RAWLINSONS

Document 9.

ROUGH ORDER OF COST
FOR
HUTT VALLEY HIGH SCHOOL ROOFING REMEDIAL WORKS

84-114 Woburn Road, Lower Hutt

Report Prepared by: Wayne Skinner
Date: 09/09/2019

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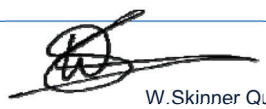
Prepared by:	*Signed:*  *For Rawlinsons* W.Skinner Quantity Surveyor	*Date:*	9 September 2019
Checked by:	*Signed:* *For Rawlinsons* P.Hay Regional Manager	*Date:*	9 September 2019

1.1 Introduction

As requested we have completed a Rough Order Of Cost for the proposed Hutt Valley High School Roofing Remedial Works project.

1.2 Basis of Estimate

This Estimate has been based on measured approximate quantities with historical cost data of similar projects, priced to be current as at September 2019. The level of pricing has been based on a competitively tendered contract.

This Estimate has been based upon the following documentation:

- CoveKinloch Condition Report: (Hutt Valley High School Roof Condition Report.docx)
- HVH Roof Survey - Drone Photos (www.nzproductions.co.nz/pages/survey-work/hvh-roof-survey)

1.3 Key Notes and Assumptions

- We have allowed to scaffold and shrink wrap the roofs of each school block / building where full roof replacement is required.
- In the absence of architectural drawings, the majority of our measurements have been derived via Google Earth.
- Our estimate does not take into consideration interior remedial works, this includes the replacement of rotten structural timber members if found underneath any of the roof cladding.

1.4 Executive Summary

The Estimated construction costs, including P&G, Margin and an Estimating Contingency is as follows:

Block Z	$	44,800.00
Boiler Room	$	50,100.00
Block W	$	301,500.00
Block P	$	488,000.00
Block A	$	282,500.00
Science Tech	$	2,600.00
Gym	$	671,000.00
Pavilion	$	17,600.00
Block B	$	384,700.00
Block C	$	1,002,000.00
Administration/Library	$	375,400.00
Student Centre	$	200,700.00
Block G	$	37,100.00
Block D	$	20,500.00
Block F	$	86,600.00
Hall	$	525,500.00
AV Tech	$	47,700.00
Block E	$	292,400.00
Block M	$	394,000.00
Groundsman's Sheds	$	89,400.00
Lower Gym	$	393,300.00
TOTAL COMBINED COST	**$**	**5,707,400.00**

2.1 Estimate Exclusions

This Estimate makes no allowance for the following:

- GST
- Temporary accommodation and relocation costs
- Purchasing of land and/or buildings
- Escalation, cost fluctuations and currency fluctuations beyond 2nd Quarter 2019
- Testing and identification of hazardous material
- Internal refurbishment works
- Decanting / furniture removal or storage thereof
- Information Technology, hardware etc.
- Legal fees, council rates and levies
- Finance and interest
- Fire services upgrade of building to meet current building code of compliance
- Services disruptions, alterations, or upgrades
- Professional Fees

3.1 Estimate Details

Refer to the following pages for estimate details

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Total
	Hutt Valley High School Roof Remediation Works - ROC Estimate	
1	Block Z	44,800
2	Boiler Room	50,100
3	Block W	301,500
4	Block P	488,000
5	Block A	282,500
6	Science Tech	2,600
7	Gym	671,000
8	Pavilion	17,600
9	Block B	384,700
10	Block C	1,002,000
11	Administration/Library	375,400
12	Student Centre	200,700
13	Block G	37,100
14	Block D	20,500
15	Block F	86,600
16	Hall	525,500
17	AV Tech	47,700
18	Block E	292,400
19	Block M	394,000
20	Groundsman's Sheds	89,400
21	Lower Gym	393,300
	TOTAL COMBINED COST	**5,707,400**
		5,707,400

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block Z				
	ROOF				
1	Clean moss build up	535	m2	5.00	2,675
2	Verge Flashing to be removed, cleaned and replaced with improved flashing design.	1	Item	5,000.00	5,000
3	Remove corroded screw fixings and replace with new (Say 60% of screws require replacing)	1	Item	10,200.00	10,200
4	Near by trees to be trimmed (west roof side)	1	Item	2,000.00	2,000
	Roof Deck				
5	Annual roof clean (deck)	19	m2	10.00	194
6	Option to replace membrane and re-fix substrate sheets (maybe required in 5 years, or before that if breach in the waterproof membrane occurs).	1	Item	9,000.00	9,000
	RAINWATER SYSTEM				
7	Clean out gutters	145	m	5.00	725
8	Trim over hanging tree (Incl. above)		Note		Incl.
9	Spreaders fitted to the higher-level downpipes	1	Item	1,500.00	1,500
10	Rounding				7
	Construction Sub-Total				**31,300**
	Element Sub-Total				
11	Preliminaries & General	15.0	%		4,700
12	Margins	8.0	%		2,900
13	Estimating Contingency	15.0	%		5,900
	Estimate Total				**44,800**
					44,800

Boiler Room

	ROOF				
	Trapezoidal Roof				
1	Remove corroded screw fixings and replace with new (Metal roof sheets)	1	Item	800.00	800
2	Tighten remaining fixings where not installed correctly	1	Item	400.00	400
3	Replace deteriorated fixings in fiberglass sheets	1	Item	300.00	300
4	Clean Roof	29	m2	5.00	147
	Standing Rib				
	Full replacement required				
5	Removal of existing roofing	93	m2	50.00	4,650
6	Disposal of existing roofing	93	m2	5.00	465

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Boiler Room				*(Continued)*
7	Allowance for new aluminium standing rib roof cladding, including roof underlay.	93	m2	110.00	10,230
8	Extra over for roof flashings	44	m	150.00	6,600
9	Edge Protection	44	m	25.00	1,100
10	Extra over to replace parapet flashings, boot seals to roof penetrations and back flashings to services where corrosion has been observed.	1	Item	2,500.00	2,500
	Clearlite Sheets				
	Full replacement required				
11	Removal of existing roofing	18	m2	30.00	535
12	Disposal of existing roofing	18	m2	5.00	89
13	Allowance for new Clearlite sheet roofing	18	m2	50.00	892
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required.				
14	Allowance to remove existing metal spouting and downpipes	1	Item	1,820.00	1,820
15	New PVC spouting	43	m	70.00	3,010
16	Downpipes to the above	9	m	150.00	1,350
17	Rounding				12
	Construction Sub-Total				**34,900**
	Element Sub-Total				
18	Preliminaries & General	15.0	%		5,300
19	Margins	8.0	%		3,300
20	Estimating Contingency	15.0	%		6,600
	Estimate Total				**50,100**
					50,100

Block W

	ROOF				
	Standing Rib				
	Full roof replacement required				
1	Removal of existing roofing	472	m2	50.00	23,600
2	Disposal of existing roofing	472	m2	5.00	2,360
3	Allowance for new aluminium standing rib roof cladding, including roof underlay.	472	m2	110.00	51,920
4	Extra over for roof flashings (including verge flashings)	146	m	150.00	21,900

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block W				*(Continued)*
5	Edge Protection	146	m	25.00	3,650
	Membrane roof				
	ACM confirmed - full containment of building/block W required and full replacement of membrane roofing.				
6	Carefully uplift existing waterproofing membrane system	99	m2	150.00	14,850
7	Securely dispose of existing ACM membrane roofing	99	m2	50.00	4,950
8	New Waterproofing Membrane	99	m2	220.00	21,780
9	Extra over for roof flashings and roof to wall junctions	73	m	150.00	10,950
	Scaffolding and Containment				
10	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	34,000.00	34,000
11	Provide full shrink wrap coverage to the above scaffolding	1	Item	9,000.00	9,000
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required.				
12	Allowance to remove existing metal spouting and downpipes	1	Item	3,360.00	3,360
13	New PVC spouting	73	m	70.00	5,110
14	Downpipes to the above	23	m	150.00	3,450
15	Rounding				20
	Construction Sub-Total				**210,900**
	Element Sub-Total				
16	Preliminaries & General	15.0	%		31,700
17	Margins	8.0	%		19,500
18	Estimating Contingency	15.0	%		39,400
	Estimate Total				**301,500**
					301,500

Block P

	ROOF				
	Full replacement required.				
	Remove existing corrugated roofing				
1	Removal of existing roofing	648	m2	50.00	32,400
2	Disposal of existing roofing	648	m2	5.00	3,240
	Remove existing standing rib roofing				
3	Removal of existing roofing	149	m2	50.00	7,450
4	Disposal of existing roofing	149	m2	5.00	745

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block P				*(Continued)*
	New Roofing				
5	Allowance for new metal profile roof cladding, including roof underlay.	797	m2	100.00	79,700
6	Extra over for roof flashings	408	m	150.00	61,200
7	Edge Protection	267	m	25.00	6,675
	RAINWATER SYSTEM				
	Full replacement required.				
	Metal Spouting				
8	Allowance to remove existing metal spouting and downpipes	1	Item	10,290.00	10,290
9	New PVC spouting	204	m	70.00	14,280
10	Downpipes to the above	90	m	150.00	13,500
	Scaffolding and Containment				
11	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	84,000.00	84,000
12	Provide full shrink wrap coverage to roof only	1	Item	28,000.00	28,000
13	Rounding				20
	Construction Sub-Total				**341,500**
	Element Sub-Total				
14	Preliminaries & General	15.0	%		51,300
15	Margins	8.0	%		31,500
16	Estimating Contingency	15.0	%		63,700
	Estimate Total				**488,000**
					488,000

Block A

	ROOF				
	Full replacement required.				
	Remove existing corrugated roofing				
1	Removal of existing roofing	391	m2	50.00	19,550
2	Disposal of existing roofing	391	m2	5.00	1,955
	Remove existing standing rib roofing				
3	Removal of existing roofing	49	m2	50.00	2,450
4	Disposal of existing roofing	49	m2	5.00	245
	Covered Walkways				
5	Removal of existing roofing	60	m2	50.00	3,000
6	Disposal of existing roofing	60	m2	5.00	300

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block A				*(Continued)*
	New Roofing				
7	Allowance for new metal profile roof cladding, including roof underlay.	499	m2	100.00	49,900
8	Extra over for roof flashings	207	m	150.00	31,050
9	Edge Protection	144	m	25.00	3,600
	RAINWATER SYSTEM				
	Full replacement required.				
	Metal Spouting				
10	Allowance to remove existing metal spouting and downpipes	1	Item	5,390.00	5,390
11	New PVC spouting	124	m	70.00	8,680
12	Downpipes to the above	30	m	150.00	4,500
	Scaffolding and Containment				
13	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	49,000.00	49,000
14	Provide full shrink wrap coverage to roof only	1	Item	18,000.00	18,000
15	Rounding				80
	Construction Sub-Total				**197,700**
	Element Sub-Total				
16	Preliminaries & General	15.0	%		29,700
17	Margins	8.0	%		18,200
18	Estimating Contingency	15.0	%		36,900
	Estimate Total				**282,500**
					282,500

Science Tech

	Roof				
	Low pitched trapezoidal profile iron roofing with a paint finish. Translucent sheets to the covered entry.				
1	Clean Roo	116	m2	5.00	579
2	Replace screw fixings to translucent roofing	1	item	600.00	600
3	Trim Trees near roo	1	item	500.00	500
4	Rounding				21
	Construction Sub-Total				**1,700**
	Element Sub-Total				
5	Preliminaries & General	15.0	%		300
6	Margins	8.0	%		200
7	Estimating Contingency	15.0	%		400

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Science Tech				*(Continued)*
	Estimate Total				**2,600**
					2,600
	Gym				
	Original Corrugated Metal Roof (Old Gym)				
	Full replacement of the roof is required				
1	Removal of existing roofing	791	m2	50.00	39,550
2	Disposal of existing roofing	791	m2	5.00	3,955
3	Allowance for new corrugated metal roof cladding, including roof underlay.	791	m2	100.00	79,100
4	Extra over for roof flashings	147	m	150.00	22,050
5	Edge Protection	147	m	25.00	3,675
6	New vents	1	item	6,500.00	6,500
	Corrugated Metal Roof (New Gym)				
7	Remove corroded screw fixings and replace with new	1	item	17,000.00	17,000
8	Replace sealant joints around services penetrations	1	item	500.00	500
	Standing Rib (Old Gym)				
	Full roof replacement required				
9	Removal of existing roofing	146	m2	50.00	7,300
10	Disposal of existing roofing	146	m2	5.00	730
11	Allowance for new aluminium standing rib roof cladding, including roof underlay.	146	m2	110.00	16,060
12	Extra over for roof flashings	89	m	150.00	13,350
13	Edge Protection	89	m	25.00	2,225
	Lower Roof south facing				
14	Clean Roof	161	m2	5.00	805
	TorchOn (Membrane Roof)				
15	Full replacement of the membrane roof is required if the substrate layers have been compromised.				
16	Uplift existing waterproofing membrane system	250	m2	50.00	12,500
17	Disposal of existing membrane	250	m2	5.00	1,250
18	New Waterproofing Membrane	250	m2	220.00	55,000
19	Extra over for roof flashings and roof to wall junctions	64	m	150.00	9,632
	Rainwater system				
	Metal Spouting				
20	Full replacement of metal spouting	144	m	70.00	10,080

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Gym				*(Continued)*
21	Downpipes to the above	54	m	150.00	8,100
	Internal Gutters				
22	Full replacement of membrane linings (TorchOn) to the internal gutters	1	Item	4,000.00	4,000
23	PVC spouting (Remove debris / clean gutters out)	1	Item	1,300.00	1,300
	Scaffolding and Containment				
24	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	112,900.00	112,900
25	Provide full shrink wrap coverage to roof only	1	Item	42,000.00	42,000
26	Rounding				38
	Construction Sub-Total				**469,600**
	Element Sub-Total				
27	Preliminaries & General	15.0	%		70,500
28	Margins	8.0	%		43,300
29	Estimating Contingency	15.0	%		87,600
	Estimate Total				**671,000**
					671,000

Pavilion

	Metal Tiles				
1	Replace dented tiles	1	item	1,300.00	1,300
	Verandas				
2	Replace translucent veranda sheets	1	item	2,000.00	2,000
	Rainwater system				
3	Metal spouting and downpipes to be replaced				
4	Spouting	101	m	70.00	7,070
5	Downpipes to the above	12	m	150.00	1,800
6	Rounding				30
	Construction Sub-Total				**12,200**
	Element Sub-Total				
7	Preliminaries & General	15.0	%		1,900
8	Margins	8.0	%		1,200
9	Estimating Contingency	15.0	%		2,300
	Estimate Total				**17,600**
					17,600

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block B				
	ROOF				
	Corrugated Profile				
1	Option / Cost to replace nail fixings with screw fixings	1	item	19,200.00	19,200
2	Services penetrations require sealing to ensure no moisture ingress around these.	1	item	2,000.00	2,000
3	Replace sheets where corrosion has started around services penetrations	1	item	1,200.00	1,200
4	Clean Roof	606	m2	5.00	3,032
	Trapezoidal Profile				
5	Remove corroded screw fixings and replace with new (Say 80% of screws require replacing)	1	item	16,400.00	16,400
6	Apron flashing requires replacement where downpipe is missing on the east elevation.	1	item	800.00	800
7	Replace sealant around services penetrations	1	item	1,000.00	1,000
8	Clean Roof annually	647	m2	5.00	3,235
9	Test anchor points prior to use		Note		
10	Inspection of localised repairs to ensure weathertight		Note		
	Aluminium Standing Rib				
11	Sealant repairs to troughs on the standing rib sheeting are sort term and it is recommended that overlaying and welding an aluminium patch in these locations for a long tern solution.	1	item	11,200.00	11,200
12	Clean Roof	372	m2	5.00	1,860
13	Test anchor points prior to use		Note		
	Standing Rib				
	The small area of standing rib roofing on the east roof line has exceeded its serviceable life. This requires full replacement.				
14	Removal of existing roofing	51	m2	50.00	2,527
15	Disposal of existing roofing	51	m2	5.00	253
16	Allowance for new aluminium standing rib roof cladding, including roof underlay.	51	m2	110.00	5,558
17	Extra over for roof flashings	69	m	150.00	10,379
18	Edge Protection	69	m	25.00	1,730
	TorchOn Membrane Roof				
19	Clean Roof annually	102	m2	5.00	510
	Butyl Membrane				
	Full replacement required				
20	Uplift existing waterproofing membrane system	70	m2	50.00	3,516

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block B				*(Continued)*
21	Disposal of existing membrane	70	m2	5.00	350
22	New Waterproofing Membrane	70	m2	220.00	15,400
23	Extra over for roof flashings and roof to wall junctions	104	m	150.00	15,600
24	Edge protection	104	m	25.00	2,600
	Bitumin Based Membrane				
	ACM present in roof membrane material. Full isolation and replacement required				
25	Carefully uplift existing waterproofing membrane system	50	m2	150.00	7,500
26	Securely dispose of existing ACM membrane roofing	50	m2	50.00	2,500
27	New Waterproofing Membrane	50	m2	220.00	11,000
28	Extra over for roof flashings and roof to wall junctions	28	m	150.00	4,200
	Scaffolding and Containment to the above				
29	Scaffolding to ACM roof and surrounding elevations (Erect & Dismantle)	1	Item	11,000.00	11,000
30	Provide full shrink wrap coverage to the above scaffolding	1	Item	9,000.00	9,000
	Covered Walkways				
31	Annual clean only.	120	m2	5.00	598
32	Further investigation regarding corrosion around steel framing		Note		
	Walk Bridge				
	Replace butyl roof membrane and substrate				
33	Uplift existing waterproofing membrane system	60	m2	50.00	3,002
34	Disposal of existing membrane	60	m2	5.00	300
35	New Waterproofing Membrane	60	m2	200.00	12,006
36	Extra over for roof flashings and roof to wall junctions	35	m	150.00	5,250
37	Edge protection	35	m	25.00	875
	RAINWATER SYSTEM				
	Copper & Metal Spouting				
	Full replacement required.				
38	Allowance to remove existing metal spouting and downpipes	1	Item	8,680.00	8,680
39	New PVC spouting	191	m	70.00	13,370
40	Downpipes to the above	57	m	150.00	8,595
	Existing uPVC Spouting				
41	Localised repairs only to areas where affected by impact damage and separation.	1	item	1,500.00	1,500
42	Clean out heavy build up of debris	1	item	250.00	250

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block B				*(Continued)*
43	Annual clean of all spouting required	258	m	5.00	1,290
	General allowance for scaffolding (Areas where full roof replacement required)				
44	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	item	45,000.00	45,000
45	Provide full shrink wrap coverage to roof only	1	item	5,000.00	5,000
46	Rounding				36
	Construction Sub-Total				**269,300**
	Element Sub-Total				
47	Preliminaries & General	15.0	%		40,400
48	Margins	8.0	%		24,800
49	Estimating Contingency	15.0	%		50,200
	Estimate Total				**384,700**
					384,700
	Block C				
	ROOF				
	Standing Rib				
	Full replacement required (Includes areas around covered entries and turn downs on external walls				
1	Removal of existing roofing	1,561	m2	50.00	78,050
2	Disposal of existing roofing	1,561	m2	5.00	7,805
3	Allowance for new aluminium standing rib roof cladding, including roof underlay.	1,561	m2	110.00	171,710
4	Allowance for new flashing as well as replacement of Apron flashings (This requires removal of wall cladding to allow access to apron flashings).	1	item	97,300.00	97,300
5	Edge Protection	290	m	25.00	7,250
6	Extra over to redesign roof where pop-up skylights are present.	1	item	7,900.00	7,900
	Old Trapezoidal Profile				
7	Replace corroded screw fixings	1	item	5,200.00	5,200
8	Clean Roof	272	m2	5.00	1,361
	New Trapezoidal Profile				
9	Clean Roof	409	m2	5.00	2,045
	Covered Walkways				
	Full replacement required				
10	Removal of existing roofing	397	m2	50.00	19,850
11	Disposal of existing roofing	397	m2	5.00	1,985

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block C				*(Continued)*
12	Allowance for new aluminium standing rib roof cladding, including roof underlay.	397	m2	110.00	43,670
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required				
13	Allowance to remove existing metal spouting and downpipes	1	Item	23,000.00	23,000
14	New PVC spouting	485	m	70.00	33,950
15	Downpipes to the above	152	m	150.00	22,734
	Scaffolding and Containment				
16	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	122,500.00	122,500
17	Provide full shrink wrap coverage to roof only	1	Item	55,000.00	55,000
18	Rounding				90
	Construction Sub-Total				**701,400**
	Element Sub-Total				
19	Preliminaries & General	15.0	%		105,300
20	Margins	8.0	%		64,600
21	Estimating Contingency	15.0	%		130,700
	Estimate Total				**1,002,000**
					1,002,000

Administration/Library

	ROOF				
	Standing Rib				
	Full roof replacement required				
1	Removal of existing roofing	634	m2	55.00	34,870
2	Disposal of existing roofing	634	m2	5.00	3,170
3	Allowance for new aluminium standing rib roof cladding, including roof underlay.	634	m2	110.00	69,740
4	Extra over for roof flashings	228	m	150.00	34,200
5	Edge Protection	88	m	25.00	2,209
	Scaffolding and Containment				
6	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	49,000.00	49,000
7	Provide full shrink wrap coverage to roof only	1	Item	23,000.00	23,000
	Trapezoidal Profile				
8	Replace corroded screw fixings (Missing fixings included)	1	item	4,000.00	4,000
9	Apron flashing replace where corrosion is visible	1	item	1,500.00	1,500

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Administration/Library				*(Continued)*
10	Services penetrations sealant, remove old and replace with new	1	item	550.00	550
11	Clean Roof	207	m2	5.00	1,033
	TorchOn Membrane				
12	Clean Roof	306	m2	5.00	1,530
13	Breaches in the membrane at the change of pitch require repair to prevent moisture ingress. (Further investigation required)		Note		
14	Re-coating of the TorchOn surface should be considered.		Note		
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required				
15	Allowance to remove existing metal spouting and downpipes	1	Item	11,000.00	11,000
16	New PVC spouting	221	m	70.00	15,470
17	Downpipes to the above	69	m	150.00	10,359
	uPVC Spouting				
18	Annual clean out	1	item	600.00	600
19	Height access factor	1	item	150.00	150
	TorchOn Gutters				
20	Clean out extensive vegetation growth	1	item	300.00	300
21	Rounding				18
	Construction Sub-Total				**262,700**
	Element Sub-Total				
22	Preliminaries & General	15.0	%		39,500
23	Margins	8.0	%		24,200
24	Estimating Contingency	15.0	%		49,000
	Estimate Total				**375,400**
					375,400

Student Centre

	ROOF				
	Standing Rib				
	Full roof replacement required				
1	Removal of existing roofing	332	m2	55.00	18,260
2	Disposal of existing roofing	332	m2	5.00	1,660
3	Allowance for new aluminium standing rib roof cladding, including roof underlay.	332	m2	110.00	36,520
4	Extra over for roof flashings	109	m	150.00	16,350

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Student Centre				*(Continued)*
5	Edge Protection	55	m	25.00	1,375
	Plywood cladding to pop-up roof requires replacing				
6	Remove existing plywood	16	m2	25.00	408
7	New plywood	16	m2	70.00	1,141
	Scaffolding and Containment				
8	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	41,000.00	41,000
9	Provide full shrink wrap coverage to roof only	1	Item	12,000.00	12,000
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required				
10	Allowance to remove existing metal spouting and downpipes	1	Item	4,000.00	4,000
11	New PVC spouting	82	m	70.00	5,740
12	Downpipes to the above	13	m	150.00	1,920
13	Rounding				27
	Construction Sub-Total				**140,400**
	Element Sub-Total				
14	Preliminaries & General	15.0	%		21,100
15	Margins	8.0	%		13,000
16	Estimating Contingency	15.0	%		26,200
	Estimate Total				**200,700**
					200,700

Block G

	ROOF				
	Trapezoidal Profile				
1	Replace Screw fixings (including any missing)	1	item	14,400.00	14,400
2	Sealant to services penetrations removed and replaced with new sealant	1	item	1,000.00	1,000
3	Further assessment of services penetrations required	Note			
4	Annual roof clean	811	m2	5.00	4,055
	TorchOn Membrane				
5	Clean Roo	30	m2	5.00	150
6	Option to re-coat membrane with UV protective chip coating	30	m2	150.00	4,500
	RAINWATER SYSTEM				
	uPVC Spouting				

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block G				*(Continued)*
7	Annual clean out	173	m	10.00	1,730
8	Check for any separation at joins and repair		Note		
9	Rounding				65
	Construction Sub-Total				**25,900**
	Element Sub-Total				
10	Preliminaries & General	15.0	%		3,900
11	Margins	8.0	%		2,400
12	Estimating Contingency	15.0	%		4,900
	Estimate Total				**37,100**
					37,100
	Block D				
	ROOF				
	Trapezoidal Profile				
1	Remove corroded screw fixings and replace with new (Say 60% of screws require replacing)	1	item	9,800.00	9,800
	Assess services penetrations				
2	Sealant to services penetrations removed and replaced with new sealant	1	item	1,500.00	1,500
3	Clean Roof	561	m2	5.00	2,805
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required				
4	No metal spouting present, only on walkways		Note		
5	Rounding				95
	Construction Sub-Total				**14,200**
	Element Sub-Total				
6	Preliminaries & General	15.0	%		2,200
7	Margins	8.0	%		1,400
8	Estimating Contingency	15.0	%		2,700
	Estimate Total				**20,500**
					20,500
	Block F				
	ROOF				
	Standing Rib				

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block F				*(Continued)*
	Full roof replacement required				
1	Removal of existing roofing	155	m2	50.00	7,737
2	Disposal of existing roofing	155	m2	5.00	774
3	Allowance for new aluminium standing rib roof cladding, including roof underlay.	155	m2	110.00	17,020
4	Extra over for roof flashings	50	m	150.00	7,500
5	Edge Protection	50	m	25.00	1,250
	Corrugated Profile (over entry)				
6	Replace apron flashing	1	item	750.00	750
	Scaffolding and Containment				
7	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	16,000.00	16,000
8	Provide full shrink wrap coverage to roof only	1	Item	6,000.00	6,000
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required				
9	Allowance to remove existing metal spouting and downpipes	1	Item	1,000.00	1,000
10	New PVC spouting	22	m	70.00	1,540
11	Downpipes to the above	6	m	150.00	960
12	Rounding				70
	Construction Sub-Total				**60,600**
	Element Sub-Total				
13	Preliminaries & General	15.0	%		9,100
14	Margins	8.0	%		5,600
15	Estimating Contingency	15.0	%		11,300
	Estimate Total				**86,600**
					86,600

Item	Description	Quantity	Unit	Rate	Total
	Hall				
	ROOF				
	Standing Rib				
	Full roof replacement required				
1	Removal of existing roofing	1,022	m2	50.00	51,100
2	Disposal of existing roofing	1,022	m2	5.00	5,110
3	Allowance for new aluminium standing rib roof cladding, including roof underlay.	1,022	m2	110.00	112,420
4	Extra over for roof flashings	238	m	150.00	35,700

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Hall				*(Continued)*
5	Edge Protection	238	m	25.00	5,950
	Scaffolding and Containment				
6	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	100,000.00	100,000
7	Provide full shrink wrap coverage to roof only	1	Item	36,000.00	36,000
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required				
8	Allowance to remove existing metal spouting and downpipes	1	Item	6,000.00	6,000
9	New PVC spouting	119	m	70.00	8,330
10	Downpipes to the above	48	m	150.00	7,140
11	Rounding				50
	Construction Sub-Total				**367,800**
	Element Sub-Total				
12	Preliminaries & General	15.0	%		55,200
13	Margins	8.0	%		33,900
14	Estimating Contingency	15.0	%		68,600
	Estimate Total				**525,500**
					525,500

AV Tech

	ROOF				
	Standing Rib				
	Full roof replacement required				
1	Removal of existing roofing	64	m2	50.00	3,218
2	Disposal of existing roofing	64	m2	5.00	322
3	Allowance for new aluminium standing rib roof cladding, including roof underlay.	64	m2	110.00	7,079
4	Extra over for roof flashings	33	m	150.00	4,971
5	Edge Protection	33	m	25.00	829
	Scaffolding and Containment				
6	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	9,000.00	9,000
7	Provide full shrink wrap coverage to roof only	1	Item	3,000.00	3,000
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required				

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	AV Tech				*(Continued)*
8	Allowance to remove existing metal spouting and downpipes	1	Item	2,000.00	2,000
9	New PVC spouting	27	m	70.00	1,856
10	Downpipes to the above	6	m	150.00	960
11	Rounding				67
	Construction Sub-Total				**33,300**
	Element Sub-Total				
12	Preliminaries & General	15.0	%		5,000
13	Margins	8.0	%		3,100
14	Estimating Contingency	15.0	%		6,300
	Estimate Total				**47,700**
					47,700
	Block E				
	ROOF				
	Standing Rib				
	Full roof replacement required				
1	Removal of existing roofing	502	m2	50.00	25,100
2	Disposal of existing roofing	502	m2	5.00	2,510
3	Allowance for new aluminium standing rib roof cladding, including roof underlay.	502	m2	110.00	55,220
4	Extra over for roof flashings	162	m	150.00	24,300
5	Edge Protection	162	m	25.00	4,050
	Scaffolding and Containment				
6	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	52,000.00	52,000
7	Provide full shrink wrap coverage to roof only	1	Item	18,000.00	18,000
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required				
8	Allowance to remove existing metal spouting and downpipes	1	Item	7,000.00	7,000
9	New PVC spouting	130	m	70.00	9,072
10	Downpipes to the above	49	m	150.00	7,290
11	Rounding				58
	Construction Sub-Total				**204,600**
	Element Sub-Total				
12	Preliminaries & General	15.0	%		30,700

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block E				*(Continued)*
13	Margins	8.0	%		18,900
14	Estimating Contingency	15.0	%		38,200
	Estimate Total				**292,400**
					292,400
	Block M				
	ROOF				
	Standing Rib				
	Full roof replacement required, including simplified design removing pop up skylights. To flat pitch roof over the block				
1	Removal of existing roofing	640	m2	50.00	32,000
2	Disposal of existing roofing	640	m2	5.00	3,200
3	Allowance for new aluminium standing rib roof cladding, including roof underlay.	640	m2	110.00	70,400
4	Extra over for re-design (10% of new roof price)	1	item	7,040.00	7,040
5	Extra over for roof flashings	138	m	150.00	20,700
6	Edge Protection	138	m	25.00	3,450
	Trapezoidal Roofing				
7	Clean Roof	135	m2	5.00	675
8	Replacement of poorly fitting flashing (50% of roof flashings)	20	m	150.00	3,000
	Butyl Roof				
	Full replacement required				
9	Uplift existing waterproofing membrane system	66	m2	50.00	3,306
10	Disposal of existing membrane	66	m2	5.00	331
11	New Waterproofing Membrane	66	m2	220.00	14,546
12	Extra over for roof flashings and roof to wall junctions	47	m	150.00	7,040
	Scaffolding and Containment				
13	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	61,000.00	61,000
14	Provide full shrink wrap coverage to roof only	1	Item	25,000.00	25,000
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required				
15	Allowance to remove existing metal spouting and downpipes	1	Item	7,000.00	7,000
16	New PVC spouting	126	m	70.00	8,820
17	Downpipes to the above	55	m	150.00	8,269
18	Rounding				24

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Block M				*(Continued)*
	Construction Sub-Total				**275,800**
	Element Sub-Total				
19	Preliminaries & General	15.0	%		41,400
20	Margins	8.0	%		25,400
21	Estimating Contingency	15.0	%		51,400
	Estimate Total				**394,000**
					394,000
	Groundsman's Sheds				
	ROOF				
	Newer Standing Rib				
1	Replace missing screw fixings	1	item	3,000.00	3,000
2	Clean Roof	66	m2	5.00	330
3	Replacement of sealant joints recommended	1	item	750.00	750
	Old standing Rib				
4	Full replacement required				
5	Removal of existing roofing	120	m2	50.00	6,000
6	Disposal of existing roofing	120	m2	5.00	600
7	Allowance for new aluminium standing rib roof cladding, including roof underlay.	120	m2	110.00	13,200
8	Extra over for roof flashings	59	m	150.00	8,850
9	Edge Protection	59	m	25.00	1,475
	Scaffolding and Containment				
10	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	17,000.00	17,000
11	Provide full shrink wrap coverage to roof only	1	Item	5,000.00	5,000
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required				
12	Allowance to remove existing metal spouting and downpipes	1	Item	2,000.00	2,000
13	New PVC spouting	35	m	70.00	2,450
14	Downpipes to the above	12	m	150.00	1,800
15	Rounding				45
	Construction Sub-Total				**62,500**
	Element Sub-Total				
16	Preliminaries & General	15.0	%		9,400

Project: Hutt Valley High School Roofing **Details:** ROC Estimate
Building: ROC Estimate

Item	Description	Quantity	Unit	Rate	Total
	Groundsman's Sheds				*(Continued)*
17	Margins	8.0	%		5,800
18	Estimating Contingency	15.0	%		11,700
	Estimate Total				**89,400**
					89,400
	Lower Gym				
	ROOF				
	Corrugated Metal Roofing				
	Full replacement required				
	Remove existing corrugated roofing				
1	Removal of existing roofing	754	m2	50.00	37,700
2	Disposal of existing roofing	754	m2	10.00	7,540
	New Roofing				
3	Allowance for new metal profile roof cladding, including roof underlay.	754	m2	100.00	75,400
4	Extra over for roof flashings	201	m	150.00	30,150
5	Edge Protection	172	m	25.00	4,300
	Scaffolding and Containment				
6	Scaffolding to all building elevations and roof (Erect & Dismantle)	1	Item	73,000.00	73,000
7	Provide full shrink wrap coverage to roof only	1	Item	27,000.00	27,000
	RAINWATER SYSTEM				
	Metal Spouting				
	Full replacement required				
8	Allowance to remove existing metal spouting and downpipes	1	Item	6,000.00	6,000
9	New PVC spouting	138	m	70.00	9,632
10	Downpipes to the above	30	m	150.00	4,500
11	Rounding				78
	Construction Sub-Total				**275,300**
	Element Sub-Total				
12	Preliminaries & General	15.0	%		41,300
13	Margins	8.0	%		25,400
14	Estimating Contingency	15.0	%		51,300
	Estimate Total				**393,300**
					393,300
	Estimate Total				**5,707,400**