15	1
	Dewatering pump	C2.45	65	100	1
	Settlement tank	N/A			
	Diesel generator	C4.78	66	80	1
	Lorry / Dump Truck	C11.10	77	5	1
Excavate and construct Shaft 5	30t Excavator	C2.16	75	40	2
	5t Excavator	C2.7	70	50	1
	Mobile crane	C5.37	76	50	1
	Spoil Wagon / Dump Truck	C11.10	77	10	1
	Telescopic handler	C2.35	71	15	1
	Dewatering pump	C2.45	65	100	1
	Settlement tank	N/A	N/A	N/A	1
	Diesel generator	C4.78	66	80	1
	Lorry / Dump Truck	C11.10	77	5	1
Construction of TPS shaft	22t Excavator	N/A	73	50	1
	16t Excavator	C2.7	70	50	2
	80t Crawler	C4.39	77	50	1
	50t Crawler Crane	C4.43	70	50	1
	Drilling rig for tension piles	C3.16	79	20	1
	Spoil Wagon / Dump Truck	C11.10	77	10	3

Activity	Equipment	BS5228-1 Ref	Plant noise level, dB $L_{Aeq,T}$ at 10m	% on-time	Quantity
	Telescopic handler	C2.35	71	15	1
	Dewatering pump	C2.45	65	100	2
	Settlement tank	N/A	N/A	N/A	1
	Diesel generator 250KVA	C4.78	66	80	1
	Concrete Truck	C4.32	78	20	3
	180 and 260 compressors	C5.5	65	50	2
	Concrete Pump	C3.25	78	25	1
Tunnelling (Tunnel drives from Shaft 3 and Shaft 5)	30t Excavator	C2.16	75	25	1
	5t Excavator	C2.7	70	25	1
	Mobile crane	C5.37	76	20	1
	Pipejack rig	C2.44	77	100	1
	Lorry / Dump Truck	C11.10	77	10	2
	Telescopic handler	C2.35	71	15	1
	Dewatering pump	C2.45	65	100	1
	Settlement tank	N/A	N/A	N/A	1
	Diesel generator	C4.78	66	100	1
	Concrete mixer truck	C4.32	78	10	1
Shaft Dewatering (Receive shaft dormant while pipe-jacking)	Dewatering pump	C2.45	65	100	1
	Diesel generator	C4.78	66	100	1
Recover MTBM at receive shaft	Mobile crane	N/A	69	25	1
	30t Excavator	C2.16	75	40	1
	5t Excavator	C2.7	70	50	1
	Lorry / Dump Truck	C11.10	77	10	1
Waterbeach pipeline					
Enabling, Construct access / haul road	30t Excavator	C2.16	75	40	1
	Vibratory compactor	C5.29	82	30	1
	Lorry / Dump Truck	C11.10	77	10	1
	Telescopic handler	C2.35	71	15	1

Activity	Equipment	BS5228-1 Ref	Plant noise level, dB $L_{Aeq,T}$ at 10m	% on-time	Quantity
	Cement mixer truck (discharging)	C4.18	75	25	1
Enabling, Setup of site hoarding and compounds	Lorry / Dump Truck	C11.10	77	10	1
	Hydraulic hammer rig	C3.2	87	20	1
	Tracked excavator	C2.3	78	100	1
	Electric hammer drill	N/A	75	15	1
	Electric saw	N/A	80	10	1
	Wheeled loader (loading lorry)	C6.33	82	25	1
	Handheld cordless nail gun	C4.95	73	20	1
	Mobile crane	C5.37	76	50	1
Compound	Lorry / Dump Truck	C11.10	77	10	1
	Wheeled loader (loading lorry)	C6.33	82	25	1
	Telescopic handler	C2.35	71	15	1
	Diesel generator	C4.78	66	80	1
Horizontal Directional Drilling	Directional Drilling rig	C4.92	87	100	1
	Generator for directional drill	C4.96	77	100	1
	Slurry cleaning	N/A	78	100	1
	Butt fusion machine	N/A	75	20	1
	Pumps and settlement tank	C2.45	65	80	1
Excavation Trench and Install Pipe	Excavator 50T	C4.63	77	40	1
	Excavator 30T	C2.16	75	40	1
	Excavator 17T	C2.25	69	40	1
	Crawler crane	C5.37	76	20	1
	12T Dumper	C4.4 & C4.5	72	40	1
	Pipe deliveries	C11.10	77	10	1
	Diesel generator	C4.78	66	80	1
	Pumps and settlement tank	C2.45	65	80	1
	Roller	C5.25	75	20	1

Activity	Equipment	BS5228-1 Ref	Plant noise level, dB $L_{Aeq,T}$ at 10m	% on-time	Quantity
	Stone deliveries	C11.10	77	10	1
Decommissioning					
Decommissioning activities	22t Excavator	N/A	73	50	2
	10t dump truck	C11.10	77	10	4
	20t mobile crane	C5.37	76	50	1
	Grab wagon	C11.10	77	10	1
	Diesel pump	C4.88	68	75	2
	Diesel bowser	N/A	N/A	N/A	1
	180 deg excavator	C4.66	69	40	1
	5t dumper	C4.57	67	50	2
	Sludge tankers	C11.10	77	10	3

Representative receptors

1.1.3 Representative receptors have been selected for assessment of construction noise. These locations are described in the following table. Receptors are shown in Volume 3, Figure 17.2.

Table 1-3: Construction noise representative receptors

ID	Representative receptor	X, Y (BNG)	Baseline noise level source	Representative ambient noise level, dB $L_{Aeq,T}$						
				Weekday Early Morning (07:00 – 08:00)	Weekday Daytime (08:00 – 19:00)	Saturday Morning (08:00 – 13:00)	Saturday Afternoon (13:00 – 22:00)	Evening (19:00 – 22:00)	Night (22:00 – 07:00)	Sunday Daytime (07:00 – 19:00)
RC1	Receptors on northern extent of Capper Road, Waterbeach	550213, 266240	ST-5 *	48	50	47	48	46	43	45
RC2	Receptors on eastern extent of Capper Road, Waterbeach	550352, 266179	ST-5	50	52	49	50	48	45	47
RC3	Receptors on Bannold Road, Waterbeach	550339, 265860	ST-5	50	52	49	50	48	45	47
RC4	Lock Farm, Long Drove, Waterbeach	550778, 265812	ST-5	50	52	49	50	48	45	47
RC5	The Cottage, Burgess Drove, Waterbeach	550523, 265719	ST-5	50	52	49	50	48	45	47
RC6	1 Burgess Drove, Waterbeach	550326, 265294	ST-4	48	50	47	48	46	43	45
RC7	Cam Sailing Club	550333, 264890	ST-4	48	50	47	48	46	43	45
RC8	Cambridge Motor Boat Club	550227, 264643	ST-4	48	50	47	48	46	43	45
RC9	Receptors in Clayhithe Road, Horningsea	550241, 264347	ST-4	48	50	47	48	46	43	45

ID	Representative receptor	X, Y (BNG)	Baseline noise level source	Representative ambient noise level, dB $L_{Aeq,T}$						
				Weekday Early Morning (07:00 – 08:00)	Weekday Daytime (08:00 – 19:00)	Saturday Morning (08:00 – 13:00)	Saturday Afternoon (13:00 – 22:00)	Evening (19:00 – 22:00)	Night (22:00 – 07:00)	Sunday Daytime (07:00 – 19:00)
RC10	Receptors along Clayhithe Road between Clayhithe and Horningsea	549823, 263230	LT-4 **	50	52	49	50	48	48	47
RC11	Receptors at northern end of Horningsea	549565, 262808	LT-4 **	50	52	49	50	48	48	47
RC12	Rear of properties at High Street, Horningsea	549381, 262408	LT-4	50	52	49	50	48	48	47
RC13	Receptors on southern extent of Horningsea	549276, 262147	LT-4	50	52	49	50	48	48	47
RC14	Cowley Road, Cambridge	547295, 261896	ST-2	58	60	57	58	56	53	55
RC15	Biggin Abbey Cottages, Horningsea Road	548720, 261717	LT-3	60	62	59	59	59	58	57
RC16	Businesses at Cowley Road	547106, 261643	ST-1	64	66	63	64	62	59	61
RC17	Northern Bridge Farm, Fen Road	548165, 261460	LT-5	59	60	54	53	56	56	56
RC18	Businesses at Orwell Furlong	547028, 261425	ST-1	64	66	63	64	62	59	61
RC19	Poplar Hall, Horningsea Road	548517, 261372	LT-5	59	60	54	53	56	56	56

ID	Representative receptor	X, Y (BNG)	Baseline noise level source	Representative ambient noise level, dB $L_{Aeq,T}$						
				Weekday Early Morning (07:00 – 08:00)	Weekday Daytime (08:00 – 19:00)	Saturday Morning (08:00 – 13:00)	Saturday Afternoon (13:00 – 22:00)	Evening (19:00 – 22:00)	Night (22:00 – 07:00)	Sunday Daytime (07:00 – 19:00)
RC20	Cambridge Gold Driving Range	547148, 261330	ST-1 **	58	60	57	58	56	53	55
RC21	Cambridge Business Park, Cowley Road	547016, 261293	ST-1	64	66	63	64	62	59	61
RC22	Red House Close, Green End	548378, 261285	LT-5	59	60	54	53	56	56	56
RC23	Fen Road (travellers site)	548002, 261183	LT-1	56	57	55	52	54	54	55
RC24	Receptors south of existing Cambridge WWTP	546823, 261077	ST-1 **	58	60	57	58	56	53	55
RC25	38 Green End, Fen Ditton	548372, 261043	LT-1	56	57	55	52	54	54	55
RC26	Gate House, Low Fen Drove	550457, 260941	LT-2 ***	55	55	51	51	51	51	50
RC27	Receptors off Horningsea Road, Fen Ditton	548802, 260809	LT-1	56	57	55	52	54	54	55
RC28	Parsonage Farm, Low Fen Drove	549807, 261561	LT-4	50	52	49	50	48	48	47

* Correction has been applied (- 2 dBA) to account for the increased distance from the railway line at this location which presents the dominant noise source at this receptor location.
** Correction applied to account for distance from primary road traffic noise sources affecting measurement location with respect to receptor.
*** Correction applied for LT-2 proxy measurement location using verification measurement result as described in Application Document Reference 5.4.17.2 (Baseline Noise Report).

Results

1.1.4 Calculations have been completed at the representative receptor locations based on the maximum design scenario and the stated plant type and utilisation assumptions for all areas of the Proposed Development. Analysis and assessment of the results are provided within the ES Noise and Vibration Chapter.

1.1.5 All predictions are shown as free-field results and with embedded (primary and tertiary mitigation) where applicable. Calculations have been completed for distances up to 500m from construction work activities to include all representative receptors within the Study Area. Noise levels are only reported for receptors within 500m of the construction work activity. Receptors at greater distances would not be subject to adverse effects.

Table 1-4: Construction predicted noise levels

Activity	Calculated free-field receptor noise level, dB $L_{Aeq,T}$																										
	RC1	RC2	RC3	RC4	RC5	RC6	RC7	RC8	RC9	RC10	RC11	RC12	RC13	RC14	RC15	RC16	RC17	RC18	RC19	RC20	RC21	RC22	RC23	RC24	RC25	RC26	RC27	RC28
Proposed WWTP Phase 1 Enabling works																										50	50	53
Proposed WWTP Phase 2 Enabling works																										50	50	53
Proposed WWTP Water Recycling and STC (Compound and external to earth bank area)																										46	49	50
Proposed WWTP Water Recycling and STC (Within earth bank area)																												40
FE Transfer and Outfall Enabling, Construct access / haul road															55				43			39						
FE Transfer and Outfall Enabling, Setup of site hoarding and compounds															52		46		47			45						
Excavate Outfall Trench and FE pipe installation															52				44			39						
Outfall, Construct cofferdam and river bank improvements															49		41		41			39						
Outfall, Construct cofferdam and river bank improvements [Piling]															53		50		50			48						
Shaft 1 and 2 – Enabling, Setup of site hoarding and compounds														46		55		55		55	50							
Shaft 1 and 2 – Works at Shaft 1,2														41		51		50		50	46							

	Calculated free-field receptor noise level, dB $L_{Aeq,T}$											
Shaft 1 and 2 – Dewatering (Dormant while pipe-jacking)	30	40	39	40	35							
Shaft 1 and 2 – Recover MTBM	36	45	45	45	40							
Shaft 3 – Enabling, Setup of site hoarding and compounds			50				47					
Shaft 3 – Excavate and construct			44				42					
Shaft 3 – Tunnelling (Drive from Shaft 3 to Shaft 2, and Drive from Shaft 3 to Shaft 4)			46				43					
Shaft 4 – Enabling, Construct access / haul road			43	54		60	39	48				
Shaft 4 – Enabling, Setup of site hoarding and compounds			48	59		65	44	51				
Shaft 4 – Excavate and construct			42	53		59	39	45				
Shaft 4 – Dewatering (Dormant while pipe-jacking)			32	44		50	29	36				
Shaft 4 – Recover MTBM			38	49		55	34	41				
Shaft 5 – Enabling, Construct access / haul road				40				39	48			
Shaft 5 – Enabling, Setup of site hoarding and compounds				45				44	51			
Shaft 5 – Excavate and construct				39				38	48			
Shaft 5 – Tunnelling (Drive from Shaft 5 to				41				40	48			

	Calculated free-field receptor noise level, dB $L_{Aeq,T}$																													
Shaft 4, and Drive from Shaft 5 to Terminal Pumping Station)																														
TPS Shaft – Construction of TPS shaft																														
TPS Shaft – Dewatering (Dormant while pipe-jacking)																														
TPS Shaft – Recover MTBM																														
Waterbeach Pipeline, Enabling, Setup of site hoarding and compounds	53	62	46																											
Waterbeach Pipeline, Compound	46	55	39																											
Waterbeach Pipeline, Horizontal Directional Drilling	55	63	59	55	65	55	59	50									67		48			68	56		59		65	51		
Waterbeach Pipeline, Excavation Trench and Install Pipe	49	59	49	45	69	61	51	46	70	53	54	49	46	53	39	53	58	44	49	43	41	66	46	35	55	28	60	42		
Decommissioning Existing WWTP														56		48	48	59		58	59	39	45	42						
Decommissioning Waterbeach WRC	48	45																												

Construction traffic

1.1.6 A summary of construction traffic parameters used within assessment of noise impacts is provided in the following table.

Table 1-5: Construction traffic parameters

Road/route	Speed	Baseline Flow, AADT	Baseline % HGV	Additional Construction Cars/LDV	Additional Construction HGV	Baseline BNL, dBA	With Construction Traffic BNL, dBA	BNL Increase, dBA
A14	112	65273	11.4	~~319~~294	~~542~~396	82.6	82.8	+0.2
A14 J34 Slip Road	112	11454	13.0	~~258~~267	~~370~~360	75.3	75.8	+0.5
Horningsea Road (at main site access)	61	5633	2.6	~~261~~267	~~370~~360	65.9	67.~~8~~7	+1.~~9~~8
Horningsea Road (at transfer tunnel access)	61	5633	2.6	27	~~45~~40	65.9	66.2	+0.3
Denny End Road	47	5515	5.5	~~14~~28	82	65.4	65.8	+0.4
Bannold Road	37	2687	3.2	~~14~~28	82	60.7	61.9	+1.2
Car Dyke Road	60	4249	4.0	~~14~~28	82	65.0	65.5	+0.5
Clayhithe Road	46	4319	2.4	~~14~~28	82	63.2	63.9	+0.7
Burgess Road*	N/A	N/A	N/A	~~14~~28	82	N/A	N/A	N/A
A10	112	23731	6.1	~~12~~28	82	71.8	71.9	+0.1
Cowley Road*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Milton Road	40	18963	4.4	~~47~~55	90	69.9	70.0	+0.1
Green End Road	34	7682	5.6	~~14~~28	90	66.0	66.5	+0.5
Fen Road	33	4664	5.5	~~14~~28	90	63.8	64.5	+0.7

* Routes have very low existing flows

Get in touch

You can contact us by:

Emailing at **info@cwwtpr.com**

Calling our Freephone information line on **0808 196 1661**

Writing to us at **Freepost: CWWTPR**

Visiting our website at [redacted]

You can view all our DCO application documents and updates on the application on The Planning Inspectorate website:

https://infrastructure.planninginspectorate.gov.uk/projects/eastern/cambridge-waste-water-treatment-plant-relocation/