Soil washing (rate based on mass of treated material)

Soil flushing (rate based on mass of treated material)

Vacuum extraction (rate based on mass of treated material)

Thermal treatment (rate based on mass of treated material)

cost range £

Roads			Ground stabilisation and site levelling	
Two lane road 7.3 m wide, rural location	m	1,050-1,300	Erosion control mat: topsoil m²	6-8
Extra for: features (total cost of features / m of motorway)	item	550	Revetment: stone filled mattress gabions, 1 m thick m²	85-120
Two lane road 7.3 m wide, urban link road	m	1,600-2,100	Retaining wall: timber cribwall m²	130-250
Extra for: features (total cost of features / m of motorway)	item	720	Retaining wall: precast concrete cribwall m ²	240-275
Four lane road, dual carriageway, 25.6 m wide overall, rural location	m	1,500-1850	Retaining wall: precast concrete; complete m²	310-350
Extra for: features (total cost of features / m of motorway)	item	1150	Retaining wall: insitu concrete; complete m²	330-420
Four lane road, dual carriageway, 23.1 m wide overall, urban location	m	1500-1900	Filling to make of levels: material retained on site m ³	3-5
Extra for: features (total cost of features / m of motorway)	item	2450	Excavation to revised formation level: disposal of material off site, London m ³	30-45
NB: Costs are based on normal ground conditions and include all earths	works, d	Irainage,	Excavation to revised formation level; as above, rest of UK m ³	
pavements, lighting, signs, fencing and safety barriers (where necessary	/). The n	naximum depth of		
cut assumed is 1 m. Costs of features represent average cost per metro	e of all r	roadway features.	Land drainage	
Costs of features such as; interchanges, side roads, bridges and so on.			Land drain: 150 mm dia,depth to invert 450–600 mm m	15-20
			Land drain: 150 mm dia, depth to invert 450-600 mm,	
Civil structures			Dispose surplus off site m	20-25
Road bridge: insitu concrete			Sump for land drain: depth to 1.2m item	650-675
15 m maximum span between abutments	m ²	1200-1300		
20 m maximum span between abutments	m ²	1100-1200	Below-ground drainage: Highways	
Road bridge: in-situ concrete with precast concrete beams			Average rate for drainage including trench, pipework and accessories m	120-190
12 m maximum span between abutments	m ²	1250-1350	Manholes installation complete, rate based on 2 m depth item	1,000-1,800
17 m maximum span between abutments	m ²	1200-1250		
27 m maximum span between abutments	m ²	1100-1200	Below-ground drainage: Public realm	
Road bridge: insitu concrete with prefabricated steel beams			Average rate for drainage including trench, pipework and drainage channels m	200-325
20 m maximum span between abutments	m ²	1200-1300	Polypropylene inspection chambers: Granular bed & surround,	
40 m maximum span between abutments	m ²	1100-1200	475 mm dia, average depth 1000 m item	350-400
Footbridge: insitu concrete with precast concrete beams			Drainage channel: ACO type, PD100 including cover, Class C m	70-100
10 m maximum span between abutments	m ²	1000-1050	Drainage Channel: ACO type, PD100 sump Class C item	140-160
20 m maximum span between abutments	m ²	1050-1100		
Extra over cost of features constructed as part of the road construction	progran	mme:	Below-ground services: Trench rates	
Pedestrian underpass: 3 m × 2.5 m high	m	3500-4200	600 mm drain, average depth to inv 1900, granular bed and surround,	
Vehicle underpass: 7 m × 5 m high	m	17,500-21,200	granular backfill, dispose surplus off site m	130-150
			450 mm drain, average depth to inv 1520 granular bed and surround,	
Road crossings and signage			granular backfill, dispose surplus off site m	80-100
Roundabout, traffic signal controlled	item	40,000-65,000	300 mm drain, average depth to inv 1200, granular bed and surround,	
Four way traffic signal installation	item	40,000-55,500	granular backfill, dispose surplus off site m	50-70
Zebra crossing	item	4,500-5,000		
Pelican crossing	item	17,250-18,500	Water main	
(For both crossing types costs include road markings, beacons, luminair	es and s	signs)	PVCu water main: 75 mm; in 150 mm cast-iron pipe as duct m	50-90
Traffic signage: reflective	item	100-200		
Traffic signage: internally illuminated	item	200-300	Electric main	
Traffic signage: externally illuminated	item	450-1300	600/1000 volt cable, 100 mm clayware duct; granular bed and surround m	31-37
Pedestrian crossing LED, recessed in ground includes installation			On the LV distribution	
in ground – excavation, forming recess, backfill and so on	item	750-830	On site LV distribution	
			Armoured LV cable in trench: 3 core 2.5mm cable;	
Car parking			trench backfilled with excavated material m	10-17
Surface car parking (20–23 m²/car)	m ²	55-80	Committee	
Surface car parking: landscaped (20–25 m²/car)	m ²	65-130	Gas main	
Grade and upper level car parking (23–32 m²/car)	m ²	200-320	MDPE pipe: 15 mm; on granular bed and surround m	50-65
Multistorey flat slab (24–32 m²/car)	m ²	300-600		
Semi basement with natural ventilation (24–32 m²/car)	m ²	500-750	Telecommunications	
Ground remediation			PVCu duct: 4 × 100mm; on granular bed and surround;	
		00.000	backfill with excavated material; marker tape m	22-40
Removal: non-hazardous	m ³	80-150	High-voltage electicity	
Removal: hazardous	m³	135-365		20.000 10.000
Clean cover: 500 mm depth	m²	25-60		30,000-40,000
On-site encapsulation (rate based on volume of material)	m ³	30-95	11 kV underground power lines (cost per run) km	95,000-105,000
Bio-remediation (rate based on mass of treated material)	t	35-100 50-100		
Sour Washing trate hased on mass of treated material)		50-100		

50-100

70-130

60-130

900-1,500