

26 October 2023

Mr. Nick Merriman
Senior Development Manager/Project Manager
Bulum Group
PO Box 5153
BRADDON ACT 2612

Dear Nick

17-21 UNIVERSITY AVENUE PROJECT
ESTIMATE FOR DA STAGE

Further to your instructions we present the following cost estimate for the development approval application.

DA Form Reference	Cost Centre	Data
Item D	GFA	20,599m ²
Item E	Cost of Works	\$50,506,000
Item I	Landscape, external works	\$400,000
Item J	Public works	\$129,000
Item K	Total Cost	\$51,035,000

The bills of quantities are attached.

Yours sincerely
for and on behalf of De Waal Advisory



Adré de Waal, Principal
MRICS MAIQS CQS MAIPM AffillEAust

Regulated by RICS

Quantity Surveying,
Project Management & Advisory for Real
Estate and Infrastructure
De Waal Management Pty Ltd
ABN 17 612 736 071



Code	Description	Quantity	Unit	Rate	Total
	<u>BILLS OF QUANTITIES</u>				
	<u>17-21 UNIVERSITY AVENUE, CANBERRA</u>				
	<u>PREAMBLES</u>				
	The purpose of this document is to establish the cost of construction at DA stage		note		
	GFA	20,599	m2		
	<u>MASTER COST PLAN</u>				
	<u>Building Works Estimate</u>				
1	Demolition and Site Works	20,599	m2	42	869,000
2	Basement Construction	6,583	m2	1,030	6,780,000
3	Tower Construction	20,599	m2	1,807	37,214,000
4	Landscaping	20,599	m2	19	400,000
5	Preliminary and General Allowances (10%)	20,599	m2	220	4,527,000
6	Margin (2.5%)	20,599	m2	60	1,245,000
	ESTIMATED CONSTRUCTION COST	20,599	m2	2,478	51,035,000
	<u>CLARIFICATIONS</u>				
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	This estimate has been prepared in accordance with generally accepted consulting practices and no other warranty, expressed or implied, is made as to the professional advice included in this proposal. Where we form opinions, draw conclusions, or make recommendations those are based on the information contained in this report or on information provided by others and the assumption is that all relevant information has been supplied by them; and we have used that information without further independent verification. De Waal Advisory disclaims any liability from any of those opinions, conclusions or recommendations being found incorrect after the fact		note		

Code	Description	Quantity	Unit	Rate	Total
1	Demolition and Site Works				
	<u>EXTERNAL WORKS</u>				
	<u>Demolition and Site Preparation</u>				
1.1	Clear site, remove trees, paving and the like, adjust existing kerbs and footpaths, carry out a condition assessment and record the results	1,317	m2	5.00	6,585
1.2	Demolition of existing buildings	3,294	m2	200.00	658,800
	<u>Roads, Footpaths and Paved Areas</u>				
1.3	Verge cross overs - allowed reinforced concrete	100	m2	175.00	17,500
	<u>External Storm and Sewer Drainage</u>				
1.4	EXTERNAL STORMWATER DRAINAGE - To dispose of rain and surface water from the site and comprises pipe runs from the external face of buildings; inspection pits; sumps; road gullies; runs from water features agricultural and sub-soil drains; connections to existing runs and pit	1,317	m2	14.00	18,438
1.5	EXTERNAL SEWER DRAINAGE - To dispose of soil and waste water form site and comprises pipe runs from the external face of buildings; grease gullies; inspection pits and manholes; pumps and connections to existing runs, pits and mains.	1,317	m2	9.00	11,853
	<u>Water, Fire and Gas Installations</u>				
1.6	EXTERNAL WATER SUPPLY - comprising pipework to supply water up to face of building and includes pumps; reticulation pipework including pipeline components; insulation; sheathing; painting and identification; meters and meter enclosures	1,317	m2	8.00	10,536
1.7	Firebooster arrangement and cabinet	1	no	15,000.00	15,000
1.8	Gas connection	1	no	5,000.00	5,000
	<u>External Electrical Works</u>				
	The point of entry and main board are allowed with the base building estimate				
1.9	Substation and pad	1	no	103,500.00	103,500
1.10	Connections and reticulation on site	1	no	15,000.00	15,000
1.11	Allowance for external lighting in landscaped areas, power to water features, etc	1,317	m2	5.00	6,585
Demolition and Site Works					868,797

Code	Description	Quantity	Unit	Rate	Total
2	Basement Construction				
	<u>BASEMENT CONSTRUCTION</u>				
	<u>PREAMBLES</u>				
	Basement access controls allowed with the apartments		note		
	Services connections allowed elsewhere		note		
	<u>EARTHWORKS AND STABILISATION</u>				
	<u>Bulk Earthworks</u>				
2.1	Bulk excavation including allowances for risk of collapse and carting away spoil to Mugga Tip	17,773	m3	36.71	652,366
2.2	Extra over cost for dumping spoil at Mugga Tip	19,550	t	7.00	136,852
	<u>Sheet Piling</u>				
2.3	Sheet piling to excavated faces	1,845	m2	315.00	581,175
	<u>STRUCTURE AND SERVICES</u>				
2.4	BASEMENT STRUCTURE - comprising reinforced concrete slab, ramps, external walls similar to Dincel, columns, lift shaft walls, stair cases, lift pits, etc complete with detail excavation	6,254	m2	651.12	4,072,088
2.5	UNDERGROUND DRAINAGE - Water detention tank, underslab drainage comprising agricultural drains around the perimeter in underneath the basement floor, sumps and pits, and pumpout stations	1	item	110,000.00	110,000
2.6	BASEMENT SPRINKLER SYSTEM - comprising the complete installation including water supply and pumping equipment, piping, valves and fittings, sprinkler heads, release devices, storage tanks, paintwork and signage and builders work	6,254	m2	52.00	325,208
2.7	BASEMENT VENTILATION SYSTEM - comprising mechanical switchboards, ducts, fans, exhaust risers to the roof and louvre grilles to exhaust smoke and CO	6,254	m2	68.00	425,272
2.8	BASEMENT ELECTRICAL INSTALLATION - comprising all light and power and emergency light and power from and including main distribution board to and including power outlets and light fittings, sub-mains and distribution boards, emergency lighting systems, power sub-mains to mechanical equipment and sub-mains and/or sub-circuits to other equipment and/or final sub-circuits	6,254	m2	28.35	177,301
	<u>FITOUT COMPONENT</u>				
2.9	Balustrades at ramps, signage, line marking, directional signage	3	level	45,000.00	135,000
2.10	Lift lobby dress-up, bollards, signage, etc	6	no	9,500.00	57,000
2.11	Roller grille at entry	1	no	35,000.00	35,000
2.12	Storage units	161	no	450.00	72,450
	Basement Construction				6,779,713

Code	Description	Quantity	Unit	Rate	Total
3	Tower Construction				
	<u>TRIANGLE TOWER</u>				
	<u>STRUCTURE, FABRIC & FINISHES</u>				
3.1	SUBSTRUCTURE - comprising beams and strip footings outside of basement footprint, foundation walls, hardcore filling, dampproof membranes, ducts, pits, bases, entrance steps, ramps and their finishes	20,599	m2	14.77	304,329
3.2	COLUMNS - internal and external columns from tops of columns to bases, column casings and all protective non-decorative coatings	20,599	m2	42.57	876,899
3.3	UPPER FLOORS - includes all reinforced concrete beams and floors, structural screeds and toppings, concealed insulation, balconies, steps and ramps in the one floor level and all protective non-decorative coatings	19,776	m2	298.40	5,901,158
3.4	STAIRCASES - comprising landings, ramps between floor levels, fire escapes, supporting framework to stairs, finishes, balustrades and handrails	20,599	m2	18.25	375,932
3.5	ROOFS - comprising metal roof, gable and other walls in roof spaces, parapet walls and roof balustrades; thermal insulation, reinforced concrete roof complete with waterproofing and gravel topping, eaves, verges and fascias, rainwater goods; internal storm water drainage runs and all protective non-decorative coatings, rooftop walkways	1,647	m2	185.00	304,695
3.6	EXTERNAL WALLS, WINDOWS & DOORS - comprising structural walls, spandrels, curtain and window walls, external entry units, glazed screen walls, non-load-bearing columns and isolated piers, balcony walls and balustrades, plant room air flow screens, insulation, external finishes to all columns, slab edges, beams, projecting overhangs and walls, lintels and flashings at openings, windows, flyscreens, sun protection to windows, window hardware, roller shutters,	10,772	m2	375.00	4,039,500
3.7	INTERNAL WALLS - comprising walls, internal non-loadbearing columns and isolated piers, lintels, damp courses, fire walls and smoke screens	20,599	m2	182.44	3,758,082
3.8	INTERNAL DOORS - comprising frames, linings, glazing, architraves, pelmets, hardware and door grilles, toilet doors, fire doors, roller shutters, service cupboard doors, duct access panels, fanlights and panels over and linings to blank openings, finishes and decoration	20,599	m2	87.00	1,792,113
3.9	INTERNAL SCREENS - comprising glazed screens, internal shop fronts, overhead frameworks and supporting beams, chain wire and grille screens, toilet partitions and screen walls; borrowed lights, balustrades and rails not associated with staircases, shower screens, all finishes and decorations	20,599	m2	9.00	185,391
3.10	WALL FINISHES - comprising finishes to internal faces of external walls and column, acoustic wall linings, extra costs involved for face bricks, face and coloured blocks and off form concrete, splashbacks, dados and regulation wall vents, fire-rating of tenancy walls	20,599	m2	105.00	2,162,895
3.11	FLOOR FINISHES - comprising all preparatory work and finishing, skirtings, screeds, timber floor finishes, dividing strips; mats and matwells, duct and pit cover, tiling, carpeting, vinyl and other finishes to concrete floors	20,599	m2	65.00	1,338,935
3.12	Balcony floor finishes, including wet seal and screen	2,063	m2	175.00	361,025
3.13	CEILING FINISHES - comprising preparatory work, suspended ceilings, acoustic ceiling linings, extra costs involved for off form concrete, linings to roof lights, ceiling manholes, framing to bulkheads and cornices	20,599	m2	105.24	2,167,839
3.14	Balcony ceiling finishes	2,063	m2	135.00	278,505

Code	Description	Quantity	Unit	Rate	Total
3	Tower Construction				<i>(Continued)</i>
3.15	FITMENTS - comprising benches, cupboards, shelving, racks, seats, notice boards, signs and name plates, coat rails and hooks, mirrors and like, but excluding the joinery fittings in the lounges, dining areas, nurses stations and chapels	20,599	m2	9.00	185,391
3.16	Kitchen joinery	155	no	12,500.00	1,937,500
3.17	Vanity units	262	no	1,100.00	288,200
3.18	PC items comprising sanitary fixtures, tapware	155	no	4,500.00	697,500
3.19	Kitchen appliance package	155	no	1,850.00	286,750
	<u>BUILDING SERVICES</u>				
	<u>Hydraulic Installation</u>				
3.20	SANITARY PLUMBING AND DRAINAGE - to bathrooms, kitchen and laundry facilities comprising stacks and vents, traps, floor wastes, internal sewer drainage runs, pumps, grease traps, box ducting and paintwork	20,599	m2	98.00	2,018,702
3.21	WATER SUPPLY - to bathrooms, kitchen and laundry facilities from point of entry to points of consumption comprising storage tanks, pumps, water heaters and coolers, reticulation pipework including pipeline components; terminal outlets not integral with fixtures and/or equipment, box ducting, insulation; sheathing, painting and identification	20,599	m2	75.00	1,544,925
3.22	GAS SERVICE - to supply central water heating plant, mechanical plant and kitchen areas comprising manifolds and regulators, pipework, box ducting, painting and identification	1	item	25,000.00	25,000
	<u>Mechanical Installation</u>				
	The circulation spaces on each level are naturally ventilated only		note		
3.23	Stair pressurisation and smoke exhaust	2	no	12,000.00	24,000
3.24	Exhaust system to wet areas and laundries, exhausting onto balcony	417	no	825.00	344,025
3.25	AC unit per apartment, to all living areas, condensor located on balcony	155	no	5,500.00	852,500
	<u>Fire Protection Installation</u>				
3.26	FIRE PROTECTION - comprising fire indicator board, manual and automatic fire alarm installations, fire fighting equipment, hydrant installations and hose reels and cupboards, hand appliances	20,599	m2	16.00	329,584
3.27	Sprinkler system	20,599	m2	52.00	1,071,148
	<u>Electrical and Communication Installation</u>				
	External reticulation, external power and the substation are elsewhere measured		note		
3.28	LIGHTS AND POWER - To provide all light and power and emergency light and power from and including main distribution board to and including power outlets and light fittings comprising main distribution board, sub-mains and distribution boards, emergency lighting systems, power sub-mains to mechanical equipment and sub-mains and/or sub-circuits to other equipment and/or final sub-circuits	20,599	m2	120.49	2,481,991
3.29	COMMUNICATIONS - including external telephone, data, FTA and Paid TV backbone	20,599	m2	15.04	309,842
3.30	ACCESS CONTROL - comprising access control and security monitoring, switches on doors, head equipment and software	20,599	m2	15.00	308,985
	<u>Vertical transportation</u>				

Code		Description	Quantity	Unit	Rate	Total
3		Tower Construction				(Continued)
3.31	Passenger lift, stretcher capable		4	no	165,000.00	660,000
		Tower Construction				37,213,340

Code	Description	Quantity	Unit	Rate	Total
4	Landscaping				
	<u>LANDSCAPING</u>				
4.1	Raised planter bed walls, cap and handrail, drainage cell and finishes	321	m2	565.00	181,365
4.2	Wetseal and drainage cells in raised planter beds	321	m2	90.00	28,890
4.3	Topsoil in raised planter beds including plants, mulch, staking, irrigation	193	m2	227.50	43,908
4.4	Lawns	450	m2	57.50	25,875
4.5	Pots and accent planting, mature trees, etc	1	no	75,000.00	75,000
4.6	Building signage	1	no	25,000.00	25,000
4.7	Front yards, mail boxes and fencing	2	no	9,500.00	19,000
	Landscaping				399,038

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