

P:\LONDON PROJECTS\2019\1947_PROJECT OSPREV01 CAD\02 SHEET LAYOUT\1947-EXA-ZZ-ZZ-DR-L-00100.DWG



LEGEND

HARD LANDSCAPE

- SURFACE TYPE 01 - TARMAC ROAD
- SURFACE TYPE 02 - CONCRETE BLOCK PAVING
- SURFACE TYPE 03 - PERMEABLE BLOCK PAVING
- SURFACE TYPE 04 - PERMEABLE BLOCK PAVING
- SURFACE TYPE 05 - PERMEABLE BLOCK PAVING
- SURFACE TYPE 06 - PERMEABLE RESIN BOUND GRAVEL
- SURFACE TYPE 07 - CONCRETE SETTS
- SURFACE TYPE 08 - PERMEABLE PLAY SURFACING
- SURFACE TYPE 09 - GREEN PERMEABLE PAVING
- SURFACE TYPE 10 - COMPOSITE TIMBER DECKING
- SURFACE TYPE 11 - RESIDENTIAL PAVING
- SURFACE TYPE 12 - SELF-BINDING GRAVEL

SOFT LANDSCAPE

- EVERGREEN HEDGE
- SPECIES RICH LAWN
- IN-GROUND PERENNIAL PLANTING
- PREPARED SELF-GROW BEES
- FILTRATION GARDEN / RAINGARDEN

EXISTING TREE TO BE RETAINED

PROPOSED TREE

INDICATIVE SMOOTH MOUNDING IN PLAY SPACES

WALLS, EDGES, STEPS AND FURNITURE

- BRICK WALLS AND STEPS TO MATCH ADJACENT SURFACE TREATMENT. ALL STEPS TO INCLUDE HANDRAILS
- RESIDENTIAL STEPS AND BRICK WALLS WITH GATE TO MATCH ADJACENT SURFACE TREATMENT. ALL STEPS TO INCLUDE HANDRAILS. GATES TO BE 1100mm IN HEIGHT.
- ECOLOGICAL BOUNDARY WALL TO RATIONALISE LEVEL CHANGE.
- BAKERSFIELD RETAINING WALL TO RATIONALISE LEVEL CHANGE.
- SHEPHERD CYCLE STANDS ARRANGED IN GROUPS
- DROP-DOWN BOLLARDS TO MANAGE VEHICLE MOVEMENT

SEATING AND SEAT ELEMENTS

- BUILT-IN TIMBER SEATING ELEMENTS AN ARRAY OF TYPOLOGIES AND FORMS ACROSS THE SCHEME WITH BACKRESTS AND ARMRESTS
- MOVEABLE SEATING ELEMENTS COMPRISING COMMUNITY TABLES, LOUNGERS AND LOUNGE SETS, MEETING TABLES AND RECLINERS

SENSORY / EXTRA-CARE GARDEN

- TIMBER CIRCLE SEATS WITH BACKS AND ARMRESTS, WITH CENTRAL SCULPTURAL BIRD BATH
- WATER FEATURE / FOUNTAIN WITH ROCKY EDGE AND ROCKERY PLANTING

WOMENS GARDEN + PLOT A AND PLOT B COMMUNAL COURTYARDS

- STAINLESS STEEL AND TIMBER PERGOLA WITH CLIMBING SPECIES
- CASCADING WATER FEATURE

PLAY EQUIPMENT

PLAY EQUIPMENT AND LAYOUTS OF PLAY AREAS ARE CURRENTLY UNDER REVIEW AND ARE SUBJECT TO CHANGE. LIST BELOW IS INDICATIVE AND NON-EXHAUSTIVE.

P01	ROBINA STILTS	P21	OUTDOOR FOOSBALL/MARBLES GAMES TABLE
P02	ROBINA BALANCE BEAM ON SPRINGS	P22	JUMPING DISCS
P03	CUBE SEATS	P23	SUPPLIER: RICHTER SPIELGERATE
P04	ROBINA BALANCE POSTS WITH ROPE	P24	HAWKS NEST
P05	ROBINA BALANCE PLUS	P25	SUPPLIER: HANDMADE PLACES
P06	ROBINA SINGLE BALANCE BEAM	P26	TIMBER ANIMALS
P07	TIMBER STEPPING LOGS	P27	SUPPLIER: RICHTER SPIELGERATE
P08	EPDM BALLS - VARIOUS SIZES	P28	MONKEY SWINGING BARS
P09	SMALL SEE-SAW OR SPRINGER	P29	SUPPLIER: TO BE CONFIRMED
P10	TALK TUBES	P30	INCLUSIVE BASKET SWING
P11	STAINLESS STEEL SLIDE - SMALL	P31	SUPPLIER: TO BE CONFIRMED
P12	SPINNER	P32	CUSTOM PLAY TOWER WITH SLIDES, SWING BRIDGES, CLIMBING NETS, HIGH ROPS COURSE, HAND GRIPS AND CLIMBABLE MESH, FIREMAN'S POLE AND FEATURE SLIDES
P13	TIMBER STEPS	P33	SUPPLIER: TO BE CONFIRMED
P14	TEE-PEE SHELTER AND CUBE SEATS	P34	ZIPLINE OR FLYING FOX
P15	SCRAMBLING CUBE BLOCKS	P35	SUPPLIER: TO BE CONFIRMED
P16	HERONS NEST	P36	FOSSIL ROCKS AND CLIMBERS
P17	STAINLESS STEEL SLIDE - MEDIUM	P37	SUPPLIER: TO BE CONFIRMED
P18	OUTDOOR CHESS/GAMES TABLE	P38	BUG HOTELS AND MAGNIFYING STATIONS
P19	RESIDENTIAL HAMMOCKS	P39	SUPPLIER: TO BE CONFIRMED
P20		P40	TIMBER BALANCING AND CLIMBING ELEMENTS, NETS AND LOG STACKS TO CREATE NATURE TRIM TRAIL UNDER EXISTING TREES AND IN NATURE GARDEN
		P41	SEE-SAW - LARGE
		P42	SUPPLIER: FLIGHTS OF FANTASY
		P43	MUD-KITCHEN AND LEARNING AREA
		P44	OUTDOOR TABLE TENNIS TABLES
		P45	SUPPLIER: TO BE CONFIRMED
		P46	PANDORA CLIMBING FRAME
		P47	SUPPLIER: SCORPION PLAY
		P48	WIDOW'S WEB NEST
		P49	SUPPLIER: SOVEREIGN PLAY

ECOLOGICAL ENHANCEMENT AND HABITAT

ANNUAL HOMES AND FINAL QUANTITIES TO BE SELECTED BY QUALIFIED PROJECT ECOLOGIST. ALL ANNUAL HOMES TO BE LOCATED FACING SOUTH OR WEST. PROPOSED HOMES INTEGRATED WITHIN THE FRAMEWORK OF THE BUILDING FACADE ARE NOT SHOWN.

EC01	SPARROW 'TERRACES'	EC03	BAT BOX
	min. 2 or 3m above ground, and placed in groups to accommodate sparse colonies	EC04	BUG HOTEL
			To be filled with organic material from removed trees
EC02	BWFT NEST BOX		
	min. 4m above ground with clear flight lines		

0 20m

No dimensions are to be scaled from this drawing. All dimensions are to be checked on site. Area measurements for indicative purposes only.

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Client
PEABODY

NOTES:

- FIRE ACCESS AND MAINTENANCE ACCESS TO PLOT C TO BE INCORPORATED
- TRECASTLE WAY TO BE UPDATED FOLLOWING INCLUSIVE DESIGN WORKSHOP WITH LBI - 25.08.2021
- ECOLOGICAL RETAINING WALL TO BE DEVELOPED IN CONSULTATION WITH ECOLOGISTS AND STRUCTURAL ENGINEERS
- ARBORICULTURALIST TO REVIEW ALL EXISTING TREES AND ROOT PROTECTION AREAS
- LAYOUTS AND PLANTING TYPES SUBJECT TO FINALISING AGAINST UPDATED UGF CALCULATION

SK02	80% DRAFT	26.08.2021
SK01	80% DRAFT	25.08.2021
Rev	Description	Date

EXTERIOR ARCHITECTURE

LONDON
Unit 17.1, The Leather Market, 11-13 Weston Street, London, SE1 3ER
MANCHESTER
Studio 537, The Royal Exchange, St Anns Square, Manchester, M2 7DH

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Project title
PROJECT HOLLOWAY

Drawing title
GENERAL ARRANGEMENT PLAN - GROUND FLOOR

Issued By	London	T: 020 7978 2101
Scale	1:500 @ A1	Drawn EXA
Status	STAGE 2	Checked KB
Date	25.08.2021	Approved TOD

Drawing number
1947-EXA-ZZ-ZZ-DR-L-00100

Revision
SK02

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LEGEND

PLANNING APPLICATION BOUNDARY

HARD LANDSCAPE

- SURFACE TYPE 02 - CONCRETE BLOCK PAVING
To footpaths and circulation areas
- SURFACE TYPE 06: PERMEABLE RESIN BOUND GRAVEL
To self-grow areas
- SURFACE TYPE 10: COMPOSITE TIMBER DECKING
To seating areas
- SURFACE TYPE 11: RESIDENTIAL PAVING
To residential terraces

SOFT LANDSCAPE

- PERENNIAL PLANTING IN RAISED PLANTER
- PREPARED SELF-GROW BEDS
- GREENBROWN ROOF - REFER TO ARCHITECTS DRAWINGS
- PROPOSED SHRUB OR TREE

SEATING AND SEAT ELEMENTS

- BUILT-IN TIMBER SEATING AND RECLINERS AN ARRAY OF TYPOLOGIES AND FORMS ATTACHED TO PROPOSED RAISED STEEL PLANTERS
- SEATING ELEMENTS AN ARRAY OF TYPOLOGIES COMPRISING COMMUNITY TABLES, LOUNGERS AND LOUNGE SETS, MEETING TABLES

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Client
PEABODY

NOTES:

- THIS PLAN INCLUDES COMMUNAL SPACE ONLY. REFER TO ARCHITECTURAL INFORMATION FOR PROVISION OF PRIVATE AMENITY SPACES

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P01	PLANNING SUBMISSION	01.11.2021
Rev	Description	Date

EXTERIOR ARCHITECTURE

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Unit 17.1, The Leather Market, 11-13 Weston Street, London, SE1 3ER

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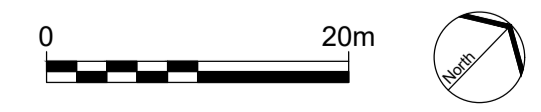
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Project title
PROJECT HOLLOWAY

Drawing title
**Landscape General Arrangement
Plan_Roof**

Issued By	London	T: 020 7978 2101
Scale	1:500 @ A1	Drawn EXA
Status	PLANNING	Checked TOD
Date	01.11.2021	Approved LP

Drawing number	1947-EXA-ZZ-ZZ-DR-L-00110	Revision	P01
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Appendix B Exploratory Depth and Requirements

Exploratory Holes	Depth (m bgl)	In-situ Testing and sampling	Installation (Details to be confirmed on completion of drilling)
BH01	40	Geotechnical and geo-environmental	50mm Standpipe. 35m total 4 slotted remainder plain. 19mm standpipe. 5m total, 2m slotted 3 plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH02	25	Geotechnical and geo-environmental	50mm Standpipe. 25m total 4 slotted remainder plain. 19mm standpipe. 5m total, 2m slotted 3 plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH03	40	Geotechnical and geo-environmental	None
BH04	40	Geotechnical and geo-environmental	50mm Standpipe. 50mm Standpipe. 35m total 4 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH05	40	Geotechnical and geo-environmental	50mm Standpipe. 35m total 4 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH06	20	Geotechnical and geo-environmental	50mm Standpipe. 50mm Standpipe. 8m total 3 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH07	20	Geotechnical and geo-environmental	None
BH08	20	Geotechnical and geo-environmental	50mm Standpipe. 8m total 3 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH09	40	Geotechnical and geo-environmental	50mm Standpipe. 35m total 4 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH10	40	Geotechnical and geo-environmental	50mm Standpipe. 35m total 4 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH11	30	Geotechnical and geo-environmental	None
BH12	40	Geotechnical and geo-environmental	50mm Standpipe. 8m total 3 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.

Exploratory Holes	Depth (m bgl)	In-situ Testing and sampling	Installation (Details to be confirmed on completion of drilling)
BH13	40	Geotechnical and geo-environmental	None
BH14	40	Geotechnical and geo-environmental	50mm Standpipe. 35m total 4 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH15	25	Geotechnical and geo-environmental	None
BH16	40	Geotechnical and geo-environmental	50mm Standpipe. 35m total 4 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH17	20	Geotechnical and geo-environmental	None
BH18	25	Geotechnical and geo-environmental	50mm Standpipe. 8m total 3 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH19	40	Geotechnical and geo-environmental	50mm Standpipe. 35m total 4 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
BH20	20	Geotechnical and geo-environmental	None
BH21	40	Geotechnical and geo-environmental	50mm Standpipe. 35m total 4 slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
WS01	To extend 1m into the London Clay Formation (estimated max. 3-5m bgl)	Geo-environmental	50mm Standpipe. 4m total, 3m slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
WS02		Geo-environmental	50mm Standpipe. 4m total, 3m slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
WS03		Geo-environmental	None
WS04		Geo-environmental	None
WS05		Geo-environmental	50mm Standpipe. 4m total, 3m slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
WS06		Geo-environmental	50mm Standpipe. 4m total, 3m slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.

Exploratory Holes	Depth (m bgl)	In-situ Testing and sampling	Installation (Details to be confirmed on completion of drilling)
WS07	3.0	Geo-environmental	None
WS08		Geo-environmental	50mm Standpipe. 4m total, 3m slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
WS09		Geo-environmental	None
WS10		Geo-environmental	50mm Standpipe. 4m total, 3m slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
WS11		Geo-environmental	50mm Standpipe. 4m total, 3m slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
WS12		Geo-environmental	50mm Standpipe. 4m total, 3m slotted remainder plain. Bentonite surrounding plain, pea gravel surrounding slotted.
TP01		Geo-environmental and CBR at 0.5m to 0.6m	None
TP02		None	None
TP03		Geo-environmental and CBR at 0.5m to 0.6m	None
TP04		None	None
TP05		Geo-environmental and CBR at 0.5m to 0.6m	None
TP06		None	None
TP07	Geo-environmental and CBR at 0.5m to 0.6m	None	
TP08	None	None	
SA 01	Soakaway test	None	
SA 02	Soakaway test	None	
SA 03	Soakaway test	None	



Appendix C Bill of Quantities

Number	Item description	Unit	Quantity	Rate	Amount £
A	General items, provisional services and additional items				
A1	Offices and stores for the Contractor	sum	1.00		
A2	Establish on site all plant, equipment and services for a Green Category site	sum	1.00		
A3	Extra over Item A2 for a Yellow Category site	sum	1.00		
A4	Maintain on site all site safety equipment for a Yellow Category site	week	5.00		
A5	Decontamination of equipment during and at end of intrusive investigation for a Yellow Category site	sum			
A6	Appropriate storage, transport and off-site disposal of contaminated arisings and any PPE equipment, excluding laboratory testing	provisional sum	1.00		
A7	Provide professional attendance in accordance with Clause 3.5.2				
A7.1	Provide Technician	p.day			
A7.2	Provide graduate ground engineer	p.day			
A7.3	Provide Experienced Ground Engineer	p.day	30.00		
A7.4	Provide Registered Ground Engineering Professional	p.day			
A7.5	Provide Registered Ground Engineering Specialist	p.day			
A7.6	Provide Registered Ground Engineering Advisor	p.day			
A8	Establish the location and elevation of the ground at each exploratory hole	sum	1.00		
A9	Preparation of Health and Safety documentation and Safety Risk Assessment.	sum	1.00		
A10	Facilities for the Investigation Supervisor	sum			
A11	Vehicle(s) for the Investigation Supervisor	v.wk			
A12	Fuel for vehicle for the Investigation Supervisor	provisional sum			
A13	Investigation Supervisor's telephone and facsimile charges	provisional sum			
A14	Deliver selected cores and samples to the specified address	provisional sum			
A15	Special testing and sampling required by Investigation Supervisor	provisional sum			
A16	Traffic safety and management	provisional sum			
A17	One master copy of the Desk Study Report	sum			
A18	Additional copies of the Desk Study Report	nr			
A19	One master copy of the Ground Investigation Report (or specified part thereof)	sum	1.00		
A20	Additional copies of the Ground Investigation Report (or specified part thereof)	nr			
A21	Electronic copy of Ground Investigation Report (or specified part thereof)	sum			
A22	One master copy of the Geotechnical Design Report (or specified part thereof)	sum			
A23	Additional copies of the Geotechnical Design Report (or specified part thereof)	nr			
A24	Electronic copy of Geotechnical Design Report (or specified part thereof)	sum			
A25	Digital data in AGS transfer format	sum	1.00		
A26	Hard copy photographs	nr			
A27	Photographic volume	nr	1.00		
A28	Long-term storage of geotechnical samples (Appendix B)	provisional sum			
A29	Long-term storage of geoenvironmental samples (Appendix B)	provisional sum			
<u>Contract specific additional bill items</u>					
A30	Utility clearance including GPR	Day	2.00		
A31	Concrete Coring	Day	1.00		
A32	UXO Mobilisation	Week	4.00		
A33	UXO Supervision	Day	20.00		

Total section A carried to summary: _____

Number	Item description	Unit	Quantity	Rate	Amount £
B	Percussion boring				
B1	Move boring plant and equipment to the site of each exploratory hole and set up	nr	21.00		
B2	Extra over Item B1 for setting up on a slope of gradient greater than 20%	nr			
B3	Break out surface obstruction where present at exploratory borehole	h			
B4	Advance borehole between existing ground level and 10 m depth (200mm)	m	210.00		
B5	As Item B4 but between 10 m and 20 m depth (200mm)	m	210.00		
B6	As Item B4 but between 20 m and 30 m depth	m	145.00		
B7	As Item B4 but between 30 m and 40 m depth	m	120.00		
B8	As Item B4 but between 40 m and 50 m depth	m			
B9	Advance borehole through hard stratum or obstruction	h			
B10	Provide aquifer protection measures at a single aquiclude/aquifer boundary or cross-contamination control measures at a single soil boundary in a borehole	nr			
B11	Backfill borehole with cement/bentonite grout or bentonite pellets	m			
B12	Standing time for borehole plant, equipment and crew <u>Dynamic sampling</u>	h	53.00		
B13	Move dynamic sampling equipment to the site of each exploratory hole and set up	nr			
B14	Extra over Item B13 for setting up on a slope of gradient greater than 20%	nr			
B15	Advance dynamic sample hole between existing ground level and 5 m depth	m			
B16	As Item B15 but between 5 and 10 m depth	m			
B17	As Item B15 but between 10 and 15 m depth	m			
B18	Standing time for dynamic sampling equipment and crew	hr			
B19	Provision of dynamic sampling equipment and crew for sampling as directed by the Investigation Supervisor; maximum depth 15 m	day	3.00		
B20	Backfill dynamic sampling hole with cement/bentonite grout or bentonite pellets	m			
<u>Contract specific additional bill items</u>					
	Provision of stainless steel casing	nr			
	Day rate for pulling casing	Day			

Total section B carried to summary: _____

Number	Item description	Unit	Quantity	Rate	Amount £
D	Pitting and trenching				
	<u>Inspection pits</u>				
D1	Excavate inspection pit by hand to 1.2m depth	nr	21		
D2	Extra over Item D1 for breaking out surface obstructions	h			
	<u>Trial pits and trenches</u>				
D3	Move equipment to the site of each trial pit or trench of not greater than 4.5m depth	nr			
D4	Extra over Item D3 for setting up on a slope of gradient greater than 20%	nr			
D5	Extra over Item D3 for trial pit or trench between 4.5 and 6m depth	nr			
D6	Excavate trial pit between existing ground level and 3.0m depth	m			
D7	As Item D6 but between 3.0 and 4.5m depth	m			
D8	As Item D6 but between 4.5 and 6m depth	m			
D9	Excavate trial trench between existing ground level and 3.0m depth	m ³			
D10	As Item D9 between 3.0 and 4.5m in depth	m ³			
D11	As Item D9 between 4.5 and 6m depth	m ³			
D12	Extra over Items D6 to D11 inclusive for breaking out hard material or surface obstructions	h			
D13	Standing time for excavation plant, equipment and crew for machine dug trial pit or trench	h			
	<u>Observation pits and trenches</u>				
D14	Move equipment to the site of each observation pit or trench of not greater than 4.5m depth	nr			
D15	Extra over Item D14 for setting up on a slope of gradient greater than 20%	nr			
D16	Extra over Item D14 for trial pit or trench between 4.5 and 6m depth	nr			
D17	Excavate observation pit between existing ground level and 3.0m depth	m			
D18	As Item D17 but between 3.0 and 4.5m depth	m			
D19	As Item D17 but between 4.5 and 6m depth	m			
D20	Extra over Item D17 for hand excavation	m			
D21	Excavate observation trench between existing ground level and 3.0m depth	m ³			
D22	As Item D21 but between 3.0 and 4.5m depth	m ³			
D23	As Item D21 but between 4.5 and 6m depth	m ³			
D24	Extra over Item D21 for hand excavation	m ³			
D25	Extra over Items D17 to D19 and D21 to D23 for breaking out hard strata or obstructions	h			
D26	Extra over Items D17 and D21 for breaking out hard strata or obstructions by hand	h			
D27	Standing time for excavation plant, equipment and crew for machine dug observation pit or trench	h			
D28	Standing time for excavation plant, equipment and crew for hand dug observation pit or trench	h			
	<u>Daily provision of pitting crew and equipment</u>				
D29	Provision of excavation plant equipment and crew for machine dug trial pits or trenches as directed by the Investigation Supervisor, maximum depth 3.0m	day	2		
D30	As Item D29 but between 3.0 and 4.5m depth	day			
D31	As Item D29 but between 4.5 and 6.0m depth	day			
D32	Provision of excavation plant, equipment and crew for machine-dug observation pit or trench as directed by the Investigation Supervisor, maximum depth 3.0m	day			
D33	As Item D32 but between 3.0 and 4.5m depth	day			
D34	As Item D32 but between 4.5 and 6.0m depth	day			
D35	As Item D32 but for hand excavation	day			
D36	Extra over Items D32 to D34 for breaking out hard strata or obstructions	day	1		
	<u>General</u>				
D37	Bring pump to the position of each exploratory pit or trench	nr			
D38	Pump water from pit or trench	h			
D39	Extra over Item D38 for temporary storage, treatment and disposal of contaminated water	Provisional sum			
D40	Leave open observation pit or trench	m ² /day			
D41	Leave open trial pit or trench	m ² /day			
	<u>Contract specific additional bill items</u>				

Total section D carried to summary:

Number	Item description	Unit	Quantity	Rate	Amount £
E	Sampling and monitoring during intrusive investigation				
	<u>Samples for geotechnical purposes</u>				
E1	Small disturbed sample	nr	685		
E2	Bulk disturbed sample	nr	685		
E3	Large bulk disturbed sample	nr			
E4.1	Open tube sample using thick walled (OS-TK/W) sampler	nr			
E4.2	Open tube sample using thin walled (OS-T/W) sampler	nr	265		
E5	Piston sample	nr			
E6	Groundwater sample	nr			
E7	Ground gas sample	nr			
E8	Cut, prepare and protect core sub sample	nr			
	<u>Continuous or semi-continuous sampling</u>				
E9	Move Delft continuous or Mostap semi-continuous sampling plant and equipment to the site of each exploratory hole and set up	nr			
E10	Extra over Item E9 for setting up on a slope of gradient greater than 20%	nr			
E11	Break out surface obstruction where present at exploratory hole	h			
E12	Advance sampler between existing ground level and 10m depth	m			
E13	As Item E12 but between 10 and 20m depth	m			
	<u>Containers for contamination assessment and WAC testing</u>				
E14.1	Provision of containers and collection of samples for contamination Suite E (S1.20.3)	nr			
E14.2	Provision of containers and collection of samples for contamination Suite F (S1.20.3)	nr			
E14.3	Provision of containers and collection of samples for contamination Suite G (S1.20.3)	nr			
E15.1	Provision of containers and collection of samples for WAC Suite H (S1.20.5)	nr			
E15.2	Provision of containers and collection of samples for WAC Suite I (S1.20.5)	nr			
E15.3	Provision of containers and collection of samples for WAC Suite J (S1.20.5)	nr			
	<u>Contract specific additional bill items</u>				

Total section E carried to summary: _____

Number	Item description	Unit	Quantity	Rate	Amount £
H	In situ testing				
H1	Standard penetration test in borehole	nr	300		
H2	Standard penetration test in rotary drillhole	nr			
H3	In situ density testing				
H3.1	Small pouring cylinder method	nr			
H3.2	Large pouring cylinder method	nr			
H3.3	Water replacement method	nr			
H3.4	Core cutter method	nr			
H3.5	Nuclear method	day			
H4	California Bearing Ratio test (TRL Method)	nr	4		
H5	Vane shear strength test in borehole	nr			
H6	Penetration vane test, penetration from ground level	nr			
H7	Hand penetrometer test (set of 3 readings)	nr			
H8	Hand vane test (set of 3 readings)	nr			
	<u>Other tests</u>				
H9	Apparent resistivity of soil	nr			
H10	Redox potential	nr			
	<u>Permeability testing</u>				
H11	Set up and dismantle variable head permeability test in borehole	nr			
H12	Set up and dismantle constant head permeability test in borehole	nr			
H13	Carry out permeability test in borehole	h			
H14	Set up and dismantle variable head permeability test in standpipe/standpipe piezometer	nr			
H15	Set up and dismantle constant head permeability test in standpipe/standpipe piezometer	nr			
H16	Carry out permeability test in standpipe/standpipe piezometer	h			
H17	Set up and dismantle variable head permeability test in rotary drillhole	nr			
H18	Set up and dismantle constant head permeability test in rotary drillhole	nr			
H19	Carry out permeability test in rotary drillhole	h			
H20	Set up and dismantle single packer permeability test	nr			
H21	Set up and dismantle double packer permeability test	nr			
H22	Carry out single packer permeability test	h			
H23	Carry out double packer permeability test	h			
	<u>Self-boring pressuremeter</u>				
H24	Move and set up self-boring pressuremeter and exploratory hole forming equipment to site of each exploratory hole	nr			
H25	Extra over Item H24 for setting up on a slope of gradient greater than 20%	nr			
H26	Advance exploratory hole to pressuremeter test location between ground level and 10m depth	m			
H27	As Item H26 but between 10 and 20m depth	m			
H28	As Item H26 but between 20 and 30m depth	m			
H29	Advance exploratory hole through hard stratum or obstruction	h			
H30	Self-bore to form test pocket between ground level and 10m depth	m			
H31	As item H30 but between 10 and 20m depth	m			
H32	As item H30 but between 20 and 30m depth	m			
H33	Carry out pressuremeter test, provision of data and report, test duration not exceeding 1.5 hours	nr			
H34	Extra over Item H33 for test duration in excess of 1.5 hours	h			
H35	Carry out additional calibrations as instructed by the Investigation Supervisor				
H35.1	Displacement transducers	nr			
H35.2	Pore pressure transducers	nr			
H35.3	Total pressure transducers	nr			
H35.4	Membrane stiffness	nr			
H36	Carry out membrane compression calibrations as instructed by the Investigation Supervisor	nr			
H37	Backfill exploratory hole for pressuremeter with cement/bentonite grout	m			
H38	Standing time for self-boring pressuremeter and crew	h			
	<u>High pressure dilatometer</u>				
H39	Move and set up high-pressure dilatometer and exploratory hole-forming equipment to site of each exploratory hole	nr			
H40	Extra over Item H39 for setting up on a slope of gradient greater than 20%	nr			
H41	Advance exploratory hole to dilatometer test depth between ground level and 10m depth	m			
H42	As Item H41 but between 10 and 20m depth	m			
H43	As Item H41 but between 20 and 30m depth	m			
H44	Advance exploratory hole through hard stratum or obstruction	h			
H45	Rotary core to form dilatometer test pocket between ground level and 10m depth	m			
H46	As item H45 but between 10 and 20m depth	m			
H47	As item H45 but between 20 and 30m depth	m			
H48	Carry out dilatometer test, provision of data and report, test duration not exceeding 1.5 hours	nr			
H49	Extra over Item H48 for test duration in excess of 1.5 hours	h			
H50	Carry out additional calibrations as instructed by the Investigation Supervisor				
H50.1	Displacement Transducers	nr			
H50.2	Total Pressure Transducers	nr			
H50.3	Membrane stiffness	nr			
H51	Carry out membrane compression calibrations as instructed by the Investigation Supervisor	nr			
H52	Backfill exploratory hole for high-pressure dilatometer with cement/bentonite grout	m			
H53	Standing time for dilatometer equipment and crew	h			
	<u>Driven or push-in pressuremeter</u>				
H54	Move and set up pressuremeter and exploratory hole-forming equipment to site of each exploratory hole	nr			
H55	Extra over Item H54 for setting up on a slope of gradient greater than 20%	nr			

H56	Advance exploratory hole to pressuremeter test location between ground level and 10m depth	m	
H57	As Item H56 but between 10 and 20m depth	m	
H58	As Item H56 but between 20 and 30m depth	m	
H59	Advance exploratory hole through hard stratum or obstruction	h	
H60	Install pressuremeter at base of exploratory hole between ground level and 10m depth	m	
H61	As Item H60 but between 10 and 20m depth	m	
H62	As Item H60 but between 20 and 30m depth	m	
H63	Carry out pressuremeter test, provision of data and report, test duration not exceeding 1.5 hours	nr	
H64	Extra over Item H63 for test duration in excess of 1.5 hours	h	
H65	Carry out additional calibrations as instructed by the Investigation Supervisor		
H65.1	Displacement transducers	nr	
H65.2	Pore pressure transducers	nr	
H65.3	Total pressure transducers	nr	
H65.4	Membrane stiffness	nr	
H66	Carry out membrane compression calibrations as instructed by the Investigation Supervisor	nr	
H67	Backfill exploratory hole for pressuremeter with cement/bentonite grout	m	
H68	Standing time for driven or push-in self-boring pressuremeter and crew <u>Menard pressuremeter</u>	h	
H69	Move and set up pressuremeter and exploratory hole forming equipment to site of each exploratory hole	nr	
H70	Extra over Item H69 for setting up on a slope of gradient greater than 20%	nr	
H71	Advance exploratory hole to pressuremeter test location between ground level and 10m depth	m	
H72	As Item H71 but between 10 and 20m depth	m	
H73	As Item H71 but between 20 and 30m depth	m	
H74	Advance exploratory hole through hard stratum or obstruction	h	
H75	Rotary core to form pressuremeter test pocket between ground level and 10m depth	m	
H76	As Item H75 but between 10 and 20m depth	m	
H77	As Item H75 but between 20 and 30m depth	m	
H78	Carry out Menard pressuremeter test	nr	
H79	Backfill exploratory hole for pressuremeter with cement/bentonite grout	m	
H80	Standing time for Menard pressuremeter and crew <u>Soil infiltration test</u>	h	
H81	Provide equipment and carry out set of 3 infiltration tests at selected location up to 1 day, including hire of excavation equipment	day	1
H82	Extra over Item H81 for additional days	day	1
H83	Calculation of infiltration rate for each tested location <u>Miscellaneous site testing</u>	nr	
H84	Reading of free product level in borehole using an interface probe	nr	
H85	Provide contamination screening test kits per sample	nr	
H86	Carry out headspace testing by FID/PID	Week	4
<u>Contract specific additional bill items</u>			

Total section H carried to summary: _____

Number	Item description	Unit	Quantity	Rate	Amount £
I	Instrumentation				
	<u>Standpipes and piezometers</u>				
I1	Backfill exploratory hole with arisings with 10m cement/bentonite gseal	m	313		
I2	Provide and install standpipe (19mm)	m			
I3	Provide and install standpipe piezometer (19mm)	m			
I4	Provide and install standpipe piezometer (50mm)	m			
I5	Provide and install standpipe piezometer (75mm)	m			
I6	Provide and install ground gas monitoring standpipe (19mm)	m	10		
I7	Provide and install ground gas monitoring standpipe (50mm)	m	416		
I8	Provide and install ground gas monitoring standpipe (75mm)	m			
I9	Provide and install headworks for ground gas monitoring standpipe, standpipe or standpipe piezometer	nr	19		
I10	Provide and install protective cover (flush)	nr	19		
I11	Provide and install protective cover (raised)	nr			
I12	Extra over Item I10 for heavy duty cover in highways	nr			
I13	Supply and erect protective fencing around standpipe or piezometer installation	nr			
I14	Supply and erect 1.5m high marker post	nr			
I15	<u>Standpipe and piezometer development</u>				
I15.1	Supply equipment and personnel to carry out development by surging	nr	14		
I15.2	Develop standpipe or piezometer by surging	h			
I15.3	As Item I15.1 but by airlift pumping	nr			
I15.4	As Item I15.2 but by airlift pumping	h			
I15.5	As Item I15.1 but by over pumping	nr			
I15.6	As Item I15.2 but by over pumping	h			
I15.7	As Item I5.1 but by jetting	nr			
I15.8	As Item I15.2 but by jetting	h			
I15.9	Disposal of development water, not including chemical testing	Provisional sum			
	<u>Inclinometer</u>				
I16	Supply and install inclinometer tubing in exploratory hole, not including hole formation	m			
I17	Hire of inclinometer readout unit	day			
I18	Carry out base set of inclinometer readings per installation and installation report	h			
I19	Provide and install protective cover (flush)	nr			
I20	Provide and install protective cover (raised)	nr			
	<u>Slip indicators</u>				
I21	Supply and install slip indicators in exploratory hole, including brass probe and not including hole formation	m			
I22	Provide and install protective cover (flush)	nr			
I23	Provide and install protective cover (raised)	nr			
	<u>Contract specific additional bill items</u>				

Total section I carried to summary:

Number	Item description	Unit	Quantity	Rate	Amount £
J	Installation monitoring and sampling (during Fieldwork Period)				
J1	Reading of water level in standpipe or standpipe piezometer during fieldwork period	nr			
J2	Ground gas measurement in gas monitoring standpipe during fieldwork period	nr			
J3	Set of inclinometer readings (as defined in Specification Clause 11.6.5 or Schedule S1.16.7) per installation during fieldwork period and report results	nr			
J4	Check for ground slippage in slip indicator installation during fieldwork period	nr			
J5	Water sample from standpipe or standpipe piezometer during fieldwork period, including purging or micro-purging up to 3.0 hours	nr			
J6	Extra over Item J5 for purging or micro-purging in excess of 3.0 hours	h			
J7	Ground gas sample from gas monitoring standpipe during fieldwork period	nr			
J8	Reading of free product level in standpipe using an interface probe during fieldwork period	nr			
	Installation monitoring and sampling (post Fieldwork Period)				
J9	Return visit to site following completion of fieldwork to take readings in, or recover samples from, installations	nr	2		
J10	Extra over Item J9 for reading of water level in standpipe or standpipe piezometer during return visit	nr			
J11	Extra over Item J9 for ground gas measurement in ground gas monitoring standpipe during return visit	nr			
J12	Extra over Item J9 for set of inclinometer readings (as defined in Specification Clause 11.6.5 or Schedule S1.16.7) per installation during return visit and report results	nr			
J13	Extra over Item J9 to check for ground slippage in slip indicator installation during return visit to site	nr			
J14	Extra over Item J9 for water sample from standpipe or standpipe piezometer during return visit to site using low flow pumping techniques	nr	2		
J15	Extra over Item J14 for purging or micro-purging in excess of 3.0 hours	h			
J16	Extra over Item J9 for ground gas sample from gas monitoring standpipe during return visit to site	nr			
J17	Extra over Item J9 for reading of free product level in standpipe using an interface probe during return visit to site	nr			
	<u>Surface water body sampling and testing</u>				
J18	Surface water body sample taken during fieldwork period	nr			
J19	Surface water body sample taken during return visit to site	nr			
J20	Determination of dissolved oxygen, conductivity, pH and temperature of surface water body during fieldwork period	nr			
J21	Determination of dissolved oxygen, conductivity, pH and temperature of surface water body during return visit to site	nr			
	<u>Contract specific additional bill items</u>				

Total section J carried to summary: _____

Summary of Bill of Quantities

£

- A. General items, provisional services and additional items
 - B. Percussion boring
 - C. Rotary drilling
 - D. Pitting and trenching
 - E. Sampling and monitoring during intrusive investigation
 - F. Probing and cone penetration testing
 - G. Geophysical testing
 - H. In situ testing
 - I. Instrumentation
 - J. Installation monitoring and sampling
 - K. Geotechnical laboratory testing
 - L. Geoenvironmental laboratory testing
-

Total tender: _____

UK and Ireland Office Locations

