

#### **Revaluation 2017**

# **Public Buildings Committee**

# Practice Note 4 Valuation of Contractor's Basis Subjects Areas Adjustment and External Works' Costs.

#### 1.0 Introduction

1.1 This Practice Note gives guidance on certain elements of Contractor's Basis Valuations for the 2017 Revaluation in Scotland.

The note has the following contents:

- 1.0 Introduction
- 2.0 Adjustment of Building Floor Areas
- 3.0 Allowances
- 4.0 Schedule of Rates
- 5.0 Overall External Works Appendix 1

## 2.0 Adjustments of Building Floor Areas

- 2.1 When utilised in Contractor's Basis Valuations, building unit cost rates are normally derived from an analysis of the cost of provision of modern equivalent items on gross external area terms.
- 2.2 Such modern equivalent buildings often have wall thicknesses of a lesser gauge than those of buildings constructed at the start of the 20<sup>th</sup> century or earlier.
- 2.3 GEA Difference Between Old and Modern Buildings
- 2.3.1 The application of unit cost rates so derived to the gross external areas of buildings of older character with thick walls will produce inflated costs in comparison with the modern equivalent providing the same usable space.
- 2.3.2 To counter this effect, adjustments will require to be made, on a floor by floor basis, to the areas of buildings of older character.
- 2.3.3 The following table is a guide to the adjustments necessary to reduce the areas of buildings of older construction to a modern equivalent (to be interpolated appropriately).

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Wall Thickness	450 mm	600 mm
Floor Area m <sup>2</sup>	% Adjustment	% Adjustment
50	13%	22%
100	8%	16%
200	6%	12%
300	5%	9%
600	3.5%	7%
1500	2.1%	4%
4000	1.3%	2.5%

## 2.4 GEA To GIA Difference Regarding Old and Modern Buildings

2.4.1 In certain circumstances, either for analysis or valuation purposes, it may be necessary to equate gross external areas with gross internal areas. The following table is a guide to adjustment in this regard (to be interpolated appropriately).

Wall Thickness	300 mm	450 mm	600 mm
Floor Area m <sup>2</sup>	% Adjustment	% Adjustment	% Adjustment
50	21%	32%	42%
100	16%	23%	31%
200	11%	17%	22%
300	10%	14%	19%
600	7%	10%	13%
1500	4%	6%	8%
4000	3%	4%	5%

#### 3.0 Allowances

## 3.1 Age Related Allowances

3.1.1 In applying age and obsolescence allowances to buildings and civils and other allowances to land reference should be made to guidance in SAA Basic Principles Committee Practice Note 2 (Contractor's Basis Valuations).

### 3.2 Flat Roof Construction Allowances

3.2.1 Consideration should be given to the application of an allowance of up to 5% in cases where older inferior flat roof construction has resulted in greater repairing obligations. Any such allowance should be applied to the affected floor area only, e.g. the top floor of a multi-storey building, and should be withheld completely in cases of modern applications of this form of construction.

# 3.3 System Built Allowances

3.3.1 System built structures comprising of inferior lightweight and inexpensive structural steel or timber frame and panel construction with very little or no brickwork to walls with inferior flat roofs may be given an additional allowance of up to 20% for pre 1975 structures, while those built from 1975 to 1985 may be given up to 15%. In the event of

such allowances being applied, separate flat roof allowances as detailed at 3.2 should be withheld.

- 3.4 Further functional or technical obsolescence may require reflection based on site specific circumstances and valuer judgement.
- 3.5 The above allowances should not be aggregated but applied in sequence to provide the Adjusted Replacement Cost of a particular item.

#### 4.0 Schedule of Unit Cost Rates

4.1 The schedule (shown as Appendix 1 to this report) lists typical items of external works encountered at lands and heritages and recommends unit cost rates that reflect the Scottish "mean" level for a notional contract size of £3,000,000. These rates require to be adjusted to reflect contract size and any addition for professional fees when arriving at Estimated Replacement Cost. (E.R.C.). In applying such adjustments, reference should be made to guidance in SAA Basic Principles Committee Practice Note 2 (Contractor's Basis Valuations).

#### 5.0 Overall External Works

5.1 These approximate overall rates may be useful where insufficient survey detail is available. They reflect the average cost of preparing, establishing and finishing the site of a public building. Higher quality finishes or features may justify higher rates and up to 20% may be added for this. The percentages quoted in the table below relate to the surface area of the site excluding the "footprint" of any building.

Туре	ERC Rate /m²
Virtually totally landscaped (eg grass/planting) with (limited) footpath, walls or fencing	£10
90% landscaped with footpath, hardstandings, walls or fencing	£18
80% landscaped with footpath, hardstandings, walls or fencing	£27
70% landscaped with footpath, hardstandings, walls or fencing	£34
60% landscaped with footpath, hardstandings, walls or fencing	£42
50% landscaped with footpath, hardstandings, walls or fencing	£49
40% landscaped with footpath, hardstandings, walls or fencing	£55
30% landscaped with footpath, hardstandings, walls or fencing	£63
20% landscaped with footpath, hardstandings, walls or fencing	£70
10% landscaped with footpath, hardstandings, walls or fencing	£77
Totally Surfaced (hardstanding) with walls or fencing (no landscaping)	£84

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RCG Code	Description				ERC Rate	Unit
33U1N5	Hardstandings <i>(i</i>	f drainage provid	led – add £17 per	· m²)		
	Plain in situ cond	erete				
	Plain paving, 150n	nm thick hardcore	, including excava	tion		
33U155 33U15A 33U15F 33U15K	100 mm thick 150 mm thick 200 mm thick 250 mm thick				£37 £44 £50 £58	m² m² m² m²
	Reinforced in site	u concrete				
	Reinforced paving	, 150mm thick har	dcore, including e	xcavation		
33U16S 33U16A 33U16F 33U16K	100mm thick 150mm thick 200mm thick 250mm thick Roads - Surfaces				£41 £48 £55 £62	m² m² m² m²
	Coated Macadam	•				
	Wearing Course	Base Course	Road Base	Sub Base		
33U17A 33U18S 33U18A	30 mm 30 mm 30 mm	60 mm 50 mm 50 mm	50 mm 100 mm 100 mm	250 mm 250 mm 300 mm	£59	m² m² m²
	Asphalt Road					
	Wearing Course	Base Course	Road Base	Sub Base		
33U195	40 mm	60 mm	100 mm	300mm	£66	m²
	Roads – Compos	ite Rates				
	In situ ready mixed thick hardcore sub gullies and drainag	base including ex				

RCG Code	Description		ERC Rate	Unit
33U1S4	3.5 m wide		£391	m run
33U1S5	4.9 m wide		£456	m run
33U1SA	6.1 m wide		£506	m run
33U1SF	7.3 m wide		£557	m run
		ense <b>bitumen macadam</b> paving on 250 mm sub avation, kerbs, channels, gullies and drainage		
33U1T4	3.5 m wide		£346	m run
33U1T5	4.9 m wide		£398	m run
33U1TA	6.1 m wide		£442	m run
33U1TF	7.3 m wide		£485	m run
	Gravel/hoggin roa excludes drainage)	ds/pavements (includes hardcore base but		
33U1A5	Hardcore	150 mm thickness	£11	m²
33U1AF	Gravel	50 mm thickness	£17	m <sup>2</sup>
33U1AK	Gravel	63 mm thickness	£19	m²
33U1AQ	Granular fill	100 mm thickness	£10	m²
	Slab/brick/block/s excludes drainage)	ett/cobble pavings (includes hardcore base but		
33U1F5	Artificial stone	450 x 600 x 50 mm	£39	m²
33U1FA		600 x 600 x 50 mm	£39	m²
33U1G5 33U1GA	Brick paviors	215 x103 x 65 mm laid flat laid on edge	£48 £65	m² m²
33U1GF		laid flat to herringbone pattern	£52	m <sup>2</sup>
33U1GK		laid on edge to herringbone pattern	£70	m²
33U1K5	Concrete paviors	200 x 100 x 80 mm (grey) laid flat	£43	m²
33U1KA		laid flat to herringbone pattern	£48	m <sup>2</sup>
33U1KF		(coloured) laid flat	£45	m <sup>2</sup>
33U1KK		laid flat to herringbone pattern	£48	m <sup>2</sup>
		·		
33U1H5	Cobble paving	50 – 75 mm	£113	m²
33U1HA		laid to pattern	£134	m²
	Concrete paving f drainage)	lags (includes hardcore base but excludes		
33U1J5		450 x 300 x 60 mm Grey	£32	m²

RCG Code	Description	ERC Rate	Unit
33U1JA	600 x 600 x 50 mm Grey	£29	m²
33U1JF	750 x 600 x 50 mm Grey	£28	m²
33U1JK	900 x 600 x 50 mm Grey	£27	m²
	Granite setts (includes hardcore base but excludes drainage)		
33U1L5 33U1LA	200 x 100 x 100 mm laid to pattern	£93 £101	m² m²
	Grass concrete paving with topsoil and seeded (excludes drainage)		
33U1M5 33U1MA 33U1MF	75 mm thick 100 mm thick 150 mm thick	£47 £55 £64	m² m² m²
	Landscaped Areas		
	Excavate topsoil, store & respread on site, cultivate, apply weedkiller, sow grass seed, harrow, lightly roll and carry out initial cut.		
33U00B 33U00G	Park Quality Sportsfield Quality	£5.40 £5.72	m² m²
33U00P	Grass Area Land Drainage	£1.25	m²
	Playing Surfaces (includes excavation and hardcore)		
33U010	Ash Surfacing including foundations	£36	m²
	Shale Surface including drainage and foundation		
33U020 33U015	Small areas less than 6,000 m <sup>2</sup> Areas greater than 6,000m <sup>2</sup>	£40 £33	m² m²
	Tarmacadam Porous tarmacadam including drainage and foundation		
33U030	Small areas less than 6,000 m <sup>2</sup>	£40	m²

RCG Code	Description	ERC Rate	Unit
33U025	Areas greater than 6,000 m <sup>2</sup>	£33	m²
33U055	Turf Artificial all-weather pitch including drainage and stone foundations	£51	m²
	Bowling Green		
33U00Q	38.4 x 38.4 m, 6 rink, basic, including land drainage and gravel perimeter path perimeter path.	£84,500	each
33U00V	38.4 x38.4 m, 6 rink, good club, Inc. land drainage, perimeter ditch channel, and macadam perimeter path.	£93,100	each
33U00U	Six rink Bowling Green to EBA standard Inc. land drainage, pumped irrigation, sprinkler system, perimeter ditch channel, and macadam path.	£99,750	each
	Cricket Synthetic wicket, 30.00 x 2.60 m including drainage		
33U075 33U07A	Concrete foundations per wicket Stone foundations per wicket	£ 11,100 £ 9,100	each each
	5-a-side Football Pitch 36.00 x 18.50 m, including perimeter wall and mesh fence including drainage		
33U085	Asphalt/macadam surface	£41,100	per
33U08A	Synthetic surface	£54,400	pitch per pitch
33U00K	Grass Tennis Court	£29,400	each
	Kerbs, Edgings and Channels		
	Precast Concrete Edgings  Bedded, jointed and pointed in cement mortar, haunching up one side with in situ concrete on concrete foundation including		
33U105	excavation 50 mm x 150mm to 250mm edgings – straight or curved	£16	m run
	Precast concrete kerbs/channels Formed as above:		
33U10A 33U10D	125 x 250 mm Kerbs - straight 125 x 250 mm Kerbs - curved	£20 £26	m run m run

RCG Code	Description	ERC Rate	Unit
33U10E 33U10H 33U10K 33U10N	125 x 300 mm Kerbs - straight 125 x 300 mm Kerbs - curved 255 x 125 mm Channels - straight 255 x 125 mm Channels - curved	£29 £33 £27 £36	m run m run m run m run
	Precast concrete "Safticurb" drainage channels		
33U10Q	250 mm x 250 mm	£79	m run
	Inspection unit		
33U10T	With cast iron lid 248 x 248 x 914 mm	£128	each
	Silt box top		
33U10W	With concrete frame and cast iron lid, 457 x 610 mm, set over gully each -	£361	each
	<u>Footpaths</u>		
	Gravel (excludes kerbs, channels & edgings)		
33U1PK 33U1PM	50 mm thick 150mm hardcore base 50 mm thick prepared earth base	£16 £6	m.² m.²
	Bitumen macadam paving (excludes kerbs, channels & edgings)		
33U1PT	Tarmac surface 20mm wearing course 45mm base	£30	m <sup>2</sup>
	Site Furniture		
	Lighting Lighting on columns set in concrete foundations		
33U1YK	4-6 m columns with up to 70 W lamp including electrical supply and connections	£1,300	each
33U1YM	10-12 m columns with up to 250 W lamp including electrical supply and connections	£2,083	each
33U1YQ	10-12 m columns with sodium lamp including electrical supply and connections	£2,636	each
	Security/Settings		
	Security Barriers Barriers for a 4 m clear opening with steel supports bolted to a concrete foundation (average rates)		

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RCG Code	Description	ERC Rate	Unit
33U1U5	Manually operated pole barrier with counter balance on tubular steel supports	£1,106	each
33U1V5	Electrically operated pole barrier switch operated	£2,815	each
33U1VA	Electrically operated pole barrier with pedestal mounted card reader and auto close induction loop	£3,240	each
33U1VE	Two electrically operated barriers with pedestal mounted card readers and auto close induction loop for entrance and exit with gatehouse over-ride switch	£6,866	each
33U1VJ	Road blockers Hydraulically operated road blocker 3 m wide 350 mm raised height.	£12,152	each
	Remote push button control, two induction loops and red over green traffic light		
33U1VP	Surface mounted hydraulically operated road blocker 3 m wide with 300 mm raised height. Remote push button control, two induction loops, red over green traffic light and approach ramps	£10,057	each
33U1VS	Hydraulic rising bollard. Remote push button control, safety/autoraise loop to work in both directions, two red over green traffic lights	£8,714	each
	Bollards/Guard rails		
33U1XK 33U1XP 33U1XT 33U1XX	Safety Barriers Single sided corrugated beam Double sided corrugated beam Single sided open box beam Double sided open box beam	£37 £45 £40 £70	m run m run m run m run
	Bollards set in concrete foundations		
33U1X5 33U1XA 33U1XF	Pre-cast concrete Hollow steel with cast cap Cast Iron	£236 £212 £290	each each each
	Boundary Walls/Fences		
	Walls ½ brick (102 mm) thick solid wall of:-		

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RCG Code	Description	ERC Rate	Unit
30P0B0	Common bricks in mortar	£35	m²
30P0BF	Medium grade facing bricks in mortar	£48	m²
30P0BP	Class A engineering bricks in mortar	£76	m²
	1 brick (215 mm) thick solid wall of:-		
30P0B5	Common bricks in mortar	£65	m²
30P0BK	Medium grade facing bricks in cement mortar	£94	m²
30P0BU	Class A engineering bricks in mortar	£149	m <sup>2</sup>
	Concrete post and wire fencing		
	Two, three and four wire, posts at 2.75 m centres		
33U2A5	900 mm high, two wire	£18	m run
33U2AA	1.07 m high, three wire	£19	m run
33U2AF	1.20 m high, three wire	£19	m run
33U2AK	1.40 m high, four wire	£19	m run
	Timber post and wire fencing		
	Posts at 2.75 m centres		
33U2B5	900 mm high	£19	m run
33U2BA	1.2 m high	£20	m run
33U2BF	1.4 m high	£21	m run
	Chain Link Fencing		
	Galvanised mild steel mesh; galvanised mild steel or concrete posts at 3.0 m centres		
33U2CA	900mm high	£18	m run
33U2CK	1.2 m high	£18	m run
33U2CP	1.5 m high	£19	m run
33U2CV	1.8 m high	£24	m run
33U2D5	2.4 m high	£32	m run
	Plastic Coated mild steel mesh; concrete posts at 3.0 m centres		
33U2GA	900mm high	£17	m run
33U2GK	1.2 m high	£17	m run
33U2GP	1.5 m high	£20	m run
33U2GV	1.8 m high	£22	m run
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RCG Code	Description	ERC Rate	Unit
	Gates and gate posts		
	Galvanised mild steel chain link mesh, with angle framing, braces etc. complete with hinges, locking bar, lock and bolts (for plastic coated add £5 to Singles and £10 Pairs)		
33U2DK 33U2DQ	Single 0.9 m wide x 1.2 m high 0.9 m wide x 1.8 m high	£1,253 £1,300	each each
33U2E5 33U2EA 33U2EF 33U2EK 33U2EQ 33U2EV 33U2F0 33U2F5 33U2FA	Pairs 2.44 m wide x 0.9 m high 2.44 m wide x 1.2 m high 2.44 m wide x 1.8 m high 4.00 m wide x 0.9 m high 4.00 m wide x 1.2 m high 4.00 m wide x 1.8 m high 4.00 m wide x 1.8 m high 6.00 m wide x 2.4 m high 6.00 m wide x 2.4 m high	£613 £632 £682 £1,784 £1,879 £2,064 £2,250 £2,384 £2,637	each each each each each each each
33U2K5 33U2KA	Chain link fencing for tennis courts  Galvanised mild steel mesh; galvanised mild steel posts at 2.5 m centres  2,745 mm high, 36.0 x 18.0 m including gate 1,070mm x 1,980mm complete with hinge, locking bar, lock and bolts  3,660 mm high, 36.0 x 18.0 m including gate 1,070mm x 1,980mm complete with hinge, locking bar, lock and bolts		each
33U2L5 33U2LA 33U2LF 33U2LK	Cleft chestnut pale fencing; pales spaced 51 mm apart on two lines galvanised wire; 64mm diameter posts; 76mm x 51mm struts 900 mm high posts at 2.5 m centres 1.05m high; posts at 2.5m centres 1.2 m high, posts at 2.25 m centres 1.35 m high; posts at 2.25 m centres	£10 £11 £23 £21	m run m run m run m run
33U2M5 33U2MA	Closeboarded – 76 mm x 38 mm softwood rails, 89 mm x 19 mm softwood pales lapped, 152 mm x 25 mm softwood gravel boards, all softwood treated posts at 3.0 m centres 1.0 m high; two rail; concrete posts 1.2 m high; two rail; concrete posts	£41 £42	m run m run

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RCG Code	Description	ERC Rate	Unit
33U2MF	1.4 m high; three rail; concrete posts	£41	m run
33U2MK	1.6m high; three rail; concrete posts	£48	m run
33U2MQ	1.8m high; three rail; concrete posts	£50	m run
33U2NA	1.2m high; two rail; oak posts	£37	m run
33U2NF 33U2NK	1.4m high; three rail; oak posts 1.6m high; three rail; oak posts	£43 £52	m run m run
33U2NQ	1.8m high; three rail; oak posts	£55	m run
	Interwoven panels- 1.80 m wide, fixed to 100 mm x 100 mm oak		
22112115	posts at 1.80 m centres	600	
33U2U5	1.5 m high	£39	m run
33U2UF	1.8 m high	£43	m run
	1.80 m wide, fixed to 100 mm x 100 mm concrete posts at 1.80 centres		
33U2UA	1.5 m high	£48	m run
33U2UK	1.8 m high	£50	m run
	<b>Post and rail</b> - three horizontal rails 90 mm x 38 mm fixed to 150 mm x 75 mm posts at 1.8 m centres; all pressure treated		
33U2W5	softwood 1.2 m high	£19	m run
33U2WA	<b>Post and rail</b> - three horizontal rails 90 mm x 38 mm fixed to 150 mm x 75 mm posts at 1.8 m centres; all pressure treated oak 1.4m high	£24	m run
33U2WF	<b>Post and rail</b> - four horizontal rails 90 mm x 38 mm fixed to 150 mm x 75 mm posts at 1.8 m centres; all pressure treated softwood and 90 mm x 38 mm intermediate posts 1.2 m high	£20	m run
33U2WK	1.4 m high	£23	m run
	Field gate - complete with wrought iron ironmongery; type 5 bar diamond braced, 1.30 m high, hung on 200 mm x 200 mm posts all.		
33U2X5	treated softwood 3,000 mm wide	£486	each
0002/10	Palisade − 75 mm x 25 mm softwood vertical palings with pointed tops, two 100 mm x 50 mm horizontal softwood rails housed into 150 mm x 100 mm softwood posts with weathered tops, all pressure treated timber, posts at 2.5 m centres	2,400	Cuoii
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RCG Code	Description	ERC Rate	Unit
33U2VA 33U2VB 33U2VE	1.2 m high 1.8 m high 1.8 m high Oak	£32 £49 £56	m run m run m run
	Precast concrete slab fencing		
33U2P5 33U2PA 33U2PF	Precast concrete slab, 305 mm x 38 mm x 1,753 mm slabs fitted in to twice grooved concrete posts. Posts at 1.83 m centres 1.2 m high 1.5m high 1.8m high	£50 £63 £68	m run m run m run
	Mild steel unclimbable fencing and gates		
33U2YM 33U2YN	Mild steel unclimbable in panels 2440 mm long; flat section top flat section edges on steel post at 2.4m centres 2.1m high 2.4m high	£137 £154	m run m run
	Gates and gate posts; mild steel unclimbable (to match mild steel unclimbable fencing) with flat section framing etc; complete with locking bar, handles etc; two 102mm x 102mm hollow section gate posts		
33U2ZH 33U2ZK 33U2ZM 33U2ZN	2 x 1.2m x 2.1m ht 2 X 2.4m x 2.1m ht 2 x 1.2m x 2.4m ht 2 X 2.4m x 2.4m ht	£1,178 £1,987 £1,327 £2,239	Pair Pair Pair Pair
	Tubular steel railings and gates		
2211255	<b>Railings; mild steel</b> ; in bays 2,000 mm long; 20 mm diameter balusters at 130 mm centres welded to flat rail top and bottom; bolted to 51mm x 51 mm hollow square section posts at 2.0 m centres	204	m run
33U2S5 33U2SA 33U2SF	900 mm high 1.2 m high 1.5 m high	£94 £125 £137	m run m run m run

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RCG Code	Description	ERC Rate	Unit
	Galvanised steel security fencing and gates		
33U2Y3 33U2Y5 33U2YA 33U2YF	Security Fencing - Corrugated steel palisade security with pales at 152 mm centres; rolled steel angle posts at 2.75 m centres set in concrete; all hot-dip galvanised.  1.80m high  2.40m high  2.70m high  3.00m high	£70 £87 £127 £133	m run m run m run m run
	<u>Security Gates</u> – Gates and gate posts, corrugated steel palisade security (to match fencing) hung on rolled steel joist posts set in. concrete; complete with bolts and locking bar; all hot-dip galvanised		
33U2ZA 33U2ZF	Pair 4.00 m wide x 2.40 m high Pair 5.00 m wide x 3.00 m high	£1,715 £2,210	each each
	<u>Electronic Security Gates</u> - Gates and gate posts; corrugated steel palisade security (to match fencing) hung on rolled steel joist posts set in concrete; complete with bolts and locking bar; all hot-dip galvanised gates power operated; double leaf swing, remote push button automation		
33U315	Pair 4.00 m wide x 2.40 m high	£6,340	each
	Cycle Shelters:		
41F00A	Freestanding half brick thick walls corrugated or profiled metal sheet roof	£239	m2
41F02A	Freestanding light steel frame corrugated or profiled metal sheet rear wall and roof	£157	m2
41F04A	Freestanding proprietary shelter - light steel frame corrugated or profiled metal sheet walls and roof	£315	m2
41F04D	Freestanding combined proprietary shelter and rack - light steel frame corrugated aluminium roof	£2398	each
41F06A	Lean to half brick thick side walls corrugated or profiled metal sheet roof	£190	m2
41F08A	Lean to light steel frame corrugated or profiled metal sheet side walls and roof	£125	m2

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