MAIN WORKSHEET-BUILD ALTERNATIVE

(Rev.19, June, 2017)

Kansas City SC

Kansas City Streetcar

Today's Date	**3/29/19**
Yr of Base Year $	2018
Yr of Revenue Ops	2024

	Quantity	Base Year Dollars w/o Contingency (X000)	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)	Base Year Dollars Unit Cost (X000)	Base Year Dollars Percentage of Construction Cost	Base Year Dollars Percentage of Total Project Cost	YOE Dollars Total (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)	**3.50**	27,509	5,502	**33,011**	**$9,432**	**21%**	**12%**	**38,290**
10.01 Guideway: At-grade exclusive right-of-way	0.10			0	$0			0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)				0				0
10.03 Guideway: At-grade in mixed traffic	3.40			0	$0			0
10.04 Guideway: Aerial structure				0				0
10.05 Guideway: Built-up fill				0				0
10.06 Guideway: Underground cut & cover				0				0
10.07 Guideway: Underground tunnel				0				0
10.08 Guideway: Retained cut or fill				0				0
10.09 Track: Direct fixation				0				0
10.10 Track: Embedded		25,427	5,085	30,513				35,392
10.11 Track: Ballasted				0				0
10.12 Track: Special (switches, turnouts)		2,082	416	2,498				2,897
10.13 Track: Vibration and noise dampening				0				0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	**16**	7,177	1,435	**8,613**	**$538**	**6%**	**3%**	**10,025**
20.01 At-grade station, stop, shelter, mall, terminal, platform	16	7,177	1,435	8,613	$538			10,025
20.02 Aerial station, stop, shelter, mall, terminal, platform				0				0
20.03 Underground station, stop, shelter, mall, terminal, platform				0				0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.				0				0
20.05 Joint development				0				0
20.06 Automobile parking multi-story structure				0				0
20.07 Elevators, escalators				0				0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	3.50	11,868	2,967	**14,835**	**$4,239**	**10%**	**5%**	**17,205**
30.01 Administration Building: Office, sales, storage, revenue counting				0				0
30.02 Light Maintenance Facility		9,807	2,452	12,259				14,216
30.03 Heavy Maintenance Facility				0				0
30.04 Storage or Maintenance of Way Building				0				0
30.05 Yard and Yard Track		2,061	515	2,577				2,988
40 SITEWORK & SPECIAL CONDITIONS	3.50	29,932	7,947	**37,879**	**$10,823**	**25%**	**14%**	**43,806**
40.01 Demolition, Clearing, Earthwork		2,745	969	3,714				4,296
40.02 Site Utilities, Utility Relocation		5,692	2,846	8,538				9,874
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments				0				0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks				0				0
40.05 Site structures including retaining walls, sound walls				0				0
40.06 Pedestrian / bike access and accommodation, landscaping		2,106	558	2,664				3,081
40.07 Automobile, bus, van accessways including roads, parking lots		3,315	836	4,151				4,800
40.08 Temporary Facilities and other indirect costs during construction		16,074	2,738	18,812				21,756
50 SYSTEMS	3.50	50,672	8,747	**59,419**	**$16,977**	**39%**	**21%**	**69,775**
50.01 Train control and signals		516	88	604				709
50.02 Traffic signals and crossing protection		4,424	885	5,309				6,234
50.03 Traction power supply: substations		16,472	2,800	19,273				22,632
50.04 Traction power distribution: catenary and third rail		17,758	3,019	20,777				24,398
50.05 Communications		10,325	1,755	12,080				14,185
50.06 Fare collection system and equipment		1,059	180	1,239				1,455
50.07 Central Control		118	20	138				162
Construction Subtotal (10 - 50)	3.50	127,158	26,598	**153,756**	**$43,930**	**100%**	**55%**	**179,100**
60 ROW, LAND, EXISTING IMPROVEMENTS	3.50	520	364	**884**	**$253**		**0%**	**964**
60.01 Purchase or lease of real estate		520	364	884				964
60.02 Relocation of existing households and businesses				0				0
70 VEHICLES (number)	**6**	41,300	16,520	**57,820**	**$9,637**		**21%**	**68,178**
70.01 Light Rail	6	37,850	15,140	52,990	$8,832			62,483
70.02 Heavy Rail				0				0
70.03 Commuter Rail				0				0
70.04 Bus				0				0
70.05 Other				0				0
70.06 Non-revenue vehicles				0				0
70.07 Spare parts	6	3,450	1,380	4,830	$805			5,695
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	3.50	43,468	3,626	**47,094**	**$13,456**	**31%**	**17%**	**53,766**
80.01 Project Development		4,346	0	4,346				4,962
80.02 Engineering		12,080	922	13,002				14,844
80.03 Project Management for Design and Construction		9,694	969	10,663				12,174
80.04 Construction Administration & Management		13,216	1,322	14,537				16,597
80.05 Professional Liability and other Non-Construction Insurance				0				0
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.		1,272	127	1,399				1,597
80.07 Surveys, Testing, Investigation, Inspection		954	95	1,049				1,198
80.08 Start up		1,907	191	2,098				2,395
Subtotal (10 - 80)	3.50	212,446	47,109	**259,555**	**$74,158**		**93%**	**302,007**
90 UNALLOCATED CONTINGENCY				**20,238**			**7%**	**23,618**
Subtotal (10 - 90)	3.50			**279,793**	**$79,941**		**100%**	**325,625**
100 FINANCE CHARGES				**0**			**0%**	**0**
Total Project Cost (10 - 100)	3.50			**279,793**	**$79,941**		**100%**	**325,625**
Allocated Contingency as % of Base Yr Dollars w/o Contingency				22.17%				
Unallocated Contingency as % of Base Yr Dollars w/o Contingency				9.53%				
Total Contingency as % of Base Yr Dollars w/o Contingency				31.70%				
Unallocated Contingency as % of Subtotal (10 - 80)				7.80%				
YOE Construction Cost per Mile (X000)								$51,171
YOE Total Project Cost per Mile Not Including Vehicles (X000)								$73,556
YOE Total Project Cost per Mile (X000)								$93,036