

Scenarios Table

	A	B	C	D	E	F	G	H	I	J	K	L
1	Ashington station Car Park scenarios											
2			Original Appx A case			Scenarios (cumulative; input changes highlighted)						
3	Cat	Description	113 Spaces (To 2018)*	Unit	Notes	122 Spaces (post 2018)*	122 Spaces (post 2018)	43% Covid reduction	130 space capacity	Full Covid recovery	Avg cost rates	Low-High cost rates
4	Spaces for existing high street users											
5		Existing spaces (100% utilisation)	113	spaces		122	122	122	122	122	122	122
6		Assumed reduction for Covid impact	50%	%	Greater % reduction makes NCC case less attractive	50%	50%	43%	43%	0%	0%	0%
7		Assumed reduced space requirement following Covid impact	57	spaces		61	61	70	70	122	122	122
8												
9	Northumberland Line Demand for spaces											
10		2039 Highest demand	186	spaces	Or maximum practicable within the space	186	186	186	186	186	186	186
11		2039 Selected demand	136	spaces	Based on a blend of selected occupancy rates etc.	136	136	136	136	136	136	136
12		2028 Interim Covid impact demand	99	spaces	Based on proportional rail demand Covid reduction	99	99	99	99	99	99	99
13												
14	Pricing				Spon's Civil Engineering and Highway Works Price Book 35th Edition 2021. Part 5 Approximate Estimating, page 97							
15		Surface car parking; landscaped										
16		Low	120	£/m2								
17		Avg	135	£/m2	Simple average between low and high							
18		High	150	£/m2								
19		Multi-storey car parks, flat slab										
20		Low	610	£/m2								
21		Avg	700	£/m2	Simple average between low and high							
22		High	790	£/m2								
23												
24	At Grade without Malhotra land											
25		Working capacity	150	spaces	Preliminary estimate (Higher makes NCC case less attractive)	150	150	150	130	130	130	130
26		Available capacity for Northumberland Line users	93	spaces		89	89	80	60	8	8	8
27												
28		Available spaces for 2028 demand	-6	spaces	Available capacity less 2028 Northumberland Line demand	-10	-10	-19	-39	-91	-91	-91
29		Time from 2024 before capacity exceeded	2.2	years	Assumes straight line demand growth from 2028 to 2039 selected demand, and scheme operational in 2024	1.0	1.0	-1.6	-7.6	-23.1	-23.1	-23.1
30		Year when capacity exceeded	2026	Calendar year		2025	2025	2022	2016	2001	2001	2001
31												

Scenarios Table

	A	B	C	D	E	F	G	H	I	J	K	L
1	Ashington station Car Park scenarios											
2			Original Appx A case			Scenarios (cumulative; input changes highlighted)						
3	Cat	Description	113 Spaces (To 2018)*	Unit	Notes	122 Spaces (post 2018)*	122 Spaces (post 2018)	43% Covid reduction	130 space capacity	Full Covid recovery	Avg cost rates	Low-High cost rates
32	At Grade including Malhotra land											
33		Working capacity	270	spaces		270	270	270	270	270	270	270
34		Available capacity for Northumberland Line users	213	spaces		209	209	200	200	148	148	148
35		Remaining NL capacity at 2028 interim demand	114	spaces		110	110	101	101	49	49	49
36		Remaining NL capacity for 2039 Selected demand	77	spaces		73	73	64	64	12	12	12
37		Remaining NL capacity for 2039 Highest demand	27	spaces		23	23	14	14	-38	-38	-38
38												
39		Cost of Malhotra land	450	£k	At top end market rate (makes NCC case less attractive)	450	450	450	450	450	450	450
40		Area of surface car parking	7,700	m2		7,700	7,700	7,700	7,700	7,700	7,700	7,700
41		Area of multi-storey car park	0	m2	At Grade only							
42		Low/Avg/High rates	High	choice	High makes NCC case less attractive	High	High	High	High	High	Avg	Low
43		Direct cost of surface car parking	1,155	£k		1,155	1,155	1,155	1,155	1,155	1,040	924
44		Direct cost of multi-storey car park	0	£k	At Grade only	0	0	0	0	0	0	0
45		Subtotal direct cost of car park	1,155	£k		1,155	1,155	1,155	1,155	1,155	1,040	924
46		Overheads rate for car park	11%	%	Traffic management (5%), contract management (1%), Design (5%)	11%	11%	11%	11%	11%	11%	11%
47		Allowance for risk	30%	%	(range 20%-40% typical)	30%	30%	30%	30%	30%	30%	30%
48		Cost of car park excluding land	1,629	£k		1,629	1,629	1,629	1,629	1,629	1,466	1,303
49		Cost of car park including land	2,079	£k		2,079	2,079	2,079	2,079	2,079	1,916	1,753
50		Cost of car park including land (rounded)	2.1	£m		2.1	2.1	2.1	2.1	2.1	1.9	1.8
51												
52	Decked car park without Malhotra land											
53		Working capacity	246	spaces		246	246	246	246	246	246	246
54		Available capacity for Northumberland Line users	189	spaces		185	185	176	176	124	124	124
55		Remaining NL capacity at 2028 interim demand	90	spaces		86	86	77	77	25	25	25
56		Remaining NL capacity for 2039 Selected demand	53	spaces		49	49	40	40	-12	-12	-12
57		Remaining NL capacity for 2039 Highest demand	3	spaces		-1	-1	-10	-10	-62	-62	-62
58												
59		Cost of Malhotra land	0	£k	No cost	0	0	0	0	0	0	0
60		Area of surface car parking	5,140	m2	Area of At Grade land less half total MSCP area	5,140	5,140	5,140	5,140	5,140	5,140	5,140
61		Area of multi-storey car park	5,120	m2	80m x 32m x 2 floors	5,120	5,120	5,120	5,120	5,120	5,120	5,120
62		Low/Avg/High rates	Low	choice	Low makes NCC case less attractive	Low	Low	Low	Low	Low	Avg	High
63		Direct cost of surface car parking	694	£k	* Avg cost used where indicated in scenario title	694	617	617	617	617	694	771
64		Direct cost of multi-storey car park	3,123	£k		3,123	3,123	3,123	3,123	3,123	3,584	4,045
65		Subtotal direct cost of car park	3,817	£k		3,817	3,740	3,740	3,740	3,740	4,278	4,816
66		Overheads rate for car park	11%	%	Traffic management (5%), contract management (1%), Design (5%)	11%	11%	11%	11%	11%	11%	11%
67		Allowance for risk	30%	%	(range 20%-40% typical)	30%	30%	30%	30%	30%	30%	30%
68		Cost of car park excluding land	5,382	£k		5,382	5,273	5,273	5,273	5,273	6,032	6,790
69		Cost of car park including land	5,382	£k		5,382	5,273	5,273	5,273	5,273	6,032	6,790
70		Cost of car park including land (rounded)	5.4	£m		5.4	5.3	5.3	5.3	5.3	6.0	6.8
71												
72	Summary cost differential											
73		Cost differential between decked car park and at grade	3,303	£k		3,303	3,194	3,194	3,194	3,194	4,116	5,037
74		Cost differential between decked car park and at grade (rounded)	3.3	£m		3.3	3.2	3.2	3.2	3.2	4.1	5.0
75												

Source:

Spon's Civil Engineering and Highway Works Price Book 35th Edition 2021.

Part 5 Approximate Estimating, extracts from page 97 and 79(attached)

BUILDING PRICES PER SQUARE METRE

Item	Unit	Range £	
UNICLASS D1 UTILITIES, CIVIL ENGINEERING FACILITIES			
Car parking			
surface car parking	m ²	91.00	to 115.00
surface car parking; landscaped	m ²	120.00	to 150.00
Multi-storey car parks			
flat slab	m ²	610.00	to 790.00
Underground car parks			
partially underground under buildings; naturally ventilated	m ²	690.00	to 890.00
completely underground under buildings with mechanical ventilation	m ²	950.00	to 1225.00
completely underground with landscaped roof and mechanical ventilation	m ²	1150.00	to 1475.00
Transport facilities			
railway stations	m ²	4000.00	to 5100.00
bus and coach stations	m ²	2800.00	to 3600.00
bus garages	m ²	1050.00	to 1350.00
petrol stations	m ²	3500.00	to 4450.00
Vehicle showrooms with workshops, garages etc.			
up to 2,000 m ²	m ²	1375.00	to 1750.00
over 2,000 m ²	m ²	1175.00	to 1475.00

PART 5**Approximate Estimating**

	Page
Preliminaries and general items	81
Building prices per square metre	97
Approximate estimating rates – General building works	105
Approximate estimating rates – Ancillary building works	152

Preliminaries

This part deals with that portion of Civil Engineering costs not, or only indirectly, related to the actual quantity of work being carried out. It comprises a definition of Method Related Charges, a checklist of items to be accounted for on a typical Civil Engineering contract and a worked example illustrating how the various items on the checklist can be dealt with.

Approximate estimating rates – Ancillary building works and General building works

Prices given in this section, which is generally arranged in elemental order, also include for all the incidental items and labours which are normally measured separately in Bills of Quantities. They include overheads and profit but do not include for preliminaries.

Whilst every effort is made to ensure the accuracy of these figures, they have been prepared for approximate estimating purposes only and on no account should they be used for the preparation of tenders.

Unless otherwise described units denoted as m² refer to appropriate unit areas (rather than gross internal floor areas).

As elsewhere in this edition prices do not include Value Added Tax, which should be applied at the current rate, together with consultants' fees.