

BASELINE COSTS
Bates White Overnight Direct Costs: Material, Labour & Equipment

Reference: BatesWhites Report D2-2-11 Attachment #3

Vendor Invoices, Purchase Orders, RSMeans, to cover EPC Contractor's cost and overhead

		Sub-totals	%	Total Overnight Costs 2019 \$	Description	Page
B	Architectural/Structural (Civil)	94,193,149	25%			P67-113
B_02	Existing conditions			26,305	Demolish/remove pavement	
B_03	Concrete			42,307,988	Slabs, walls, bulkhead curbs and beams, footing, foundation wall, column	
B_04	Masonry			1,624,093	Concrete block, foundation wall, joints, anchors	
B_05	Metals			16,155,086	Steel beams, framing, roof, mezzanine, stairs, hoist, pipe rack, column	
B_06	Thermal Protection			2,238,531		
B_07	Doors windows			98,564	membrane waterproofing, roofing, firestopping	
B_08	Finishings			251,780	Doors, frames, hardware	
B_31	Earthwork			487,889	Excavation, piles	
B_32	Site improvements			791,504	Stone, fence, curbs & gutters	
B_33	Site utilities			30,211,409	Drains, cut & cap, yard drainage	
C	Process Systems Tie-in					P114-123
C_01	PHT and Moderator D2O Systems	4,408,380	1%	2,763,971	Pipe, fittings, valves	
C_02	TRF Feed Product System			684,652	Pipe, fittings, valves	
C_03	D2O Clean-up Systems			728,309	Pipe, fittings, valves	
C_04	Active Drain Systems			198,985		
C_05	Inactive Drain System			32,463		
D	Process Systems					P124-213
D_01	PHT and Moderator D2O Systems	175,552,625	47%	101,519,520	Pipe, fittings, valves	
D_02	TRF Feed Product System			25,746,901	Pipe, fittings, valves	
D_03	Downgraded D2O System			15,762,855	Pipe, fittings, valves	
D_04	D2O Clean-up Systems			12,227,032	Pipe, fittings, valves	
D_05	Active Drain System			9,213,327	Pipe, fittings, valves	
D_06	Inactive Drain System			290,694	Pipe, fittings, valves	
D_07	Drum Handling and Cleaning Systems			10,792,296	Pipe, fittings, valves	
E	Process Support Systems	22,231,702	6%			P214-230
E_01	Chilled Water Supply			1,148,352	Pipe, fittings, valves	
E_02	Vapour Recovery System			18,261,798	Pipe, fittings, valves	
E_03	Instrument & Services Air Systems			2,821,552	Pipe, fittings, valves	
F	Building Support System Tie-Ins	165,908	0%			P231-237
F_01	Plumbing and Drainage			63,395	Pipe, fittings, valves, insulation	
F_02	Heating System and Condensate System			60,793	Pipe, fittings, valves, insulation	
F_03	Fire Protection System			41,720	Pipe, fittings, valves, insulation	
G	Building Support Systems	10,729,713	3%			P238-261
G_01	Plumbing Fixtures			432,804	Pipe, fittings, valves, insulation	
G_02	Heating Steam and Condensate System			743,127	Pipe, fittings, valves, insulation	
G_03	Ventilation System			8,427,635	HVAC	
G_04	D2O Leak Detection System			15,096	2 leak detection systems	
G_05	Fixed Gaseous Effluent Radioactivity Monitoring				See Section H Electrical	
G_06	Fixed Area Alarming Gama and Tritium Monitors				See Section H Electrical	
G_07	Fire Protection System			777,336	Pipe, fittings, valves	
G_08	Miscellaneous				No quantities in BOQ	
G_09	Building Controls			333,715	Fans, duct heaters, pneumatic control	
H	Electrical	69,875,282	19%			P262-294
H_01	Services & Distribution			21,664,336	switchgear, generator, transformer, cable, wire	
H_02	Lighting, Devices, etc.			8,753,294	Fixtures, cable	
H_03	Systems & Ancillaries			1,925,519	Detection system, wire, cable, outlet boxes	
H_04	Instrumentation and Controls			37,532,133	Control cable, circuit breakers, pipe, wire, valves	
	TOTAL	377,156,759	100%	377,156,759		