

CASE STUDY

Helena, Montana YWCA Estimates for Capital Improvements 2009

Description of Work	Costs	Workers Employed
Weatherization and Energy Conservation:		
Boiler room pipe insulation	\$2,300	2 plumbers; 1 supplier
Replace ill fitting, modern exterior doors	\$13,100	2 carpenters; 2 suppliers
Retrofit wooden and aluminum storm windows	\$47,500	1 architect; 4 carpenters; 2 suppliers
Insulate heating and water pipes	\$4,400	2 plumbers; 1 supplier
Heat recovery from boiler room, heat exchanger	\$3,500	1 engineer; 1 electrician; 1 supplier
Additional attic insulation	\$1,700	2 carpenters; 1 supplier
High efficiency hot water heater	\$12,600	1 engineer; 2 plumbers; 1 carpenter; 1 supplier
Lighting retrofit	\$17,850	1 architect; 2 electricians; 1 painter
Replace valves on steam radiators	\$12,700	2 plumbers, supplier
Roof:		
Repair/replace rooftop ventilation & patch roof	\$3,000	1 carpenter; 1 roofer
Replace roof with new metal or composite roofing	\$65,000	1 architects; 1 engineer; 2 carpenters; 6 roofers; 1 supplier
Fire Escapes and Exterior Decking:		
Investigate condition and stability	\$1,200	1 architect; 1 engineer
Repair and repaint structural members	\$3,000	2 carpenters; 2 painters; 1 supplier
Install safety fence for fire escapes	\$1,000	1 engineer; 2 carpenters; 2 suppliers
Upgrade railings on balconies to code	\$50,000	1 architect; 1 engineer; 4 carpenters; 2
painters; 1 supplier		
Kitchen Upgrading:		
Install new community kitchen, commercial grade electricians;	\$85,000	1 architect; 2 carpenters; 2 painters; 2 2 plumbers; suppliers

Upgrade existing kitchen for catering functions electricians;	\$17,500	1 architect; 2 carpenters; 2 painters; 2 plumbers; suppliers
Rain Cutters and Site Drainage:		
Install drip edge where needed, replace gutters and down spouts; install heat cables	\$19,000	2 carps; 2 paints; 2 electricians; suppliers
Direct water away from site, under sidewalks	\$10,000	1 engineer; 3 masons; 2 suppliers
Masonry Repair:		
Re-point and stabilize brick veneer	\$65,000	6 masons; 2 suppliers
Stabilize, repair and water proof brick veranda	\$45,000	1 engineer; 3 masons; 1 supplier
ADA Compliance:		
Construct accessible entrances to lower and main levels suppliers	\$27,000	2 carpenters; 2 painters; 2 electricians; 2
Install elevator to upper residential rooms	\$195,000	1 engineer; 1 architect; 2 masons 2 carpenters; 2 painters; 2 electricians; suppliers
Modify bathrooms for ADA accessibility	\$45,000	1 architect; 3 masons; 2 paints; 2 electricians; 2 suppliers
Plumbing:		
Remodel bathrooms, upgrade with water-saving fixtures	\$79,850	1 architect; 3 masons; 2 paints; 2 electricians; 2 suppliers
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Subtotal of above work items	\$827,200	
Provision for contingencies at 10%	\$82,720	
Architecture and engineering fees	\$90,992	
Estimate of total project costs:	\$1,000,912	
Minimum employed over 12-18 months:	147 workers	