



COMMERCIAL PROPOSAL

us test office — Fire Protection Estimate

Scope: Whole Building

Preliminary NFPA-based budgetary estimate — scope: Whole Building. 100 line items, 99 matched to rate card. Estimated total \$1,084,256.11 (incl. sales tax).

Item	Qty	Unit	Unit Rate (\$)	Amount (\$)
SPRINKLER SYSTEM				
Automatic Sprinkler Head (Pendent/Upright, 155°F) - QR	509	EA	18	9,162
Sprinkler Escutcheon / Cover Plate	509	EA	4	2,036
Branch Line Pipe 1" (CPVC/Sch10 steel)	4,072	LF	9	36,648
Cross Main Pipe 2" (Sch10 steel)	600	LF	14	8,400
Feed Main / Riser Pipe 4" (Sch40 steel)	72	LF	32	2,304
Riser Assembly w/ Alarm Check Valve	2	EA	2,800	5,600
Control Valve (OS&Y) w/ Tamper Switch	2	EA	850	1,700
Waterflow Switch	2	EA	320	640
Pressure Gauge	4	EA	45	180
Inspector's Test & Drain Valve Assembly	2	EA	450	900
Auxiliary Drain (per floor)	6	EA	180	1,080
STANDPIPE SYSTEM				
Standpipe Riser 6" (Sch40 steel)	196	LF	85	16,660
2.5" Class I Hose Valve w/ Pressure-Reducing (per floor)	14	EA	650	9,100
Hose Valve Cabinet	14	EA	380	5,320
Check Valve 6"	2	EA	1,200	2,400
Control/Isolation Valve 6" w/ Tamper	2	EA	1,400	2,800
Air/Vacuum Relief Valve	2	EA	280	560
Pressure Gauge (per riser)	4	EA	45	180
Riser Connection to Pump Header	2	Set	1,500	3,000
FIRE DEPT CONNECTION				
Fire Department Connection (Siamese, 4"x2.5"x2.5", Storz)	2	EA	1,800	3,600
FDC Check Valve & Connection to System	1	Set	900	900
FDC Identification Signage	1	EA	60	60
FIRE HYDRANTS				
Underground Fire Main 6" (C900 PVC/DI)	200	LF	95	19,000



Item	Qty	Unit	Unit Rate (\$)	Amount (\$)
Dry-Barrel Fire Hydrant (AWWA)	2	EA	4,500	9,000
Post Indicator Valve (PIV)	1	EA	2,800	2,800
Gate Valve 6" w/ Valve Box	3	EA	1,400	4,200
FIRE PUMP				
Electric Fire Pump 1000 GPM @ 153 psi (UL/FM)	1	EA	65,000	65,000
Diesel Fire Pump 1000 GPM @ 153 psi (UL/FM)	1	EA	95,000	95,000
Jockey (Pressure Maintenance) Pump	1	EA	4,200	4,200
Suction Header w/ Valves & Fittings	1	Set	6,500	6,500
Discharge Header w/ Valves & Fittings	1	Set	6,500	6,500
Fire Pump Controller (Listed)	2	EA	9,500	19,000
Diesel Fuel Tank w/ Level Gauge	1	EA	7,500	7,500
Flow Meter & Test Header	1	Set	5,500	5,500
Pressure Relief Valve & Sensing Lines	1	Set	3,800	3,800
HOSE STATIONS				
1.5" Hose Station w/ Rack & Nozzle	6	EA	650	3,900
1.5" Pipe & Valve to Hose Station	90	LF	12	1,080
Isolation Valve 1.5"	6	EA	180	1,080
FIRE EXTINGUISHER				
ABC Dry Chemical Extinguisher 10 lb	30	EA	85	2,550
CO2 Extinguisher 10 lb (electrical)	13	EA	220	2,860
Extinguisher Cabinet / Bracket	42	EA	180	7,560
DETECTION & ALARM				
Fire Alarm Control Panel (FACP, addressable)	1	EA	6,500	6,500
Remote Annunciator (at main entrance)	1	EA	1,400	1,400
Manual Pull Station (dual-action)	14	EA	75	1,050
Photoelectric Smoke Detector (addressable)	17	EA	65	1,105
Heat Detector (135°F fixed/ROR)	3	EA	55	165
Horn/Strobe Notification Appliance (ADA)	20	EA	85	1,700
FPLR Fire Alarm Cable	2,700	LF	2.5	6,750
Batteries / Power Supply / NAC Booster	1	Set	1,200	1,200
Duct Smoke Detector (HVAC shutdown)	3	EA	320	960
WATER SUPPLY				



Item	Qty	Unit	Unit Rate (\$)	Amount (\$)
Fire Water Storage Tank 60,000 gal	60,000	gal	2.5	150,000
Tank Interior Coating / Lining	1	EA	8,500	8,500
Level Indicator w/ Low-Level Alarm	1	EA	1,200	1,200
Tank Access Ladder w/ Safety Cage	1	EA	1,800	1,800
Overflow & Drain Arrangement	1	Set	1,500	1,500
Suction Pipe to Pump Room	1	Set	3,500	3,500
Automatic Fill Valve (make-up water)	1	EA	850	850
CIVIL WORKS				
Trench Excavation for Underground Main (36" cover)	200	LF	28	5,600
Backfill & Compaction	200	LF	12	2,400
Concrete Thrust Blocks at Bends/Tees	4	EA	450	1,800
Fire Pump Housekeeping Pad / Foundation	3	EA	1,500	4,500
Pump Room Floor Drain & Sump	1	EA	2,500	2,500
Pump Room Ventilation Louvers	1	EA	1,200	1,200
PIPE SUPPORTS				
Pipe Hanger (listed) for Sprinkler Piping	475	EA	18	8,550
Seismic Sway Brace (lateral/longitudinal)	119	EA	95	11,305
Riser Clamp / Support for Standpipe	24	EA	45	1,080
Misc. Fittings (elbows, tees, reducers)	1	LS	3,500	3,500
PAINTING & ID				
Pipe Identification Labels & Flow Arrows	1	LS	2,500	2,500
Fire Safety Signage (photoluminescent)	21	EA	45	945
Valve Identification Tags	8	EA	18	144
TESTING & COMMISSIONING				
Hydrostatic Test (200 psi / 2 hr, all piping)	1	LS	4,500	4,500
Sprinkler Flow Test & Final Inspection	1	EA	2,500	2,500
Fire Pump Acceptance Test (churn/rated/150%)	3	EA	3,500	10,500
Fire Alarm Acceptance Test & Programming	1	LS	3,500	3,500
Final Acceptance, O&M Manuals, As-Builts, Handover	1	LS	5,000	5,000
SMOKE CONTROL				
Stair Pressurization Fan w/ Motor	2	EA	12,000	24,000
Galvanized Ductwork for Pressurization	44	LF	65	2,860



Item	Qty	Unit	Unit Rate (\$)	Amount (\$)
Motorized Smoke/Fire Damper	4	EA	850	3,400
Differential Pressure Sensor (per floor)	6	EA	450	2,700
Smoke Control Panel (Firefighter Smoke Control Station)	1	EA	18,000	18,000
Fresh Air Intake Louver w/ Filter	2	EA	1,800	3,600
Smoke Exhaust Fan w/ Motor	2	EA	9,500	19,000
Makeup Air Fan w/ Motor	2	EA	7,500	15,000
Smoke Exhaust Ductwork (galvanized)	100	LF	75	7,500
Fire-Rated Motorized Smoke Damper	4	EA	950	3,800
EMERGENCY LIGHTING				
LED Exit Sign (90-min battery)	28	EA	85	2,380
Emergency Egress Light (LED, 90-min)	42	EA	120	5,040
Central Inverter / Battery Unit	1	EA	8,500	8,500
Fire-Rated (2-hr) Circuit Wiring	210	LF	6	1,260
VOICE EVACUATION				
Voice Evacuation Amplifier / Controller	1	EA	6,500	6,500
Ceiling Speaker / Speaker-Strobe	42	EA	95	3,990
Firefighter Telephone / Communication	7	EA	320	2,240
Fire-Rated Speaker Circuit Cable	420	LF	3	1,260
FIRE SERVICE ELEVATOR				
Firefighter Emergency Operation (Phase I/II recall)	1	EA	8,500	8,500
Elevator Lobby Smoke Detector (recall)	6	EA	85	510
Shunt Trip / Elevator Power Monitoring	1	Set	2,500	2,500
Elevator Machine Room Heat Detector	1	EA	65	65
FIRE ELECTRICAL				
Fire Pump Disconnect / Monitoring	1	EA	2,500	2,500
Fire-Rated Power Feed to Pump/FACP	151	LF	18	2,718
CONTINGENCY				
Contingency & Unforeseen Site Conditions (5% of base)	1	LS	39,500	39,500

Basic Material Cost	\$827,787
Agency Overheads	\$82,778.7
Agency Profit	\$91,056.57
Sales Tax	\$82,633.84
GRAND TOTAL	\$1,084,256.11

Preliminary budgetary estimate for bidding/planning. Quantities and sizing are based on published NFPA baseline criteria and must be verified by a licensed PE / NICET-certified designer with a project-specific hydraulic calculation before construction or permit submission.