Form 10-300 (Dec. 1968)

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY - NOMINATION FORM

r 	,
Rhode Islan	đ
Bristol	
FOR NPS USE O	NLY
ENTRY NUMBER	DATE

		(Type all entrie	s – complete app	plicable sections)	ł	ENTATIO	ABER DA	<u>'-</u>
	1.	NAME						
	, .	Y. M. C. A. Anne	c		.•			
		Bristol Customs I	louse and Pos	st Office		,	· .	
	2.	LOCATION						28.50 S
		Between 420 and	ula Hope Str	eet	•			
		CITY OR TOWN: Bristol		,	٠.		,	
		STATE		CODE CO	UNTY:			
	٠	Rhode Island, 020	309	111	Bristo.	1	00	DE
	3.	CLASSIFICATION						
S		CATEGORY (Check One)		OWNERSHIP		STATUS	ACCESSIBL TO THE PUB	
z		District 🕅 Building 📋	Public 🗀	Public Acquisition:		Occupied 🛣	Yes:	-
0		Site Structure	Private 🛣	In Process		Unoccupied 🔲	Restricted	X
<u>⊢</u>		Object 🗍	Both .	Being Consider	ed 🛄	Preservation work in progress	Unrestricted No:	
S		PRESENT USE (Check One or I	fore as Appropriate)	_!				
\supset		Agricultural [] . Governm	nent 🗍 Pa	rk :	Tran:	sportation []	Comments	
œ		Commercial 🗌 Industri	al 🗌 Pri	vate Residence	Othe:	r (Specify) [X]		
⊢		Educational 🗌 Military	☐ Re	ligious		ice use by so		ice
S		Entertainment Museum	☐ Sci	ientific	orga	anisation is	planned	
z	4. (OWNER OF PROPERTY						
_		Young Men's Chris	stian Associa	ation of Bris	tol :	- ,		
ш		STREET AND NUMBER:	TOTALL NOOVEL	TOTOM OF BITS	· · · · · · · · · · · · · · · · · · ·			
ш		hh8 Hope Street		•	.*.		. ,	ļ
S		CITY OR TOWN: Bristol			STATE:	Island, 0280	CODE	STA
	5.	LOCATION OF LEGAL DESC	RIPTION		ruodė	ISTANO, UZUU	9 44 <u>1</u>	AT E
	LT.	COURTHOUSE, REGISTRY OF I	The second of the second of the contract of the second of					
		Bristol Town Cler	k		٠			
		STREET AND NUMBER:	,			ţ		7
		Court Street			1	·		
		'Bristol	•		Phode	Island, 0280	CODE	COCA
		APPROXIMATE ACREAGE OF	YOMINATED PROPE	FRITY Tage tha	n one ser	7314110, 0200	9 44	ે ⊣ા
	6. 1	REPRESENTATION IN EXIST	ING SURVEYS	Less una		. 6		
		TITLE OF SURVEY:			•			83
	.	DATE OF SURVEY:	· · · · · · · · · · · · · · · · · · ·	Federal 🗍	State	County D Le	ocal 🗍	ū
		DEPOSITORY FOR SURVEY RE	CORDS:		٠.			ENTRY
		STREET AND NUMBER:					•	
								NUMBER
	.	CITY OR TOWN:			STATE:		CODE	
	<i>'</i>					· · · · · · · · · · · · · · · · · · ·		DATE
			,					1 I

		_
4	•	•
ſ	ι	1
r		
ı	•	ı
	_	
2	2	_
ŧ	,	,
-		1
7	ξ	,
c	_	_
(-)
	_	,
-		-
¢	_)
7	,	,
C	/	1

ं	DESCRIPTION	Karing Sandan Sandan					
٦					(Check One)		
ŀ	CONDITION	Excellent 🗀	Good 🟋	Fair 📳,	Deteriorated 🔲	Ruins 🗀	Unexposed 🔲
ı			(Check	One)		(Chi	nck One)
j	INTEGRITY	Altered		Unaltered 💢		Moved 🔲	Original Site 🙀
- 1							

DESCRIBE THE PRESENT AND ORIGINAL (If known) PHYSICAL APPEARANCE

Dominating the middle of a block on Hope Street in Bristol and overlooking the water, where boats once docked near it, the former Post Office and Customs House is a tall and massive, though restrained, rectangular palazzo. Set back from the sidewalk and raised upon a granite base, it has a towering presence, diminished only by the many recent structures around it. It was built in 1858 from the designs of Amming. Young, Supervising Architect of the Treasury Department, who helped the Renaissance Revival style become for a time the predominant one for public buildings, following the long reign of the Greek Revival—a style in which he was also accomplished.

The plain front wall of deep red brick is pierced by three large arched openings on each of its two stories. A greyish sandstone molding outlines the arches on both floors and caos the piers which separate the first-floor arches; and a decisive molding of the same material forms a belt between the two stories. The center opening on the first floor serves as the doorway; it is flanked by windows barred with iron. As is typical of the Renaissance Revival style, the second-story openings are more complex in their treatment than those below. The upper openings have granite sills, as well as a very shallow balcony of iron, on brackets, running across them. The panelling of the upper façade is understated, but the surmounting entablature is heavy and elaborately decorated. The cornice performs as the visual topping of the building, for the low hipped roof is visible only when one is at a distance from the building.

The sides and rear of the building have window: arrangements similar to the front, but include some blind recesses, and the molding on these faces becomes a browner sandstone. A side chimney probably once rose near the front of the left elevation. One chimney is extant, though apparently altered, at the rear of the building. In old photographs there appears a pedimented dormer in the front center of the roof, but it was probably a later addition and is now gone, anyway. The present torchères that are prominently attached to the first-floor piers were later decorations. An iron fence of attenuated balusters encloses the side portions of the small lot on which the building is situated.

The interior is in a state of neglect today. The front area accommodated postal sorting rooms, offices and mail boxes. The original iron columns are evident between the wood panels of the clerks' windows. Also extant is the wooden vestibule. The tile now on the floor seems to be an alteration. Cast iron stairs, railed also in iron, extend up to the customs quarters on the second story, which consist of a very large main room and a smaller one. The stair landing has what seem to be its large, original tiles, and a heavy iron gate divides the landing from the lower stair run. The large room is particularly interesting because of its

(See Continuation Sheet.)

Form 10-300a (July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY - NOMINATION FORM

Rhode I	sland	
COUNTY		
Bristol		
FOR N	IPS USE, ONL	Υ
ENTRY NL	IMBER	DATE
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	

(Continuation Sheet)

(Number all entries)

7. Description.

seven sets of iron-framed windows with heavy iron sills and interior shutters. The scale is impressively large: the ceiling is approximately 17 feet high and there are 8-foot panelled doors. The floors are of hardwood. A very plain marble fireplace is in one corner of the large room.

In the cellar one can see the granite piers which support horizontal iron beams, which in turn support the iron columns of the first floor. The stone-walled cellar extends under the full length and width of the building and has a ceiling of brick.

Currently the building is attached to a modern Y. M. C. A. swimming pool structure and is used somewhat as ante-space, although it may in future be remodelled as offices.

•	
V	)
7	_
C	)
-	-
۲	_
ر	,
=	2
Ω	_
۲	
U	
2	_
_	
_	
Ц	ı
Ц	J
v	2
-	•

PERIOD (Check One or	More as .	Appropriate)					
Pre-Columbian		16th Centur	у 🗀	18th Centur	у 🗆 .	20th Century	· 🗀
15th Century		17th Centu	ry 🔲 .	19th Centur	у (Х)		
SPECIFIC DATE(S) (H	Applicabl	e and Known) ]	358				
AREAS OF SIGNIFICAN	E (Che	ck One of More as	Appropri	ato)	•		
Abor iginal		Education		Political		Urban Planning	. 🗀
Prehistoric		Engineering		Religion/Phi-		Other (Specify)	
Historic		Industry		losophy			
Agriculture		Invention		Science			
Arť;	ĽX	Landscape		Sculpture			
Commerce	<b>K</b> )	Architecture		Social/Human-	•.		
Communications	X	Literature		itarian			
Conservation		`Military		Theater			
		Music .		Transportation			

STATEMENT: OF SIGNIFICANCE (Include Personages, Dates, Events, Etc.)

The Bristol Customs House and Post Office of 1858 stands as an example of the rediscovery of the Italian palazzo mode of architecture after the long proliferation of the Greek Revival. Also, though small, it quite exemplifies the period in which dozens of such buildings were erected by the Department of the Treasury--virtually all of them designed by Ammi B. Young. Young earlier was a master of the Greek Revival style, and through his career one can view the popularization of subsequent styles, the emergence of new materials and methods of construction. Talbot F. Hamlin writes in his Greek Revival Architecture in America:

Engaged as architect for the Treasury Department in 1852 ... [he] continued as Supervising Architect until 1860. Of practically all of these [post offices and customs houses] during this period, Ammi B. Young was the architect. [They show] the rapid development ... toward more Italianate and baroque forms.

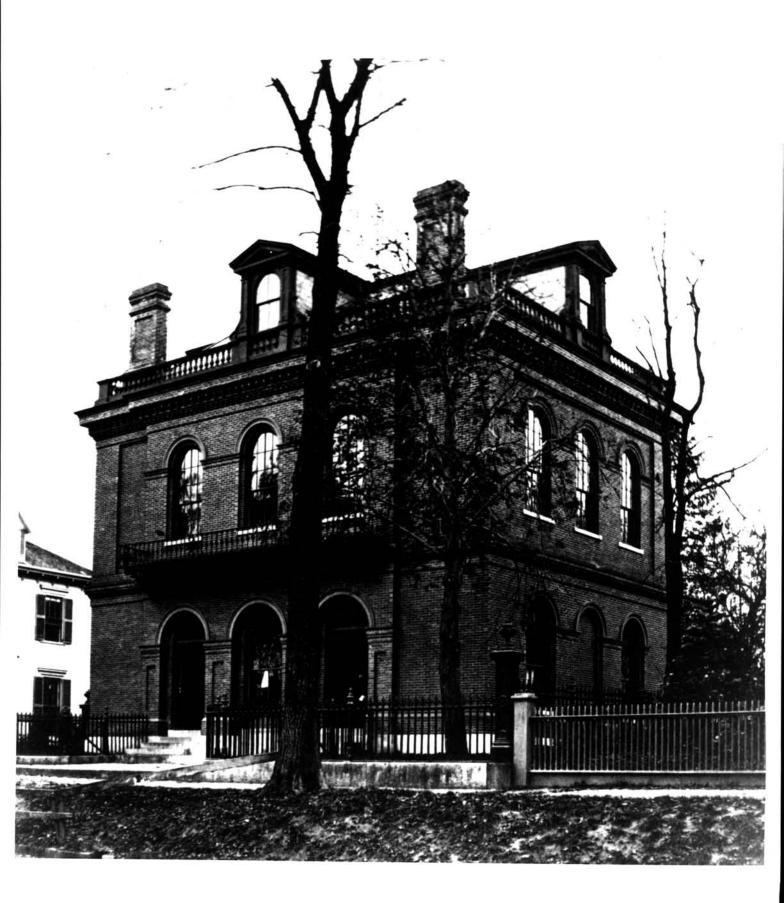
The Greek Revival style, however, continued to serve as a discipline for design in other styles during Young's period, and one can see in the Bristol building elements of the Greek Revival's clarity of elevation and simplicity of ornament: the massive, deliberate façade; the heavy cornice; the severe, almost anti-picturesque, feeling the building achieves. The building contains obvious and interesting differences to the Customs House in Providence, designed by Young in the previous year in a more Tuscan style. The Providence building has a more consciously classical, academic theme, but shares with the Bristol edifice a severely plain wall treatment with sharply-cut openings, a pronounced verticality, and numerous structural innovations.

The Bristol work serves as an excellent example of a style that is little represented in a town which has fine buildings of other styles and periods, and is a reminder of what was once one of the most active seaports in the northeast. Fortunately the building has found a new use and will be of continued value to the town practically as well as historically. It is hoped (and expected) that the planned interior renovations will be handled with due regard to the existing architecture.

ţ		٠
`	_	٠
r	T	1
r	1	1
•		•
-	-	-
_	2	-
1	_	-
¢	/	,
-		•
7	τ	J
C	_	-
•		
-	_	ł
_		
C		)
7	,	
4		٠
L		•

•	บ. ธ	Report of the Se 30, 1856. "Report Set, Series 896,	ecretary of ort on Publi	the T	reasury	for the 1	ear Ending	June
						· .		
	ļ					•		
	1			÷				
850								94888888888888
<u> </u>		RAPHICAL DATA LATITUDE AND LONGITU IING A RECTANGLE LOC			U DEFI	ATITUDE AND LONG	POINT OF A PROP	
	CORNER	LATITUDE	LONGITUE	DE .	R	ATITUDE	N ONE ACRE	DE
		Degrees Minutes Seconds	Degrees Minutes	Seconds		Minutes Seconds	Degrees Minutes	
	NW NE				lil °	39 58.45 N	71 • 16 😗	31.53 W
	NE SE	0 , ,						٠.
	SW	٠, ،	ر <b>.</b> ه	•				
	LIST ALI	STATES AND COUNTIES	FOR PROPERTI	ES OVERI	LAPPING ST	ATE OR COUNTY BO	DUNDARIES	
	STATE:			CODE	COUNTY	,	,	CODE
	STATE:	<u> </u>		CODE	COUNTY:	•		
		× · ·	·-·-	CODE	COUNTY		•	CODE
	STATE:		* ·	CODE	COUNTY:	•		CODE
	STATE:			CODE	COUNTY:			CODE
822						·		
. 💯		PREPARED BY						
	NAME AN	ID TITLE;	-					
		hristopher Bene,	Consultant	L		• •		· ·
	B. C	hristopher Bene,			Commiss	ion	Sept. 15,	1971
	B. CORGANIZ Rhod	hristopher Bene,	cal Preserv		Commiss	ion		, 1971
	B. CORGANIZ Rhod STREET Stat	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit Town:	cal Preserv		STATE		Sept. 15,	CODE
	B. CONGANIZARHOOD STREET Stat CITY OR Prov	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit Town: idence	cal Preserv		STATE Rhode	Island, 0290	Sept. 15,	CODE
12	B. CONGANIZARHOOD STREET Stat CITY OR Prov	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit Town:	cal Preserv		STATE Rhode		Sept. 15,	CODE
12	B. CORGANIZ Rhod STREET Stat CITY OR Prov	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit Town: idence LIAISON OFFICER CE	cal Preservin Street	ration	STATE Rhode	Island, 0290	Sept. 15,	CODE
12	B. CORGANIZ Rhod STREET Stat CITY OR Prov STATE	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit Town: idence LIAISON OFFICER CE	cal Preserving Street  RTIFICATION on Officer for the	ration	STATE Rhode	Island, 0290	Sept. 15,	CODE 114 N
12	B. CORGANIZ Rhod STREET Stat CITY OR Prov STATE	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit Town: idence LIAISON OFFICER CE	cal Preserventh Street ERTIFICATION on Officer for the	ration  Na- ic Law	STATE Rhode No.	Island, 0290	Sept. 15,	CODE 114 N
12	B. CORGANIZ Rhod STREET Stat CITY OR Prov STATE  As the tional 89-665	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit TOWN: idence LIAISON OFFICER CE designated State Liaiso Historic Preservation A	cal Preservent Ch Street  ERTIFICATION  on Officer for the ct of 1966 (Public property for inc	Na-ic Law	STATE Rhode No.	Island, 0290	Sept. 15,	CODE 114 N
12	B. CORGANIZ Rhod STREET Stat CITY OR Prov STATE  As the tional 89-665 in the evalua	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit Town: idence LIAISON OFFICER CE designated State Liaise Historic Preservation A ), I hereby nominate this National Register and ce ted according to the crit	cal Preservent Ch Street  ERTIFICATION  on Officer for the ct of 1966 (Public property for incertify that it has eria and procedu	e Na- ic Law elusion been ires set	STATE Rhode No.	Island, 0290	Sept. 15,	CODE 114 N
12	B. CORGANIZ Rhod STREET Stat CITY OR Prov STATE  As the tional 89-665 in the evalua forth b	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit TOWN: idence LIAISON OFFICER CE designated State Liaise Historic Preservation A ), I hereby nominate this National Register and ce ted according to the critical the control of the National Park Server	en Officer for the ct of 1966 (Public property for incertify that it has eria and proceduvice. The recom	e Na- ic Law elusion been ires set	STATE Rhode No. No. I hereby National	Island, 0290	Sept. 15,	CODE 144 N
12	B. CONGANIZ Rhod STREET Stat CITY OR Prov STATE  As the tional 89-665 in the evaluate forth believed to	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit Town: idence LIAISON OFFICER CE designated State Liaise Historic Preservation A ), I hereby nominate this National Register and ce ted according to the crit	cal Preserve the Street en Officer for the ct of 1966 (Public property for incertify that it has eria and procedurice. The recomposition is:	Na- ic Law clusion been ires set mended	STATE Rhode No. No. I hereby National	Island, 0290 ATIONAL REGIST certify that this pr Register.	Sept. 15,	CODE 144 N
12	B. CONGANIZ Rhod STREET Stat CITY OR Prov STATE  As the tional 89-665 in the evaluate forth believed to	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit TOWN: idence LIAISON OFFICER CE designated State Liaise Historic Preservation A ), I hereby nominate this National Register and ce ted according to the crit by the National Park Serv of significance of this no	cal Preserve the Street en Officer for the ct of 1966 (Public property for incertify that it has eria and procedurice. The recomposition is:	Na- ic Law clusion been ires set mended	STATE Rhode No. No. I hereby National	Island, 0290 ATIONAL REGIST certify that this pr Register.	Sept. 15,	CODE 144 N
12	B. CONGANIZ Rhod STREET Stat CITY OR Prov STATE  As the tional 89-665 in the evaluate forth believed to	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit TOWN: idence LIAISON OFFICER CE designated State Liaise Historic Preservation A ), I hereby nominate this National Register and ce ted according to the crit by the National Park Serv of significance of this no	cal Preserve the Street en Officer for the ct of 1966 (Public property for incertify that it has eria and procedurice. The recomposition is:	Na- ic Law clusion been ires set mended	I hereby National  Chief, O	Island, 0290 ATIONAL REGIST certify that this pr Register.  ffice of Archeology	Sept. 15,	CODE 144 N
12	B. CORGANIZ Rhod STREET Stat CITY OR Prov STATE  As the tional 89-665 in the evaluation the level of	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit TOWN: idence LIAISON OFFICER CE designated State Liaise Historic Preservation A ), I hereby nominate this National Register and ce ted according to the crit by the National Park Serv of significance of this no	cal Preserve the Street en Officer for the ct of 1966 (Public property for incertify that it has eria and procedurice. The recomposition is:	Na- ic Law clusion been ires set mended	Rhode Rhode Note the second of	Island, 0290 ATIONAL REGIST certify that this pr Register.  ffice of Archeology	Sept. 15,	CODE 144 N
12	B. CORGANIZ Rhod STREET Stat CITY OR Prov STATE  As the tional 89-665 in the evaluation the level of	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit TOWN: idence LIAISON OFFICER CE designated State Liaise Historic Preservation A ), I hereby nominate this National Register and ce ted according to the crit by the National Park Serv of significance of this no	cal Preserve the Street en Officer for the ct of 1966 (Public property for incertify that it has eria and procedurice. The recomposition is:	Na- ic Law clusion been ires set mended	I hereby National  Chief, O	Island, 0290 ATIONAL REGIST certify that this pr Register.  ffice of Archeology	Sept. 15,	CODE 144 N
12	B. CORGANIZ Rhod STREET Stat CITY OR Prov STATE  As the tional 89-665 in the evalua forth be level of No.	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit TOWN: idence LIAISON OFFICER CE designated State Liaise Historic Preservation A ), I hereby nominate this National Register and ce ted according to the crit by the National Park Serv of significance of this no	cal Preserve the Street en Officer for the ct of 1966 (Public property for incertify that it has eria and procedurice. The recomposition is:	Na- ic Law clusion been ires set mended	I hereby National  Chief, O	Island, 0290 ATIONAL REGIST certify that this pr Register.  Iffice of Archeology	Sept. 15,	CODE 144 N
12	B. CORGANIZ Rhod STREET Stat CITY OR Prov STATE  As the tional 89-665 in the evalua forth be level of No.	hristopher Bene, ATION e Island Histori AND NUMBER: e House, 90 Smit TOWN: idence LIAISON OFFICER CE designated State Liaise Historic Preservation A ), I hereby nominate this National Register and ce ted according to the crit by the National Park Serv of significance of this no	cal Preserve the Street en Officer for the ct of 1966 (Public property for incertify that it has eria and procedurice. The recomposition is:	Na- ic Law clusion been ires set mended	I hereby National  Chief, O	Island, 0290 ATIONAL REGIST certify that this pr Register.  ffice of Archeology	Sept. 15,	CODE 144 N

9. MAJOR BIBLIOGRAPHICAL REFERENCES



### UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

## NATIONAL REGISTER OF HISTORIC PLACES

#### PROPERTY PHOTOGRAPH FORM

Z

Z

Ш

Dhada Taland	
Rhode Island	
COUNTY	
Bristol	
FOR NPS USE ON	LY
ENTRY NUMBER	DATE

(Type all entries - attach to or enclose	with photograph)	ENTRY NUMBER	DATE
1. NAME			<u> </u>
COMMON: Y. M. C. A. Annex			
AND/OR HISTORIC: Bristol Customs House	and Post Office		
2. LOCATION	WALLE CONTRACTOR		
STREET AND NUMBER:			
Between 420 and 448 Hope Str	eet		
CITY OR TOWN: Bristol		ik.	
Rhode Island	CODE COUNTY: Bristo	ol	CODE
3. PHOTO REFERENCE	· · · · · · · · · · · · · · · · · · ·		
PHOTO CREDIT: Not known			
рате оf PHOTO: C. 1860-1869; copy nega	tive, 1972		
NEGATIVE FILED AT: Rhode Island Histori 90 Smith Street, Pro			House,
4. IDENTIFICATION		-	
DESCRIBE VIEW, DIRECTION, ETC.			
Copy of a stereoscopic view then in place and corner "ch lators. The dormers, now re	imneys" which per	rhaps disguised ve	enti-



#### UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

#### NATIONAL REGISTER OF HISTORIC PLACES

#### PROPERTY PHOTOGRAPH FORM

STATE	
Rhode Island	
COUNTY	
Bristol	
FOR NPS USE ON	LY
ENTRY NUMBER	DATE

	AND/OR HISTORIC: Bristol Customs House and Post Office	
2.	LOCATION	
	Between 120 and 1148 Hope Street	
	CITY OR TOWN: Bristol	
	Rhode Island cope COUNTY:  Bristol	H
3.	PHOTO REFERENCE	
	рното скеріт: В. Christopher Bene	
	DATE OF PHOTO: 1971	
	NEGATIVE FILED AT: Rhode Island Historical Preservation Commission, State Ho 90 Smith Street, Providence, Rhode Island, 02903	ou
4.	DENTIFICATION	
	Entrance front.	

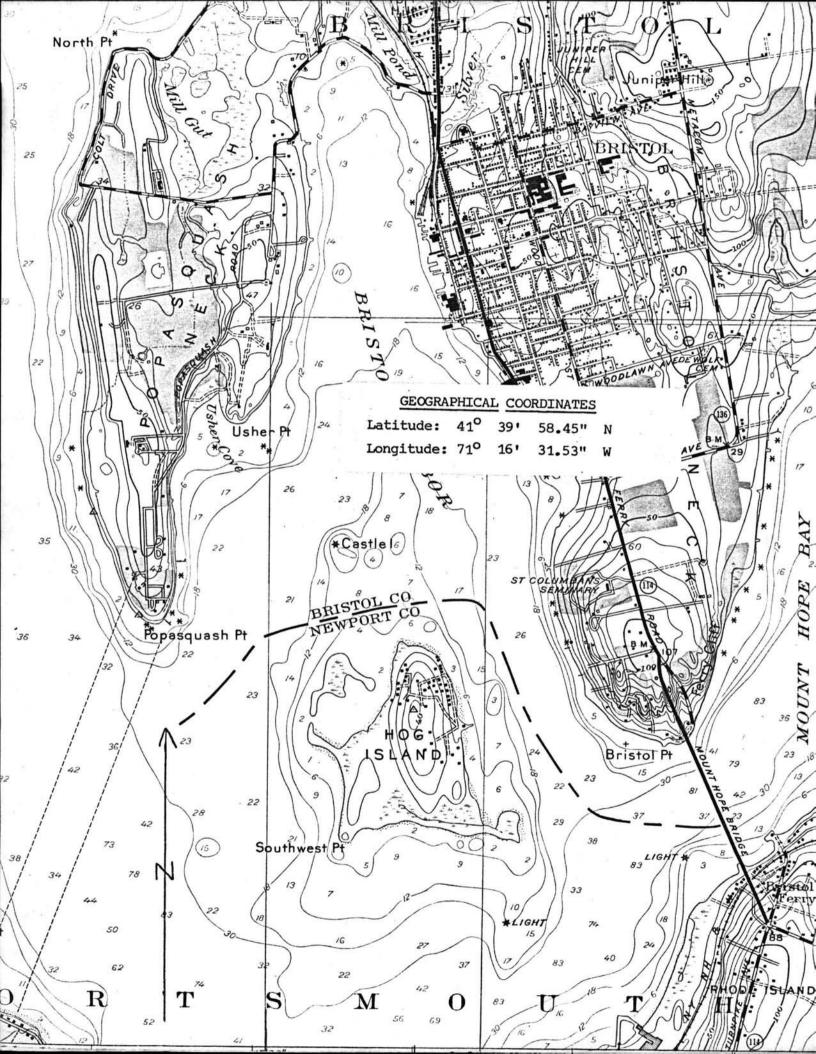


## UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

# NATIONAL REGISTER OF HISTORIC PLACES PROPERTY PHOTOGRAPH FORM

Rhode Island	
Bristol	4.5
FOR NPS USE ON	LY
ENTRY NUMBER	DATE

(Type all entries - attach to or enclose with photograph)		ENTRY NUMBER	DATE			
I. NAME			1			
COMMON: Y. M. C. A. Annex	common: Y. M. C. A. Annex					
AND/OR HISTORIC: Bristol Customs Hous	AND/OR HISTORIC: Bristol Customs House and Post Office					
2. LOCATION						
Between 1:20 and 1:148 Hope S	treet					
CITY OR TOWN: Bristol		1 .				
Rhode Island	code county: Hi Brist	ol	001			
3. PHOTO REFERENCE	,					
Рното скеріт: В. Christopher Bene						
DATE OF PHOTO: 1971						
NEGATIVE FILED AT: Rhode Island Historical Preservation Commission, State House 90 Smith Street, Providence, Rhode Island, 02903						
4. IDENTIFICATION						
DESCRIBE VIEW, DIRECTION, ETC.						
Detail of principal interior staircase of cast-iron.						
		z.				



Form 10-301 (July 1969)

## UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

## NATIONAL REGISTER OF HISTORIC PLACES PROPERTY MAP FORM

(Type all entries - attach to or enclose with map)

Rhode Island	
COUNTY	
Bristol	
FOR NPS USE ON	LY
ENTRY NUMBER	DATE

	identio of enerose with map)	
1. NAME		
COMMON: Y. M. C. A. Annex		
AND/OR HISTORIC: Bristol Cus	stoms House and Post Office	
2. LOCATION		
Between 120 and 41	18 Hope Street	
CITY OR TOWN: Bristol		A. C.
Rhode Island	CODE COUNTY: Bristol	00 CODE
3. MAP REFERENCE		
Source: U.S. Geological S	urvey	
scale: 1: 24,000		
DATE: 1955		
4. REQUIREMENTS		
TO BE INCLUDED ON ALL MAPS		*
1. Property broundaries where r	equired.	
2. North arrow.		
3. Latitude and longitude refere	nce.	