S-Curve of Works Progress: Planned Percentage compared with Achieved Percentage

Construction of Mass Transit System Project in Bangkok (Red Line) (I)

Contract 1: Civil Works for Bang Sue Grand Station and Depots

BILL NO	DESCRIPTION	CONTRACT AMOUNT		Cumulative		2013										2014												2015												2016												2017	
						Mar13	Apr13	May13	Jun13	Jul13	Aug13	Sep13	Oct13	Nov13	Dec13	Jan14	Feb14	Mar14	Apr14	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14	Jan15	Feb15	Mar15	Feb15	May15	Jun15	Jul15	Aug15	Sep15	Oct15	Nov15	Dec15	Jan16	Feb16	Mar16	Feb16	May16	Jun16	Jul16	Aug16	Sep16	Oct16	Nov16	Dec16	Jan17	Feb17	%
		(Baht)	(%)	Progress (%)		31	59	90	120	151	182	212	243	273	304	335	363	394	422	453	483	514	545	575	606	636	667	698	726	757	785	816	846	877	908	938	969	999	1030	1061	1089	1120	1148	1179	1209	1240	1271	1301	1332	1362	1393	1424	1440	
1	GENERAL WORKS	266,482,434	0.90%	Planed	27.29%	1.94%	2.08%	2.15%	2.08%	2.15%	2.15%	2.08%	2.15%	2.08%	2.15%	2.15%	1.94%	2.15%	2.08%	2.15%	2.08%	2.15%	2.15%	2.08%	2.15%	2.08%	2.15%	2.15%	1.94%	2.15%	2.08%	2.15%	2.08%	2.15%	2.15%	2.08%	2.15%	2.08%	2.15%	2.15%	2.01%	2.15%	2.08%	2.15%	2.08%	2.15%	2.08%	2.15%	2.08%	2.15%	2.15%	0.69%	
				Actual	43.95%	8.05%	11.84%	5.62%	3.92%	1.68%	1.50%	1.74%	1.65%	2.36%	1.36%	1.38%	1.38%	1.53%																																						
2	ELEVATED STRUCTURE	11,422,571,521	38.54%	Planed	9.58%	0.00%	0.03%	0.05%	0.08%	0.42%	0.51%	1.70%	1.13%	1.06%	1.13%	1.22%	1.07%	1.18%	1.07%	0.95%	0.98%	1.24%	2.45%	2.44%	2.57%	1.49%	1.71%	3.22%	3.05%	2.84%	3.28%	3.70%	3.11%	3.11%	3.11%	3.70%	3.69%	3.77%	3.62%	3.36%	2.99%	2.88%	2.82%	3.19%	3.06%	3.21%	3.25%	3.02%	2.73%	2.75%	1.89%	1.09%	0.13%	
				Actual	1.52%	0.00%	0.00%	0.13%	0.12%	0.13%	0.14%	0.15%	0.07%	0.24%	0.10%	0.07%	0.16%	0.20%																																						
	2.1 Elevated railway	11,244,557,895	37.94%	Planed	9.26%	0.00%	0.02%	0.05%	0.08%	0.42%	0.51%	1.72%	1.15%	1.01%	1.03%	1.15%	1.07%	1.10%	0.94%	0.85%	0.89%	1.18%	2.44%	2.43%	2.56%	1.45%	1.68%	3.22%	3.04%	2.83%	3.28%	3.70%	3.10%	3.12%	3.14%	3.74%	3.74%	3.82%	3.67%	3.41%	3.04%	2.97%	2.86%	3.24%	3.10%	3.26%	3.30%	3.07%	2.77%	2.79%	1.91%	1.10%	0.13%	
				Actual	1.23%	0.00%	0.00%	0.13%	0.12%	0.13%	0.15%	0.15%	0.07%	0.12%	0.10%	0.06%	0.11%	0.04%																																						
	2.2 At-grade and transition railway	178,013,626	0.60%	Planed	29.85%	0.18%	0.19%	0.20%	0.19%	0.20%	0.20%	0.19%	0.20%	4.29%	7.47%	5.46%	4.69%	6.37%	6.32%	6.77%	6.60%	5.42%	3.46%	2.77%	3.20%	3.48%	3.45%	3.47%	3.32%	3.68%	3.22%	3.57%	3.56%	2.64%	1.76%	0.60%	0.76%	0.19%	0.20%	0.20%	0.19%	0.20%	0.19%	0.20%	0.19%	0.20%	0.19%	0.20%	0.19%	0.20%	0.20%	0.06%	
				Actual	19.94%	0.00%	0.00%	0.00%	0.00%	0.09%	0.00%	0.10%	0.00%	4.97%	0.39%	0.33%	3.29%	10.78%																																						
3	STATION	14,247,067,853	48.07%	Planed	12.94%	0.01%	0.00%	0.04%	0.49%	0.58%	1.06%	1.70%	1.78%	1.70%	1.40%	1.39%	1.08%	1.71%	1.68%	1.95%	1.84%	1.70%	1.47%	1.33%	0.72%	0.57%	0.47%	0.46%	0.56%	1.58%	1.67%	2.45%	2.66%	3.06%	2.89%	3.02%	3.20%	3.09%	2.80%	3.27%	3.04%	2.38%	2.36%	2.21%	2.66%	4.60%	5.51%	5.25%	5.78%	5.18%	3.94%	1.77%	0.04%	
				Actual	12.00%	0.00%	0.01%	0.01%	0.12%	0.72%	0.03%	0.65%	1.08%	1.52%	1.82%	1.31%	2.48%	2.14%																																						
	3.1 Bang Sue Station	13,388,098,271	45.17%	Planed	13.32%	0.01%	0.00%	0.04%	0.52%	0.62%	1.13%	1.80%	1.89%	1.74%	1.41%	1.39%	1.06%	1.77%	1.69%	1.97%	1.86%	1.70%	1.45%	1.23%	0.74%	0.57%	0.43%	0.42%	0.53%	1.60%	1.60%	2.35%	2.58%	3.02%	2.91%	3.03%	3.17%	3.06%	2.88%	3.34%	3.08%	2.40%	2.39%	2.20%	2.38%	4.74%	5.74%	5.10%	5.64%	5.21%	4.00%	1.65%	0.02%	
				Actual	12.77%	0.00%	0.01%	0.01%	0.13%	0.78%	0.04%	0.69%	1.14%	1.62%	1.99%	1.40%	2.64%	2.22%																																						
	3.2 Chatuchak station	858,969,582	2.90%	Planed	6.95%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.04%	1.13%	1.29%	1.29%	1.49%	1.69%	1.59%	1.67%	1.63%	1.69%	1.85%	1.13%	0.40%	0.61%	1.00%	1.13%	1.06%	1.17%	2.86%	4.04%	3.78%	3.71%	2.62%	2.83%	3.73%	3.41%	1.49%	2.21%	2.50%	2.01%	1.83%	2.32%	7.08%	2.55%	1.98%	7.49%	7.99%	4.66%	2.97%	3.50%	0.38%	
				Actual	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%																																						
4	DEPOTS	1,604,023,818	5.41%	Planed	33.84%	0.00%	0.00%	0.00%	1.07%	1.25%	1.81%	2.35%	2.64%	3.80%	3.77%	4.92%	5.70%	6.53%	5.74%	6.23%	5.19%	3.96%	3.57%	4.22%	4.00%	3.28%	4.79%	4.81%	2.37%	2.33%	1.64%	2.45%	1.94%	1.64%	1.49%	1.48%	1.39%	0.77%	0.43%	0.49%	0.32%	0.35%	0.22%	0.24%	0.23%	0.41%	0.27%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
				Actual	0.98%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%	0.02%	0.03%	0.06%	0.05%	0.09%	0.12%	0.58%																																						
	4.1 LD-train depot	821,073,432	2.77%	Planed	61.07%	0.00%	0.00%	0.00%	2.08%	2.45%	3.53%	4.11%	4.75%	7.40%	7.34%	8.69%	9.96%	10.77%	9.59%	9.59%	7.05%	4.82%	1.96%	1.60%	0.62%	0.65%	1.79%	1.74%	0.47%	0.03%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
				Actual	0.77%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.04%	0.08%	0.06%	0.00%	0.00%	0.02%	0.54%																																						
	4.2 CT-train depot	782,950,386	2.64%	Planed	5.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.50%	0.43%	0.03%	0.03%	0.97%	1.24%	2.08%	1.69%	2.71%	3.24%	3.05%	5.25%	6.96%	7.54%	6.04%	8.47%	8.55%	4.37%	4.73%	3.35%	5.01%	3.98%	3.37%	3.05%	3.03%	2.84%	1.58%	0.87%	1.01%	0.65%	0.72%	0.44%	0.49%	0.46%	0.83%	0.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
				Actual	1.21%	0.00%	0.00%	0.00%	0.07%	0.00%	0.00%	0.00%	0.01%	0.05%	0.09%	0.18%	0.23%	0.62%																																						
5	LOCAL ROAD AND ROAD FLYOVER	1,410,141,074	4.76%	Planed	35.45%	0.02%	0.03%	0.03%	0.03%	0.05%	0.08%	0.70%	3.18%	3.46%	4.44%	8.99%	7.21%	7.74%	7.92%	7.49%	4.25%	4.55%	4.87%	4.71%	5.01%	7.64%	4.04%	3.23%	4.09%	2.30%	1.82%	1.45%	2.01%	1.68%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.01%	
				Actual	4.01%	0.00%	0.00%	0.02%	0.00%	0.01%	0.01%	0.00%	0.55%	0.41%	0.42%	0.43%	0.81%	1.24%																																						
	5.1 Local road	1,196,569,730	4.04%	Planed	41.72%	0.03%	0.03%	0.03%	0.04%	0.06%	0.09%	0.74%	3.74%	4.07%	5.23%	10.59%	8.49%	9.12%	9.33%	8.82%	5.01%	4.99%	4.97%	4.46%	4.26%	0.80%	2.11%	3.14%	2.57%	0.68%	0.98%	1.30%	2.36%	1.97%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.01%	
				Actual	4.07%	0.00%	0.03%	0.02%	0.03%	0.01%	0.01%	0.03%	0.63%	0.48%	0.55%	0.31%	0.83%	0.92%																																						
	5.2 Road flyover	213,571,344	0.72%	Planed	0.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.74%	2.83%	2.74%	2.83%	2.83%	2.74%	2.83%	2.74%	2.83%	2.56%	2.83%	2.74%	2.83%	2.74%	2.83%	2.83%	2.65%	0.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
				Actual	3.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%																																							
6	PROVISIONAL SUMS AND PROVISIONAL ITEMS	672,130,000	2.27%	Planed	24.84%	0.00%	0.00%	0.00%	0.00%	2.56%	2.74%	2.83%	2.74%	2.83%																																							
				Actual	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%																																						
7	DAYWORK SCHEDULE	17,823,300	0.06%	Planed	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%										0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	
				Actual	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%																																						
	SUM	29,640,240,000	100.00%																																																		

Plan 14.24 %

Actual 6.99 %

Delay -7.25 %

Plan	% Progress of Works					0.02%	0.03%	0.06%	0.34%	0.59%	0.89%	1.69%	1.67%	1.68%	1.61%	1.91%	1.67%		2.08%	1.82%	1.81%	2.16%	2.06%	1.87%	1.23%	1.42%	2.05%	1.85%	2.17%	2.33%	2.89%	2.75%	2.92%	2.76%	2.85%	3.12%	3.06%	2.85%	2.98%	2.72%	2.36%	2.32%	2.39%	2.55%	3.50%	3.94%	3.71%	3.86%	3.38%	2.64%	1.29%	0.08%	
	% Accumulative Progress of works					0.02%	0.05%	0.11%	0.46%	1.05%	1.93%	3.62%	5.29%	6.97%	8.58%	10.49%	12.15%		18.29%	20.11%	21.92%	24.08%	26.14%	28.02%	29.25%	30.67%	32.72%	34.58%	36.75%	39.08%	41.97%	44.73%	47.65%	50.41%	53.25%	56.37%	59.44%	62.29%	65.27%	67.99%	70.34%	72.66%	75.05%	77.61%	81.11%	85.04%	88.75%	92.61%	95.99%	98.63%	99.92%	100.00%	
	Total Amount (MB)					7	9	18	102	174	263	500	494	498	476	567	494	617	584	616	541	536	640	612	555	365	421	609	549	644	691	858	816	866	817	844	925	908	845	883	806	699	687	709	756	1,038	1,167	1,099	1,143	1,001	784	382	24	
	Accumulative Total Amount (MB)					7	16	34	136	310	573	1,074	1,568	2,066	2,542	3,108	3,602	4,220	4,804	5,420	5,961	6,497	7,137	7,749	8,304	8,670	9,090	9,699	10,248	10,892	11,583	12,441	13,257	14,124	14,940	15,785	16,709	17,618	18,463	19,345	20,151	20,850	21,537	22,246	23,003	24,040	25,207	26,307	27,450	28,451	29,234	29,617	29,640	
Actual	% Progress of Works					0.07%	0.11%	0.11%	0.17%	0.41%	0.09%	0.39%	0.59%	0.87%	0.98%	0.69%	1.31%	1.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	% Accumulative Progress of works					0.07%	0.18%	0.29%	0.46%	0.87%	0.96%	1.35%	1.94%	2.80%	3.78%	4.47%	5.78%	6.99%																																							
	Total Amount (MB)					21	33	32	49	122	27	115	175	257	289	205	388	359																																							
	Accumulative Total Amount (MB)					21	55	86	136	257	284	399	573	830	1,120	1,325	1,713	2,072																																							
	Cumulative Progress Difference in % against Planing					0.05%	0.13%	0.18%	0.00%	-0.18%	-0.97%	-2.27%	-3.35%	-4.17%	-4.80%	-6.02%	-6.37%	-7.25%																																							
	Cumulative Progress Difference in (MB) % against Planing					15	39	53	0	-53	-289	-675	-994	-1,235	-1,422	-1,783	-1,886	-2,148																																							