National Register of Historic Places Inventory—Nomination Form

For NPS use only

received

date entered

	ns in How to Complete s—complete applicable	National Register Forms e sections		
1. Nam	1e			
historic Harv	vard Stadium			
and or common				
2. Loca	ation			
street & number	60 N. Harvar	d Street	-	not for publication
city, town	Boston	vicinity of		
state Mass	sachusetts co	de county	Suffolk	code
3. Clas	sification			
Category district building(s) _X structure site object	Ownership public private both Public Acquisition in process being considered	Status X occupied unoccupied work in progress Accessible yes: restricted yes: unrestricted no	Present Use agriculture commercial educational entertainment government industrial military	museum park private residence religious scientific transportation X other: Football
4. Own	ner of Prope	erty		Stadium
name Dr.	Derek Bok, Preside	nt		
street & number	Harvard Univ	ersity		
city, town	Cambridge	vicinity of	state	Massachusetts 0213
	ation of Leg	al Description	n	
		folk County Registry		
	Pemberton Square		<u> </u>	
	Boston			Maggaghygotta
6. Rep		in Existing S		Massachusetts
Bosto	on Landmarks ission Survey			igible?yes _X no
date 1978			federalsta	te county _X local
depository for s	urvey records Boston 1	Landmarks Commission,	City Hall	***************************************
city, town	Boston		state	Massachusetts

7. Description

Condition ____ excellent ____ good

____ fair

Check one unaltered

Check one

____ deteriorated unalterd ____ ruins _X altered ____ unexposed

X original site moved date

Describe the present and original (if known) physical appearance

$Summary^l$

The Harvard Stadium, erected in 1903, is a U-shaped structure of concrete and steel construction, resembling Classical Greek and Roman models that had a curved end and straight sides. Its total exterior length is 573'; its overall width, 420'. The structure's long axis runs northeast—southwest with the U opening at the northeast end. The playing area includes a standard football gridiron, and a 1/4-mile running track, which extends out the open end. The interior measurements are 481' by 230'. The Stadium was designed to seat about 24,000 spectators.

Detailed Description

The inner wall is 9' high above the field, while the outer wall, 53' in height, consists of two tiers of Roman arches and piers, separated by a molded belt course and surmounted above the second level by a parapet with a massive cornice that features simple square openings over alternate arches below. The parapet and its concrete roof, supported by a row of pillars on the interior, was added in 1910, as were the two square pavilions at the ends of the U. All exterior wall surfaces were "rough-picked" to remove the wooden form prints and stains from the concrete.

The arches in the lower tier serve as the entrances to the stadium. They admit people into an inside corridor running the interior perimeter of the structure. The corridor not only permits free internal circulation but can be used as a running track in bad weather. On the inner edge of the corridor, concrete walks lead to 36 stairways that open into the lower seat aisles. Eight larger stairways rise to a second-level corridor from which passages and short flights of stairs lead to the upper levels of seats.

The innovative structural system using Ransome's cold twisted steel bars combines concrete encased steel beams and trusses, with 4500 "L"-shaped slab seats and a poured, curved exterior wall 1390' long and 72' high to the parapet.²

Alterations

In terms of its general silhouette and major features, Harvard Stadium is well-preserved. However, in common with almost all active stadiums, it has had a press box grafted onto it. In Harvard's case, the box is a long horizontal steel and glass structure with an extended roof area; erected atop the north-western side of the Stadium in 1981, it replaced an earlier facility.

In 1929-52, Harvard Stadium's open end was closed by a steel grandstand that increased seating capacity. It is now left open, as originally designed, although temporary stands can be erected as the occasion arises, as occurred before 1929. A chain-link fence, just behind the metal scoreboard beyond the end of the running track, now secures the playing area.

B. Significance

Per	iod	Areas of Significance—Ch	neci	c and justify below			
	prehistoric	archeology-prehistoric		community planning	landscape architecture	,	religion
	1400-1499	archeology-historic		conservation	law		science
	1500-1599	agriculture		economics	literature		sculpture
	1600-1699	architecture		education	military		social
	1700-1799	art	X	engineering	music		humanitarian
	1800-1899	commerce		exploration settlement	philosophy		theater
X	1900-	communications		industry	politics government		transportation
				invention		X_{-}	other (specify)
							Pagrantion

1903 Specific dates

Builder Architect Charles F. McKim, architect (football Lewis J. Johnson, Ira N. stadium)

Hollis, and Joseph R. Worcester,

engineers

Statement of Significance (in one paragraph)

Summary

Harvard Stadium is highly significant in the history of stadium design, for the technology of its construction, and for its associations with Harvard football coaches and teams, who played a major role in the early development of intercollegiate football in the United States.

The Stadium's design, derived from Classical models in architecture and influenced by the revival of the Olympic Games (1896), may even have influenced the rules of football, for some suggest that the 1905 commission reforming the sport chose to legalize the forward pass rather than widen the playing field for lateral action, because Harvard Stadium, the newly completed "jewel" of the sport, was too narrow to accommodate wider plays. 1

Harvard Stadium, the first college stadium in the United States, is also the earliest still extant. Its design and its multipurpose use became a prototype for the design of college stadiums that were built by other universities in the United States in the 20th century. The structure is also of significance as a pioneering example of the use of reinforced concrete in the construction of large structures. At the time of its completion it was the largest structure of that material in the world.2

History

Harvard's participation in rudimentary forms of college football played a significant role in the evolution of the sport long before Harvard Stadium was erected. Early forms of the game had been banned at the university in 1860. The faculty lifted its ban in 1871 and the game began to reappear on the campus. played a carrying game, much like Rugby, called the "Boston game," which differed from that played by other colleges, whose teams emphasized kicking.³

Lacking games with U.S. colleges because of the rules differences, Harvard scheduled games with McGill University of Montreal, in the spring of 1874. The games with McGill committed Harvard to the running Rugby game, and influenced the pattern of the U.S. game that was to evolve.

Harvard adopted the Rugby rules and Harvard and Yale met for the first time in 1875, in New Haven, in a game that was largely Rugby. The desire for a contest between the two universities had led to a conference between them.

9. Major Bibliographical References

SEE CONTINUATION SHEET

10. Geo	graphical	Data				
Acreage of nominated property		Quadrangle scale 1:24,000				
Zone Easting	9 ₁₆₁₀ 4 ₁₆ 9 ₁₂ Northing		B 1 19 Zon	e Easting	No	6 9 12 2 18 10 rthing
c 1,9 3 2,4 E	[7,0,0] [4,6]9,2 	4 0 0	D [)	3 ₁ 2 ₁ 0 ₁ [4 ₁	6 9 2 5 7 0
Verbal boundary	description and jus	tification				
	SEE COI	MTINUATIO	N SHEET			
List all states an	nd counties for prop	erties over	apping state or	county bou	ndaries	
state		code	county			code
state		code	county			code
11. Forr	n Prepare	d By				
						·
name/title James	H. Charleton, H	istorian				
organizationHisto	ory Division, Nat	ional Par	k Service	date	January	198 6
street & number	1100 L Street, N	V		telephone	(202) 3	43 - 8165
city or town	Washington			state	DC 200	13-7127
12. Stat	e Historic	Pres	ervation	Office	er Cer	tification
The evaluated sign	ificance of this proper	ty within the	state is:			
	national	state	local			
665), I hereby nomi according to the cr	State Historic Preserva inate this property for i iteria and procedures : ervation Officer signat	inclusion in t set forth by t	he National Regis	ter and certify		
title					date	
For NPS use or						
	ify that this property is	included in t	he National Regis	ter		
					date	
Keeper of the N	National Register					
Attest:	ration				date	
Chief of Regist	iauon					

National Register of Historic Places Inventory—Nomination Form

Continuation sheet

Item number

7

Page

е

Condition

By the 1970s, chunks of masonry were missing from the structure in places and the steel reinforcing rods were consequently exposed. Recent patching, while correcting the problem, has, with work done over the years, given the structure a mottled appearance.

Footnotes

¹The statistics and general descriptive data are extracted from Henry H. Fox, "Methods of Construction of the Harvard Stadium," <u>Harvard Engineering Journal</u>, 3, 2 (June 1904), 91-108 <u>passim</u>; and Lewis J. Johnson, "Materials and Design of the Harvard Stadium," <u>Harvard Engineering Journal</u>, 3, 2 (June 1904), 109-130 passim.

²Margaret Floyd, "Colossus by the Charles: The Harvard Stadium."

National Register of Historic Places Inventory—Nomination Form



Continuation sheet

Item number

8

Page

2

conceded to the Rugby principles of running with the ball and tackling. Yale formally adopted the Rugby rules in 1876. That same year, Harvard, Yale, Columbia, and Princeton met and organized the Intercollegiate Football Association, adopting Rugby-influenced rules.

Harvard's records in its early years of play, especially 1886-91, reflect something of this pioneering dominance in the sport. In those 6 seasons, the "Crimson won 67 games and lost only 7.4 Their scoring record in the 1886 season, though played under rules subsequently modified (and with several "prep" school games included), is generally regarded as the all-time high for any team. The cumulative season pointage was 765 to opponents' 41. The scores included such lopsided ratios as 82-0 against Tufts, 62-0 with MIT, 70-0 against Dartmouth, and an unparalleled 158-0 against Exeter. Only Princeton and Yale defeated Harvard that year.

The erection of Harvard Stadium grew out of certain basic factors.⁵ The University came under increasing pressure and embarassment from the unsightly condition of its wooden football stands, on the present Stadium site in Soldier's Field. They were also regarded as a fire hazard, and were expensive to maintain. The site's strategic location, athwart a key spot in Frederick Law Olmsted's "emerald necklace" of Boston metropolitan parks, commended itself to respectful treatment as a "public duty." Harvard's solution to these problems was to recommend itself to other universities, which faced similar dilemmas.

Olmsted prepared a plan that became the basis for the siting of the stadium and other athletic structures nearby. With the determination made that the structure would be a permanent one, arrived at not without objections from those who opposed giving sports such a prominent role at the university, work began on materials and design that would be both attractive and able to withstand the rigors of New England winters. Lewis F. Johnson, of the University's civil engineering department, proposed a novel treatment, the use of great concrete slabs reinforced with steel. Cost was a factor, concrete being less expensive than brick or stone. Construction was quick, being essentially completed in a few months in 1903.

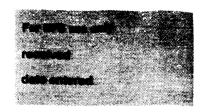
After engineering details and materials testing were completed, the matter had been turned over to Charles F. McKim, of McKim, Mead, and White, who had put the innovative engineering into Classical dress, combining elements of Greek stadia and Roman "circuses." The Classical symbolism of the Stadium "converged precisely with the Classically based curricular theory of the Harvard physical education constituency." This Classical emphasis was reiterated when in 1906 the ascendant Classics department performed Agamemnon by Aeschylus with live horses, chariots, and a temple erected in the colossal stadium.

NPS Form 10-900-a (3-82)

OMB No. 1024-0018 Exp. 10-31-84

United States Department of the InteriorNational Park Service

National Register of Historic Places Inventory—Nomination Form



Continuation sheet

item number

8

Page

3

In the new Stadium, from 1908 through 1916, Percy Duncan Haughton coached Harvard teams to outstanding victories. Even a Yale partisan has noted that he was "the man destined to humble Yale's pretensions to invincibility." Harvard was undefeated and untied in 1912 and 1913, undefeated in 1908, 1910, and 1914 and defeated only once each year in 1909 and 1915. Haughton won at Harvard where others had failed because he was one of the first major coaches to realize that speed and power were, in themselves, relatively valueless unless properly masked by deception.

Harvard played football only informally in 1917 and 1918, but returned to the field in 1919. The master coach had retired, but enough of his teaching and his impetus remained to carry Harvard through to the 1919 championship and a Rose Bowl victory over Oregon by 7-6 on New Year's Day, 1920.

An exciting series was staged in 1920-22 with the "Praying Colonels" of Centre College, of Danville, Kentucky. Harvard won the first and third and lost the second of the three matches.

Overall, Harvard's teams have secured the championship in Ivy League (Eastern Intercollegiate) conference play relatively infrequently, less often than the team's illustrious early history would suggest: 1901, 1908, 1912, 1913 (shared), 1946 (shared), 1961 (shared), 1966 (shared), 1968 (shared), 1974 (shared), 1975, 1982 (shared), and 1983 (shared). 10

Harvard's members of the College Football Hall of Fame include coaches Haughton and Richard C. Harlow (1935-42, 1945-47) and the following players:

David C. Campbell (1899-1901) Charles D. Daly (1898-1900) H. R. ("Tack") Hardwick (1912-14) Marshall Newell (1890-93) Benjamin H. Ticknor (1928-30)¹¹ Edward L. Casey (1916, 1919) Hamilton Fish (1907-09) Edward W. Mahan (1913-15) Stanley B. Pennock (1912-14)

Harvard's All-Americans include William Henry Lewis (1892-93), the first black to be so honored; Endicott ("Chub") Peabody (1941), who later served as Massachusetts' Governor; and Hamilton Fish (1907-09), longtime Congressman from New York (also noted above). 12

Although Harvard is far behind (38 wins, as opposed to 55 losses, with 8 ties) in its renowned rivalry with football nemesis Yale, in what the alumni of both universities term "The Game," the "Crimson" have known some proud times in the series, such as 4 straight victories under Haughton in 1912-15 and 18 instances where they have left Yale scoreless. 13

National Register of Historic Places Inventory—Nomination Form

For ISFS use only received

Continuation sheet

Item number

8

Page

4

Footnotes

- 1 Nancy Salzman, "Harvard Stadium, Boston Landmarks Commission Study Report," December 1979, p. 3.0.
- ² Margaret Floyd, "Colossus by the Charles: The Harvard Stadium."
- 3 These remarks on Harvard's early football history are extracted from the article "Football," Encyclopedia Britannica IX, 480-482.
- ⁴ These statistics are from Keith W. Jennison, ed., <u>The Concise Encyclopedia of Sports</u> (New York: Franklin Watts, Inc., 1970), p. 462.
- ⁵ The background of the Stadium's conception, design, and construction are discussed at length in three articles in the <u>Harvard Engineering Journal</u> (June 1904), namely I. N. Hollis, "Origin of the Harvard Stadium," pp. 91-108; Lewis J. Johnson, "Materials and Design of the Harvard Stadium," pp. 109-130; and Henry H. Fox, "Methods of Construction of the Harvard Stadium," pp. 131-144.
 - 6 Margaret Floyd, op. cit.
 - 7 Ibid.
- ⁸ John Allan Krout, "Annals of American Sport," The Pageant of America (New Haven: Yale University Press, 1929), p. 250.
- 9 "Football," Encyclopedia Britannica, op. cit., IX, 484.
- 10 Keith W. Jennison, ed. "Football," The Concise Encyclopedia of Sports (New York: Franklin Watts, Inc., 1970), p. 450; and World Almanac, 1985, p. 829.
- 11 Herbert Kamm, The Junior Illustrated Encyclopedia of Sports (Indianapolis: Bobbs-Merrill, 1970), pp. 301-309.
- 12 John D. McCallum and Charles H. Pearson, College Football U.S.A., 1869-1973 (New York: Hall of Fame Publishing Co., Inc., 1973), pp. 115, 231.
- 13 These are the more conservative, i. e., <u>Yale</u>, statistics. Some discrepancies in records kept by the two universities occur. The source is Yale University Sports Information Office, <u>THE GAME</u>, Football Program, November 19, 1983 (New Haven, 1983), pp. 8-9.

National Register of Historic Places Inventory—Nomination Form



Continuation sheet

Item number

9

Page

1

Bibliography

- The College Game. Indianapolis: Bobbs-Merrill, 1974.
- Floyd, Margaret Henderson. "Colossus by the Charles: The Harvard Stadium." (Precis of talk given by the author at the Society of Architectural Historians Annual Meeting, Pittsburgh, Pennsylvania, April 1985.)
- "Football," Encyclopedia Britannica. Chicago: 1960. IX, 470-491.
- Fox, Henry H. "Methods of Construction of the Harvard Stadium," <u>Harvard Engineering</u> Journal, 3, 2 (June 1904), 131-144.
- Frazier, George. "The Game Supreme," Esquire's Great Men and Moments in Sports. New York: Harper and Row, 1962. Pp. 153-159.
- Hollis, I. N. "Origin of the Harvard Stadium," <u>Harvard Engineering Journal</u>, 3, 2 (June 1904), 91-108.
- Jennison, Keith W., ed. <u>The Concise Encyclopedia of Sports</u>. New York: Franklin Watts, Inc., 1970.
- Johnson, Lewis J. "Materials and Design of the Harvard Stadium," <u>Harvard</u> Engineering Journal, 3, 2 (June 1904), 109-130.
- Kamm, Herbert. The Junior Illustrated Encyclopedia of Sports. Indianapolis: Bobbs-Merrill, 1970.
- Krout, John Allen. "Annals of American Sport," The Pageant of America. New Haven: Yale University Press, 1929.
- McCallum, John D., and Charles H. Pearson. <u>College Football U.S.A.</u>, 1869-1973. New York: Hall of Fame Publishing Co., Inc., 1973.
- Salzman, Nancy. "Harvard Stadium: Boston Landmarks Commission Study Report." December 1979. (Unpublished.)
- Serby, Myron W. The Stadium, A Treatise on the Design of Stadiums and their Equipment. New York: American Institute of Steel Construction, Inc., 1930.

National Register of Historic Places Inventory—Nomination Form



Continuation sheet

Item number

9, 10

Page

2

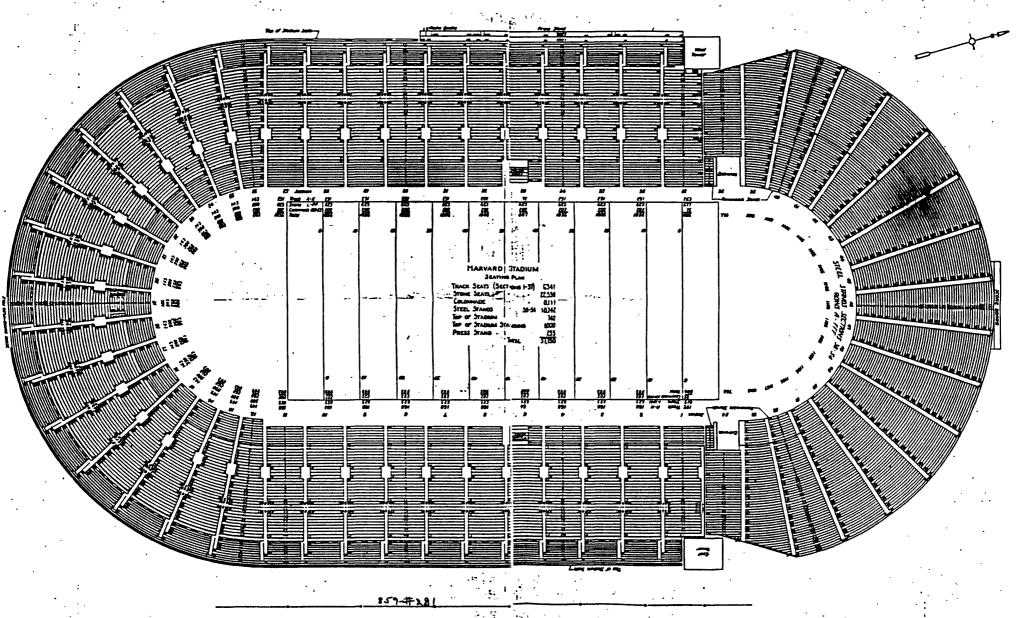
Taylor, W. W., and S. E. Thompson. <u>Concrete, Plain and Reinforced</u>. New York: Wiley, 1911.

Warren, H. Langford. "Ancient Stadia and Circuses," <u>Harvard Engineering Journal</u> 3, 2 (June 1904), 145-152.

Verbal Boundary

The Stadium structure only and its immediate lot, as bounded by N. Harvard Street on the southeast, a line projected northwest from N. Harvard Street along the axis formed by the southwesternmost point of the Stadium and Harvard Street, northeast along the Stadium wall, and southeast along the line of the chain-link fence enclosing the open end of the Stadium and its scoreboard.

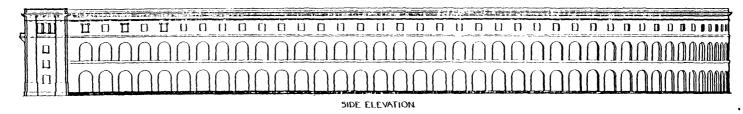
A horizontal schematic (1937) showing the steel grandstands in place, closing the Harvard Stadium's distinctive "U." (Harvard University Department of Planning).



Ale Manues Trace

1/19/37

Renderings of Harvard Stadium that appeared in the Harvard Engineering Journal, 3, 2, (June 1904), 92, shortly after completion of the structure. (Harvard University Department of Planning)





LONGITUDINAL SECTION

BIDE ELEVATION AND LONGITUDINAL SECTION OF THE STADIUM AS IT WILL APPEAR WHEN FINISHED.

Plate I.

