# The Quebec Bridge in Tabloid

#### LENGTHS

Length of suspended span ..... 640 ft. Length of cantilever arm from centre of main

pier to end of cantilever ..... 580 ft. Centre to centre of main piers ..... 1,800 ft. Centre to centre of anchor piers..... 2,830 ft. Centre of main pier to centre of anchor pier... 515 ft. First north approach span ..... 110 ft. 7 9/16 in. Second north approach span ..... 157 ft. 101/2 in. South approach span ..... 140 ft. 4 3/16 in. Abutment to abutment, face to face ... 3,238 ft. 10 1/4 in. Sub-chord (compression member) ..... 84 ft. Sub-chord (balancing member for symmetry). 84 ft. From anchor pier to main pier, panels of anchor arm

measure 23 ft., 42 ft., 28 ft., 31 ft.,  $32\frac{1}{2}$  ft.,  $34\frac{1}{2}$  ft., 30 ft. and 7 of 42 ft. each.

- From main pier to end of cantilever, panels of cantilever arm are 8 of 42 ft. each, 40 ft., 32 ft., 31 ft., 28 ft., 251/2 ft., 221/2 ft., 42 ft., 23 ft.
- From cantilever arm to centre of suspended span there are 4 panels of 321/2 ft. each, 2 of 35 ft. each, 3 of 40 ft. each.

686 ft. Length 150 ft. clear of high water level.....

#### WIDTHS

Centre to centre of trusses	88 IT.
Two-track system, 15 ft. each.	c. c.
Space between track systems	17 ft. 6 in.
Centre to centre of track	32 ft. 6 in.
Cantilevered sidewalk, from centre of track	
· 1 · · · · · · · · · · · · · · · · · ·	ft. 03/1 in.

girders to centre

HEIGHTS	
North anchor pier, from el. 77 to el. 239. North anchor pier concrete to el. 85. North anchor pier granite facing above el. 85. South anchor pier from els. 81 and 99 (variable	e) to
South anchor pier concrete to el. 110.	
South anchor pier granite facing above el. 110.	
South main pier el. 128 to el. 0.94.	
South main pier concrete to el. 75.	
North main piers el. 128 to el. 20.	
North main pier concrete to el. 77.	
North main pier granite facing above el. 77.	
North main pier solid granite for top ten courses.	
Depth of suspended span from centre of top	to ft.
Chord to centre of bottom chord	70 ft.
Depth of suspended span at mp	70 ft.
Main posts contre of bottom pins to centre of	a la compañía
top pins	to ft.
Depth of anchor arms at anchor piers	70 ft.
Bridge floor is at a level 40 ft. below main panel p	oints.
Suspended span clear of high water	50 ft.
Extreme high water level	101:3
Extreme low water level	79.7
Ordinary high water level	94.7
Ordinary low water level	82.0
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### QUANTITIES AND WEIGHTS

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imber in south main pier	3,045	cu.	yus.	
Concrete in south main pier	24,050	1994		
lasonry in south main pier	10,385			
Lisher is north main pier	5.450			
imber in north main pict	16 180			
Concrete in north main pier	10,400			
lasonry in north main pier	9,940	222	1997.9	
concrete in south anchor pier	2,135			
Jasonry in south anchor pier	14,279			
lasonry in south anchor pier	1.123	6.6		
oncrete in north anchor pict	17.054		1.0	
lasonry in north anchor pier	17,954	11		
Steel in main anchorage each anchor pier.	732,000	IDS	·	
Steel in wind anchorage each anchor pier.	58,000	lbs	. the set of	
Four main shoes weigh about 450 tons	each.			
out main shoes weigh about 450 cours	T 200 f	ons	each.	
our main posts, 10' square, weign about	1,200	·····	nost	
Pins at shoe connection to bottom chor	d and i	nam	post	
are 45" diam. Weight, 12 tons each,	includi	ng s	leeve.	
Weight of each anchor arm inclusive of	main			
weight of each anchor and measure	לד	.000	tons	
posts		,000		
Weight of each cantilever arm exclusion	ve or			

main posts .....12,000 tons Weight of suspended span, erected complete. 6,000 tons Weight of approach spans ..... 1,500 tons structure, exclusive of rails and reinforcing steel in sidewalk, 133,310,570 lbs., or 66,655 tons.

## MISCELLANEOUS INFORMATION

Bridge	floor	is	on	I	per	cent.	grade	almost	to	the	sus-
Der	ided a	ana	n.								

The suspended span and the adjacent end panels of the cantilever arms are level.

Rivets up to 11/4 in. diameter were used, whereas the biggest previously used were 1 1/16 in. Later, 11/2in. rivets were used for Hell Gate Bridge.

Batter of main piers, 1 in. in 1 ft.

Batter of anchor piers, 1/2 in. in I ft.

North anchor pier at bottom.. 137 ft. 10 in. x 31 ft. 4 in.

North anchor pier at top..... 130 ft. 6 in. x 24 ft.

South anchor pier at bottom.. 137 ft. x 30 ft. 6 in. South anchor pier at top..... 137 ft. 6 in. x 24 ft. Main piers at top ..... 160 ft. 8 in. x 32 ft. 4 in.

Concrete foundation for main

piers . ..... 168 ft. 3 in. x 60 ft. Caisson for north main pier. 181 ft. x 55 ft. 6 in. 

Cost estimated at approximately \$17,000,000.

Estimated total cost of first Quebec Bridge and new bridge, including interest on all moneys expended, estimated at about \$35,000,000. This figure has been variously estimated by different authorities. W. F. Tye places it as high as \$40,000,000.

Contractors for superstructure, the St. Lawrence Bridge Co., Limited.

Contractors for substructure, M. P. & J. T. Davis, Quebec.

Contract for superstructure let 1911.

Work on substructure started December, 1911.