## **NRM2 Bill of Quantities Example** Work Section breakdown structure

### 5: Excavating and Filling / 11: In-situ Concrete Works

Refer to NRM 2 Appendix A: Guidance on the Preparation of Bill of Quantities

#### This example follows the Work Section breakdown structure :

Measurement and description is divided into the work sections listed in NRM2: Detailed measurement for building works i.e., the tabulated rules:

Bill No 1: Main Contractor's Preliminaries

Bill No 2: Off-site manufactured materials, components and buildings

Bill No 3: Demolition works

Bill No 4: Alterations, repairs and conservation

Bill No 5: Excavating and filling

Bill No 6: Ground remediation and soil stabilisation

Bill No 7: Piling

Bill No 8: Underpinning

Bill No 9 · Diaphragm walls and embedded retaining walls

Bill No 10: Crib walls, gabions and reinforced earth

Bill No 11: In-situ concrete works

Precast/composite concrete Bill No 12:

Bill No 13: Precast concrete

Bill No 14: Masonry

Bill No 15: Structural metalwork

Bill No 16: Carpentry

Bill No 17: Sheet roof coverings

Bill No 18: Tile and slate roof and wall coverings

Bill No 19: Waterproofing

Proprietary linings and partitions Bill No 20:

Bill No 21: Claddings and coverings

Bill No 22: General joinery

Windows, screens and lights Bill No 23: Bill No 24: Doors, shutters and hatches Bill No 25: Stairs, walkways and balustrades

Bill No 26: Metalwork Bill No 27: Glazing

Bill No 28: Floor, wall, ceiling and roof finishes

Bill No 29: Decoration

Bill No 30: Suspended ceilings

Bill No 31: Insulation, fire stopping and fire protection

Furniture, fittings and equipment Bill No 32:

Bill No 33: Above ground drainage Bill No 34: Drainage below ground Site works

Bill No 36: Fencing Bill No 37: Soft landscaping Bill No 38: Mechanical services Bill No 39: Electrical services

Bill No 40: Transport

Builders work in connection with mechanical, electrical and transportation Bill No 41:

Bill No 42: Risks

Bill No 35:

Bill No 43: **Provisional Sums** 

Bill No 44: Credits

Daywork (Provisional) Bill No 45:

This breakdown structure is often preferred by Contractors for the purpose of pricing as all like products and components are grouped together (e.g. the reinforced concrete columns, beams, floors, roofs and staircases), whereas they can be spread among a number of different elements when an elemental breakdown structure is used.

# Work Section 5 : Excavating and Filling

	Item	Quantity	Unit	Rate	Cost (£)
	INFORMATION				
	Nature and location of the work				
	The work in this bill comprises				
а	excavation from commencement level, forming foundations and ground floor slab as shown on the drawings and as described in the specifications provided		item		
	Generally				
b	the contractor shall take account of all restrictions which will apply when undertaking the works. The rates and prices inserted shall fully reflect the nature and character of the work and the restrictions imposed		item		
	Sub-Contractor Preliminaries				
	Allow for				
С	Sub-Contractor's preliminaries for excavating and filling and associated works		item		
d	Sub-Contractor's temporary works for the excavating and filling and associated works		item		
	Insert below and other preliminary items that you deem to be required along with their associated costs (provide details on additional sheets if required)				
	PREAMBLES				
е	Include as appropriate - see RICS NRM2 Appendix A.3 (3) (e)		item		
			to	collection £	

	ence?	Quantity	Unit	Rate	Excavating and F Cost (£)
	SUBSTRUCTURE	Quartity	0	rate	3331 (2)
	EXCAVATING AND FILLING				
	Site clearance				
	Clear site of all vegetation and other growth and dispose off site				
а	description sufficient to identify scope and location of work	х	m2		
	Site preparation				
	Remove topsoil				
b	150 thick	х	m2		
	Excavation				
	Bulk excavation; commencing from formation level of xx.xxx				
С	not exceeding 2.00m deep	92	m3		
d	exceeding 2.00m and not exceeding 4.00m deep	x	m3		
е	exceeding 4.00m and not exceeding 6.00m deep	x	m3		
	Foundation excavation; commencing at reduced level				
f	not exceeding 2.00m deep	x	m3		
g	exceeding 2.00m and not exceeding 4.00m deep	50	m3		
h	exceeding 4.00m and not exceeding 6.00m deep	х	m3		
	Extra over excavation irrespective of depth for excavating in				
i	hazardous material; details stated (Provisional)	1	m3		
j	non-hazardous material; details stated (Provisional)	1	m3		
k	below ground water level (Provisional)	1	m3		
I	in running water (Provisional)	1	m3		
m	unstable ground (Provisional)	1	m3		
	Extra over excavation irrespective of depth for breaking up				
n	rock (Provisional)	1	m3		
0	reinforced concrete (Provisional)	1	m3		
p	concrete (Provisional)	1	m3		
q	brickwork (Provisional)	1	m3		
		1	tr	collection £	

Extra over excavation irrespective of depth for excavating alongative existing underground services at type, size and depth of service stated	QS Refere	ence?				Excavating and Filling
a longside existing underground services type, size and depth of service stated Extra over excavation irrespective of depth for excavating across existing underground services  b type, size and depth of service stated x nr  Disposal Ground water c depth below original ground level stated bitem Excavated materials of site 99 m3 Retaining excavated material on site All other excavated material to temporary spoil heaps; average distance no more than 20.00m away Filling obtained from excavated material Final thickness of filling not exceeding 500 deep  g 350 thick; obtained from on temporary on site spoil heaps no more than 20.00m away Final thickness of filling exceeding 500 deep  h maximum 150 thick leyer; obtained from on temporary on site spoil heaps no more than 20.00m away Imported filling: MOT Type 1. Hardoore Beds over 50 thick but not exceeding 500 thick I level to falls, cross falls or cambers 64 m3		Item	Quantity	Unit	Rate	Cost (£)
Extra over excavation irrespective of depth for excavating across existing underground services  bype, size and depth of service stated x nr  Disposal  Ground water  c depth below original ground level stated item  Excavated materials  e off site 99 m3  Relaining excavated material on site  All other excavated material  f to temporary spoil heaps; average distance no more than 20,00m away  Eilling obtained from excavated material  Final thickness of filling not exceeding 500 deep  g 350 thick, obtained from on temporary on site spoil heaps no more than 20,00m away  Final thickness of filling exceeding 500 deep  h maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20,00m away  Imported filling; MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  level to falls, cross falls or cambers 64 m3						
across existing underground services b type, size and depth of service stated  Disposal  Ground water c depth below original ground level stated d polluted water described if known Excavated materials e off site 99 m3  Retaining excavated material to temporary spoil heaps; average distance no more than 20,00m away Filling obtained from excavated material Final thickness of filling not exceeding 500 deep  350 thick: obtained from on temporary on site spoil heaps no more than 20,00m away 28 m2 Final thickness of filling exceeding 500 deep maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20,00m away 32 m3 Imported filling; MOT Type 1 Hardcore Beds over 50 thick but not exceeding 500 thick i level to falls, cross falls or cambers 64 m3	а	type, size and depth of service stated	х	m		
Disposal Ground water  c depth below original ground level stated d polluted water described if known Excavated materials e off site 99 m3  Retaining excavated material on site All other excavated material f to temporary spoil heaps; average distance no more than 20.00m away Filling obtained from excavated material Final thickness of filling not exceeding 500 deep  g 350 thick; obtained from on temporary on site spoil heaps no more than 20.00m away Final thickness of filling exceeding 500 deep  h site spoil heaps no more than 20.00m away Imported filling: MOT Type 1 Hardcore Beds over 50 thick but not exceeding 500 thick i level to falls, cross falls or cambers 64 m3						
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be polluted water described if known  Excavated materials  off site  Retaining excavated material on site  All other excavated material  to temporary spoil heaps; average distance no more than 20.00m away  Filling obtained from excavated material  Final thickness of filling not exceeding 500 deep  3 350 thick; obtained from on temporary on site spoil heaps no more than 20.00m away  Final thickness of filling exceeding 500 deep  maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  Imported filling: MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  i level to falls, cross falls or cambers  64 m3		Ground water				
Excavated materials  off site  off site  Retaining excavated material on site  All other excavated material  to temporary spoil heaps; average distance no more than 20.00m away  Filling obtained from excavated material  Final thickness of filling not exceeding 500 deep  350 thick; obtained from on temporary on site spoil heaps no more than 20.00m away  Final thickness of filling exceeding 500 deep  maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  mported filling; MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  level to falls, cross falls or cambers  64 m3	С	depth below original ground level stated		item		
e off site  Retaining excavated material on site  All other excavated material  to temporary spoil heaps; average distance no more than 20.00m away  Filling obtained from excavated material  Final thickness of filling not exceeding 500 deep  g 350 thick; obtained from on temporary on site spoil heaps no more than 20.00m away  Final thickness of filling exceeding 500 deep  h maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  32 m3  mported filling; MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  i level to falls, cross falls or cambers  64 m3	d	polluted water described if known		item		
Retaining excavated material  All other excavated material  to temporary spoil heaps; average distance no more than 20.00m away  Filling obtained from excavated material  Final thickness of filling not exceeding 500 deep  350 thick; obtained from on temporary on site spoil heaps no more than 20.00m away  Final thickness of filling exceeding 500 deep  maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  Imported filling: MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  i level to falls, cross falls or cambers  64 m3		Excavated materials				
All other excavated material to temporary spoil heaps; average distance no more than 20.00m away  Filling obtained from excavated material Final thickness of filling not exceeding 500 deep  350 thick; obtained from on temporary on site spoil heaps no more than 20.00m away  Final thickness of filling exceeding 500 deep  maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  amaximum 150 thick layer; obtained from on	е	off site	99	m3		
to temporary spoil heaps; average distance no more than 20.00m away  Filling obtained from excavated material Final thickness of filling not exceeding 500 deep  350 thick; obtained from on temporary on site spoil heaps no more than 20.00m away  Final thickness of filling exceeding 500 deep  maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  Imported filling; MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  i level to falls, cross falls or cambers  64 m3		Retaining excavated material on site				
Filling obtained from excavated material  Final thickness of filling not exceeding 500 deep  350 thick; obtained from on temporary on site spoil heaps no more than 20.00m away  Final thickness of filling exceeding 500 deep  maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  Imported filling; MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  i level to falls, cross falls or cambers  64 m3		All other excavated material				
Final thickness of filling not exceeding 500 deep  350 thick; obtained from on temporary on site spoil heaps no more than 20.00m away  Final thickness of filling exceeding 500 deep  h maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  Imported filling: MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  i level to falls, cross falls or cambers  64 m3	f		42	m3		
g 350 thick; obtained from on temporary on site spoil heaps no more than 20.00m away  Final thickness of filling exceeding 500 deep  maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  Imported filling; MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  i level to falls, cross falls or cambers  64 m3		Filling obtained from excavated material				
Final thickness of filling exceeding 500 deep  maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away  Imported filling; MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  i level to falls, cross falls or cambers  64 m3		Final thickness of filling not exceeding 500 deep				
h maximum 150 thick layer; obtained from on temporary on site spoil heaps no more than 20.00m away 32 m3  Imported filling; MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  i level to falls, cross falls or cambers 64 m3	g		28	m2		
site spoil heaps no more than 20.00m away  Imported filling: MOT Type 1 Hardcore  Beds over 50 thick but not exceeding 500 thick  i level to falls, cross falls or cambers  64 m3		Final thickness of filling exceeding 500 deep				
Beds over 50 thick but not exceeding 500 thick  i level to falls, cross falls or cambers  64 m3	h		32	m3		
i level to falls, cross falls or cambers 64 m3		Imported filling: MOT Type 1 Hardcore				
		Beds over 50 thick but not exceeding 500 thick				
to collection £	i	level to falls, cross falls or cambers	64	m3		
to collection £						
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to collection £						
to collection £						
to collection £						
to collection £						
to collection £						
				to	collection £	

Project Reference ? Work Section 5
QS Reference ? Excavating and Filling

Item	Quantity	Unit	Rate	Cost (£)
Exc	Work Secti	on 5 : Filling ection		
Page Bill Example			£	
Page Bill Example			£	
Page Bill Example	: Work Sectio	n 5 / 3	£	
Page Bill Example	: Work Sectio	n 5 / 4	£	
Work Section 5 : Excavating and Filling				
Carried to Summary			£	

## Work Section 11 : In-situ Concrete Works

	Item	Quantity	Unit	Rate	Cost (£)
	INFORMATION				
	Nature and location of the work				
	The work in this bill comprises				
а	insitu concrete works forming foundations, columns and floor slabs as shown on the drawings and as described in the specifications provided		item		
	Generally				
b	the contractor shall take account of all restrictions which will apply when undertaking the works. The rates and prices inserted shall fully reflect the nature and character of the work and the restrictions imposed		item		
	Sub-Contractor Preliminaries				
	Allow for				
С	Sub-Contractor's preliminaries for the in-situ concrete works and associated works		item		
d	Sub-Contractor's temporary works for the in-situ concrete works and associated works		item		
	Insert below and other preliminary items that you deem to be required along with their associated costs (provide details on additional sheets if required)				
	PREAMBLES				
е	Include as appropriate - see RICS NRM2 Appendix A.3 (3) (e)		item		
			to	collection £	

S Kele	rence?	Quantity	Unit	Rate	In-situ Concrete Worl
	SUBSTRUCTURE	Quartity	Onic	rato	0001 (2)
	INSITU CONCRETE WORKS				
	Plain in situ concrete; Mix A; in substructures; as specification xxx				
	Horizontal work; poured on or against earth or unblinded hardcore				
а	not exceeding 300 thick; blinding to pad foundations	1	m3		
	Reinforced in situ concrete; Mix B; in substructures; as specification xxx				
	Horizontal work; in blinding				
b	exceeding 300 thick; pad foundations	14	m3		
	Horizontal work; in structures				
С	not exceeding 300 thick; ground floor slab	41	m3		
d	exceeding 300 thick; perimeter edge beams	11	m3		
	Vertical work; in structures				
е	not exceeding 300 thick; columns	3	m3		
	Formwork; plain finish				
	Sides of foundations and bases				
f	exceeding 500 high	50	m2		
	Edges of horizontal work				
g	not exceeding 500 high	61	m		
	Sides of isolated columns				
h	300 x 300 square; 16nr	35	m2		
	Reinforcement mesh; as specification xxx				
	Reference A193				
i	weight 3.02 kg/m2 with 150 minimum laps; to ground floor	005	0		
	slab	225	m2		
			<u> </u>	collection £	

QS Refe				T	In-situ Concrete Works
	Item	Quantity	Unit	Rate	Cost (£)
	SUPERSTRUCTURE				
	INSITU CONCRETE WORKS				
	Reinforced in situ concrete; Mix B; in substructures; as				
	specification xxx				
	Horizontal work; in structures				
а	not exceeding 300 thick; floor slab	213	m3		
b	not exceeding 300 thick; attached beams	51	m3		
	Vertical work; in structures				
С	not exceeding 300 thick; columns	20	m3		
d	not exceeding 300 thick; parapet wall	5	m3		
	Formwork; plain finish				
	Soffits of horizontal work				
е	for concrete not exceeding 300 thick	1,080	m2		
	Sides and soffits of attached beams	1,000			
f		578	m2		
1	300 x 300 square; attached beams	576	1112		
	Sides of isolated columns				
g	300 x 300 square; 80nr	242	m2		
	Faces of walls and other vertical work				
h	vertical; parapet wall	67	m2		
	Sloping top surfaces				
i	exceeding 15 degrees; parapet wall	11	m2		
	Reinforcement mesh; as specification xxx				
	Reference A193				
	weight 3.02 kg/m2 with 150 minimum laps; to ground floor				
J	slab	1,125	m2		
				collection £	
			10	CONSCION £	·

Project Reference ? Work Section 11
QS Reference ? In-situ Concrete Works

Work Section 11 : In-situ Concrete Works	
Work Section 11:	
Collection	
Page Bill Example : Work Section 11 / 1 £	
Page Bill Example : Work Section 11 / 2 £	
Page Bill Example : Work Section 11 / 3 £	
Tage Bill Example : Work Section 1173	
Work Section 11 : In-situ Concrete Works	
Carried to Summary £	