

01 32 Construction Progress Documentation

01 32 33 – Photographic Documentation

01 32 33.50 Photographs

		Crew	Daily Output	Labor-Hours	Unit	Material	2022 Bare Costs Labor	Equipment	Total	Total Incl O&P
0550	10 shots, digital images, 1 print				Set	600			600	660
0600	For each additional print from fly-over					315			315	345
0700	For full color prints, add					40%				
0750	Add for traffic control area				Ea.	365			365	400
0900	For over 30 miles from airport, add per				Mile	7.30			7.30	8.05
1500	Time lapse equipment, camera and projector, buy				Ea.	2,625			2,625	2,900
1550	Rent per month				"	1,350			1,350	1,475
1700	Cameraman and processing, black & white				Day	1,300			1,300	1,450
1720	Color				"	1,550			1,550	1,700

01 41 Regulatory Requirements

01 41 26 – Permit Requirements

01 41 26.50 Permits

0010 PERMITS

0020	Rule of thumb, most cities, minimum				Job				.50%	.50%
0100	Maximum				"				2%	2%

01 45 Quality Control

01 45 23 – Testing and Inspecting Services

01 45 23.50 Testing

0010 TESTING and Inspecting Services

0012	Testing, for concrete or steel building, minimum				Week				4,585	5,045
0025	Maximum				"				6,005	6,605
0200	Asphalt testing, compressive strength Marshall stability, set of 3				Ea.				545	600
0250	Extraction, individual tests on sample								236	260
0300	Penetration								91	100
0350	Mix design, 5 specimens								182	200
0360	Additional specimen								36	40
0400	Specific gravity								53	58
0420	Swell test								64	70
0450	Water effect and cohesion, set of 6								182	200
0470	Water effect and plastic flow								64	70
0600	Concrete testing, aggregates, abrasion, ASTM C 131								205	225
0650	Absorption, ASTM C 127								77	85
0800	Petrographic analysis, ASTM C 295								910	1,000
0900	Specific gravity, ASTM C 127								77	85
1000	Sieve analysis, washed, ASTM C 136								130	140
1050	Unwashed								130	140
1200	Sulfate soundness								182	200
1300	Weight per cubic foot								80	88
1500	Cement, physical tests, ASTM C 150								320	350
1600	Chemical tests, ASTM C 150								245	270
1800	Compressive test, cylinder, delivered to lab, ASTM C 39								36	40
1900	Picked up by lab, 30 minute round trip, add to above	1 Skwk	16	500			29.50		29.50	44
1950	1 hour round trip, add to above		8	1			59		59	88.50
2000	2 hour round trip, add to above		4	2			118		118	177
2200	Compressive strength, cores (not incl. drilling), ASTM C 42								95	105
2250	Core drilling, 4" diameter (plus technician), up to 6" thick	B-89A	14	1.143		.89	59.50	8.50	68.89	100
2260	Technician for core drilling				Hr.				50	55