



BEACON HILL

A Thesis in Site Planning

Determination of the Character of Housing to
Replace the Deterioration on the North Slope . .

. . Being a Portion of the Research Study of
Beacon Hill

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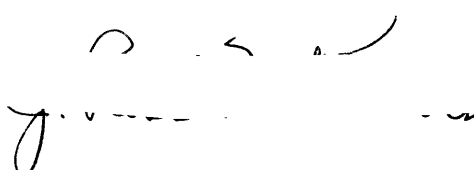
FOREWORD

This thesis is one part of the larger program of the research study in City Planning on the development of the entire Beacon Hill District in Boston.

It is the purpose in this thesis to determine the character and the best type of housing which should be erected to replace the deterioration on the North Slope of Beacon Hill, based on a sociological survey of existing conditions.

The development of this portion of the research program, as the thesis requirement for the degree of Master in Architecture, reveals the North Slope Village of Beacon Hill as proof to the statement that any community which allows cheap sub-standard construction and poor quality design is destined to be overtaken by deterioration.

The study of Beacon Hill also shows that high quality design and construction, as exemplified by the South Slope, is capable of rehabilitation, while cheap, sub-standard structures, as exemplified by the North Slope, not only cannot be rehabilitated, but makes difficult any fundamental change because of the cost involved in the throwing away of the old structures.


J. Ross McKeever
January 30, 1935

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THE BEACON HILL RESEARCH AND THE PROGRAM



A RECENT AIRPLANE VIEW OF BOSTON

Courtesy Boston Transcript

THE BEACON HILL RESEARCH and the PROGRAM

Purpose: This program of research in City Planning is being undertaken to prove the advantage and desirability of planning in cities residential neighborhoods in proximity to business and industrial areas separated and protected from encroachment by parks or parkways.

The Beacon Hill District in Boston, bounded on the north by Cambridge Street, on the south by Beacon Street, on the east by Scollay Square and Tremont Street, and on the west by Embankment Road and the Charles River Esplanade, is a unique example of an existing residential neighborhood close to the commercial heart of the city. It is set apart from the rest of Boston by topography and the abutting park areas. The grades of the area and the layout of its streets cause traffic to skirt its edges, while the parks, the Common and the Public Gardens, separate it from the retail shopping centers of Tremont and Boylston Streets and the Back Bay.

Beacon Hill has remained primarily a residential neighborhood since its first development, regardless of the lack of any municipal controlling or restricting ordinances--except that of zoning, not instituted until 1924. This maintenance of character in Beacon Hill indicates that once a stable condition is reached and an area is serving its best social purpose, there is no necessity for change until the buildings themselves deteriorate to the extent of their needed replacement.

Program: To accomplish the purpose of this study, it is necessary to prepare an account including the following:

I. A general treatment or birds-eye view of Beacon Hill as a neighborhood of homes showing--

The original condition and physical appearance,

An account of the land and titles so far as they have affected the layout of the land, the location of the streets, the division and the shape of the blocks and lots, and the character of the buildings,

An account of the physical changes in the Hill and their effect on development,

The gradual changes that have occurred in the building uses,

The extent to which the residential character has been preserved or destroyed,

The nature of the influences that have either militated against or promoted changes,

The municipal and private regulations, including zoning, affecting property on the Hill.

II. The social gains or losses, in terms of healthfulness and amenities, which have accrued from the comparatively high stability of its parts, and from the changed conditions.

The financial gains or losses due to stability or change,--the pros and cons of stable and changed conditions respectively from social and financial points of view.

III. The progress of zoning in the area, its purposes at different periods, its effects and its deficiencies, particularly on uses and height or bulk of buildings.

IV. The effects caused by:

Isolation provided by abutting park areas,

The grades of area causing diversion of main traffic routes to the edges of the Hill.

V. The extent of preservation of fine old houses and buildings of historic and architectural interest and the benefits of this preservation.

VI. The forces that have operated in causing business use to spread into the edges of the area, particularly on the east side and along Charles Street.

Consideration is to be given for future development in particular with:

I. Possibilities of State House, Court House, and other extensions.

II. Making of through streets.

III. Effect of "throttling" or "segregation" on decay.

Thesis:

IV. Character of buildings that should be erected for rehousing on the deteriorated blocks.

V. Whether good developments are now spreading into the deteriorated areas or are being encroached upon by deterioration.

VI. Extent, character and use of courts and alleys, question of their retention and extension.

Requirements: The following maps and plates are to be prepared:

- I. Base map--showing existing conditions, Scale 50' = 1"
- II. Land valuation map--showing assessed valuation of the land in each block, Scale 100' = 1"
- III. Property use map--showing buildings devoted to residence, business, and industry, Scale 50' = 1"
- IV. Deteriorated area map--showing buildings that are definitely run-down and need to be demolished or remodeled.
Indicate preservation of original buildings by way of contrast.
- V. Zoning map--showing areas which should be preserved as they are or may be changed in use--either from business to residence or from residence to business. The ideal limits which should be placed on the heights of buildings and coverage of lots.

Thesis:

- VI. Street replanning--showing possible improvements in alignment and width of streets and in their connections.
- VII. Aerial mosaic map.
- VIII. Historical maps at difference periods:
 1. Bonner's Map of 1722,
 2. Page's Map of 1775,
 3. Osgood Carleton's Map of 1800,
 4. Bulfinch Plan for development of Louisburg Square,
 5. H. G. Hale's Map of 1814,
 6. Map of original pastures superimposed on streets of 1934,
 7. Present City map.

THESIS

A section of the Requirements of the Research
on Beacon Hill.

Title: The character of the housing to replace the
deterioration on the North Slope.

Consideration is to be given to the present
street and block layout and the desira-
bility of extending the streets, making
"through" streets, replanning streets,
improving alignment, width, or connec-
tions of streets.

Scope: In any consideration of the North Slope, at-
tention must be given necessarily first
to the background and associations of
the Beacon Hill District

In considering housing on the North Slope,
a preliminary survey of the governing
conditions must be made to discover:

Original Character,
Changes in Development,
Extent of Deterioration and
Preservation,
Causative Factors in the
Present Condition,
Replanning Possibilities,
Economic and Social Aspects
Affecting Rehabilitation.

Intent: Finally, from the conclusions drawn in these
considerations, to determine the type
and character of housing best suited
for the rehabilitation of the North
Slope.

Furthermore, to show that construction of
low cost, cheap, or sub-standard struc-
tures leads the way to future deteriora-
tion and slum conditions.

Requirements: For achieving this purpose the following is prepared:

MAPS AND CHARTS

Geographical Relation of Beacon Hill to Rest of City

Historical Periods in Development

Captain Bonner's Map - 1722
Carleton's Map - 1800
H. G. Hale's Map - 1814
Map of Original Pastures and Streets of 1934
Condition before change in North Slope
Character 1898

Types of Construction)
Uses of Property)
Land Valuation) Research Maps
Deterioration and Preservation)
Zoning)

Population Trends by Census Tracts
Population Density by Census Tracts
Median Monthly Rents by Census Tracts
Foreign Born Heads of Families

Existing Conditions on the North Slope
Land Coverage
Population Distribution
Spot Map of Remaining Old Houses
Public Utilities
Topography

ILLUSTRATIONS

Pencil sketches of Existing Conditions
Photographs of Existing Conditions

DRAWINGS

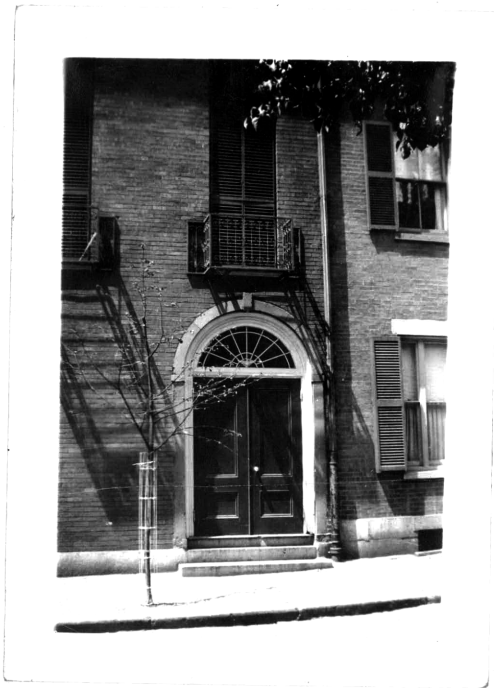
Block Plan of New Developments
Scale 1" = 50'
Plans and Elevations of Typical Units
Elevation of the Hill from Cambridge Street

MODEL

Scale 1" = 50'

BEACON HILL

The Background for Housing Study



BEACON HILL

The Background for Housing Study

Introduction: Few localities in American cities possess such characteristic and admirable quality of architecture as does Beacon Hill.

In few places has the unity of effect over so large an area been so long preserved since the original block development.

Beacon Hill in Boston is associated with attainment and tradition as the Vieux Carre' in New Orleans is associated with romance.

Background: Beacon Hill had its greatest development during a period when public taste was on a very high level. The buildings presented consistently classic fronts with admirable proportions and refinement of detail. Of the men concerned with the actual building up of the Hill, very few were professionally known as architects--Charles Bulfinch and Asher Benjamin were the best known of these. The builders and house-wrights had the good sense to follow the standard works on domestic English Architecture then in circulation, and from their faithful study grew the classic housefronts and refinement of interior details.

Inhabitants: Beacon Hill was developed by a group of sagacious owners, men of wealth and culture. It early became peopled with families distinguished in their political, literary, and cultural attainments. Men prominent in the City's business, educational, religious, and social life made their homes here. The district became associated with those names which have given to Boston its place as the foremost center of culture among American cities.

It is this association with distinction, both in the character of the buildings and in the character of their occupants which has given Beacon Hill its atmosphere and background of tradition--a tradition which links Beacon Hill to the past by means of quiet charm and merit of its architecture.

Definition of Area: Beacon Hill today comprises the territory within these bounds:

North--Cambridge Street
East--Scollay Square and Tremont Street
South--Beacon Street, the Common and Public Garden
West--Embankment Road and the Esplanade.

Grades of Area: The layout of the streets is such that it discourages through traffic; even though there were through streets and cross connections, the grades of the area are too great for any easy flow of traffic.

The grades are: -

Beacon, Charles to Joy.	5%
Beacon, Somerset to Tremont	6%
Chestnut, Charles to Walnut	6.5%
Mt. Vernon, Charles to Joy.	7%
Pinckney, Charles to Anderson	10%
Revere, Charles to Grove.	10%
Phillips, W. Cedar to Grove	6%
Anderson.	10.2%
Grove	8%
Garden.	10.8%
Irving.	12.1%
S. Russell.	9.5%
Joy, Cambridge to Mt. Vernon.	8%
Joy, Beacon to Mt. Vernon	7%
Hancock	6%
Temple.	4.4%
Bowdoin, Cambridge to Ashburton	6%
Somerset, Howard to Ashburton	5%
Pemberton Square, Tremont to Court House.	8%

The grades tend to divert traffic to the main traffic streets which bound the District:

Cambridge Street on the north,
Scollay Square and Tremont Street
on the east,
Beacon Street on the south, and
Charles Street and Embankment Road
on the west.

Traffic moves around the Hill rather than over it. The only streets which cross the Hill in a north and south direction are Joy and Bowdoin. Both of these are narrow (35' and 40' from property line to property line, respectively) and their distances are over steep grades.

Mount Vernon is the only street which runs over the Hill in a west to east direction and it terminates at Bowdoin Street, its eastern outlet from there being the tortuous way through Ashburton Place and around the Court House to Scollay Square.

Result of Topography and Abutting Park Areas:

The flow of traffic to the edges of the area leaves Beacon Hill isolated from the main streams of traffic. It is left an island near the commercial heart of the City. This territory is set apart from the rest of Boston. In itself, it is a complete neighborhood, primarily residential in character, in close proximity to business, protected on the south and west by abutting park areas. The Common and Public Gardens effectively cut off the spread of business from Tremont and Boylston Streets and the Back Bay. The Embankment on the west is a recreational area for the District. On the north, the 100-foot wide Cambridge Street is the boundary. The eastern border is much less protected from invasion, however, the State House grounds and the steeper grade to the north serve as barricades.

THE FOUR SECTIONS OF THE HILL

East of Bowdoin Street

The North Slope

The South Slope

West of Charles Street on filled land



The Four Sections of the Hill:

There are four parts to the Hill--the section east of Bowdoin Street to Scollay Square and Tremont Street; the North Slope from Pinckney Street to Cambridge Street; the South Slope from Pinckney Street to Beacon Street; and the section west of Charles Street to the Embankment on filled land.

Eastern Section:

The section east of Bowdoin Street has suffered greatly from the inroads of business and is primarily a business district. (See the Use of Property Map.) It has become lost in its association with Beacon Hill.

Western Section:

This section, west of Charles Street is on filled land. Until the creation of the Charles River Basin and the Embankment, these streets, excepting Brimmer between Mt. Vernon and Pinckney Streets and Beacon Street, were lined with stables, carpentry shops, and storage yards. After 1910, when the Embankment was officially opened, wooden shacks were condemned by the City, stables were torn down, and blocks of new houses and four and five-story apartments were erected in harmony with the architectural spirit of the older sections of the Hill.

South Slope:

This district, from Pinckney Street south to the Common and between Charles Street and Bowdoin Street, is a community in itself and is that part of Beacon Hill to which the name is most familiarly applied. It became developed by families of affluence and social prominence. It is this section which continues with a high degree of preservation of original buildings and atmosphere.

North Slope:

This section from Myrtle Street north to Cambridge Street, is of entirely different character from the South Slope and always

has been. It was developed by tradesmen, mechanics, and servants of the mansions on the South Slope. It was a village in itself, dotted with small, inexpensive houses, but soundly built with good architectural design. This section's present shoddy character follows a natural sequence on its first use.

Difference between North and South Slopes:

The difference between the North and South Slopes, in the character of the buildings and of the atmospheres of the communities, is one of the outstanding features of Beacon Hill. It affects the present efforts to develop the highest type of occupancy and usefulness for the district. The Southern Slope was built up of high quality design and construction by people of culture; the North Slope, less desirable in orientation and prospect, was at first naturally used for the housing of dependents of the large mansions to the south and for less prosperous tradespeople. Subsequent developments have followed then naturally on these first uses--the South Slope with high quality construction capable for rehabilitation; the North Slope with cheap, poor construction not susceptible to rehabilitation.

THE SOUTH SLOPE

The Highly Preserved and Best-Known
Section of Beacon Hill



THE SOUTH SLOPE

A Residential Community of High Quality
Design and Construction

Verification of Value of Good Construction: This part of the Hill, now more familiarly called Beacon Hill, has preserved its character almost intact through the periods of economic and social transitions since its first development. This is unique and invaluable in fluid America where change in buildings and their uses flows over neighborhoods very rapidly. The district has preserved itself through conservatism and resistance to change afforded by good taste and excellence in design and construction. This preservation of old buildings reveals the life of a well-constructed building can continue, with reasonable care, indefinitely. The recent rejuvenation and renovation of the South Slope (since 1910) by individual owners proves that excellence in design and high-class construction is capable of rehabilitation; whereas, commonplace buildings of poor construction, evidenced by tenements on the North Slope, are not.

History of South Slope: Until the building of the State House in 1795, this Section from the crest of Mount Vernon, south to the Common, remained distinctly rural in character. The land was covered with bits of cultivation, orchards, and pastures over which the cows peacefully grazed among the blackberry and barberry bushes. There were several country seats on the Beacon Street front opposite the Common, such as the Hancock and Copley places. With the erection of the State House, began the era of development which left the Hill as pasture land no longer. This continued for the next 50 years.

Original Appearance:
Beacon Hill early known as "Tri-Mountain," was the highest of the three Boston Hills. It was a distinguishing feature of the peninsula, in consequence of the peculiar shape of its Summit which exhibited three eminences.

Beacon Hill:

One of these was behind where the State House was placed, now the site of the Northern Extension. It was the site of the ancient beacon pole, and was known as Sentry or Beacon Hill.

Mt. Vernon:

To the west of this, the highest of the three knobs, was a lesser elevation called Mt. Vernon, on the site of the present houses numbered 69--85 Mt. Vernon Street between Pinkney Street and Mount Vernon Streets and just east of Louisburg Square.

Cotton Hill:

To the east was the summit known as Cotton Hill, later Pemberton Hill, the present site of the Court House. A ridge connected Cotton and Beacon Hills, about the present site of Ashburton Place. Another portion of the ancient Mount stretched nearly to the present line of W. Cedar Street near the jog at Revere Street, where it terminated in a high bluff called West Hill.

Shurtleff Topographical and Historical Desc. of Boston, \$. 170

Physical Changes:

Outline of the changes in topography--

1758--Thomas Hodson and gravel digging on the North Side of Beacon Hill.

1803--Mt. Vernon Proprietors' grading operations on Mt. Vernon.

1805--Charles Street filling in completed (Beacon to Cambridge.)

1811--Levelling of Beacon Hill (at least 60' cut made.)

1821--Opening of Mill Dam (Beacon Street.)

1829--Final grading operations on North Slope between Revere and Phillips Street.

1835--Levelling of Cotton Hill (65' cut made.)

1845--Levelling of ridge between the former Beacon and Cotton Hills.

1848--Construction of reservoir north of State House.

1858--Start of filling-in of the Back Bay.

1830--Filling-in of section west of Charles Street between Beacon and Mt. Vernon Streets completed.

1856--Mt. Vernon Street, west of Charles, and north to the bridge, including Brimmer Street, filled in.

1880--Discontinuation of Reservoir.

1888--Construction of North Extension of State House started.

1910--Opening of Charles River Embankment.

1912--Opening of Beacon Hill Subway.

1920--Widening of Charles Street.

1927--Widening of Cambridge Street.

1931--Construction of the Traffic Circle.

Mount Vernon Proprietors:

In 1795, after the erection of the State House, a syndicate known as the Mt. Vernon Proprietors, composed of H. G. Otis, Jonathan Mason, Benjamin Joy, and Mrs. James Swan bought the Copley lands together with parts of the Allen and Phillips Pastures. This purchase gave the Proprietors the land west of Joy Street to the River and south from Pinckney Street to Beacon Street, except the land held by Dr. John Joy, roughly bounded by Mt. Vernon, Joy, Beacon, and Walnut Streets and a plot 25' x 77' on Clapboard Street (Joy between Mt. Vernon and Myrtle Streets.)

Development of Mount Vernon:

This was undoubtedly the most important real estate operation up to that time in Boston. It was successful because it was launched at the height of the period of prosperity which followed the Revolution, expanding old fortunes and creating new ones.

"The older parts of the town no longer held sites for fine houses, while on the heights of Beacon Hill was room for a development of high distinction," cooled as it was by the breezes from the broadening-out of the Charles River and open to the view of the Brookline Hills beyond.

It was the Proprietors' intention that the residences there be of mansion-house order with ample grounds for gardens and stables.

The actual work of cutting the streets and opening the land did not begin until the late summer of 1799.

PLANS:

Withington Plan:

Mather Withington, surveyor, prepared a plan for the development. It provided for lots of 100' frontage with a depth of from 150' to 200'.

On that basis there would have been room for scarcely more than 40 houses between Walnut Street and the River.

It provided for Walnut, Chestnut, Mt. Vernon, and Pinckney Streets substantially as they are now.

This plan was adopted in principle, but more lots were laid out than Withington had contemplated.

The Proprietors were developing this land for speculation; therefore they took advantage of all available land.

Bulfinch Plan:

Charles Bulfinch, the architect, also prepared a plan, but it was considered too grandiose by the Proprietors and wasteful of valuable building land.

This plan provided for 60 lots averaging 66' in width and 160' feet in depth. Bulfinch intended to take full advantage of the topography. On the top of the ridge he provided a square 460' long and 190' wide, laid out as a park. The main axis of the square was east and west. Opening from this square at the eastern and western ends were two 50' streets. From the center of the south side of the square another 50' street ran directly south to Beacon Street, about 50' east of the present Spruce Street. This street was to be crossed by an east and west street which, as Bulfinch planned it, would have been about 30' south of the present Chestnut Street. Bulfinch did not contemplate Walnut or Pinckney Streets.

Both these plans are preserved in Suffolk Deeds L. 192, f. 198; L. 387, f. 271.

The idea of the square, however, lurked in the Proprietors' minds so that when the land west of 89 Mt. Vernon Street was contemplated for development in 1826, the Proprietors had their surveyor, S. P. Fuller, draw the layout which provided for Louisburg Square.

A Subdivision of High Distinction:

The Proprietors in their development deliberately encouraged a development of high distinction. They created the division in character between the North and the South Slopes.

The "Pinckney St. Wall": For years before this speculation, since 1735, there had been a series

The Ropewalks": of ropewalks (long, narrow "alleys" of land used for the spinning of rope) on the present site of the houses on the South Side of Myrtle Street, from Hancock Street west, to beyond Grove Street; these served as a barrier to any connection between the north and south sides of the Hill. It was not until 1805, when this land became valuable, that these ropewalks were discontinued and the land laid out in house lots, that any direct connection could be made. At this time Joy Street was cut through and the two former blind streets connected as the direct way over the Hill, north and south, between Cambridge Street and the Common. Until then the only cart track over the Hill was by way of Joy Street to Mt. Vernon, thence east to Hancock and over Hancock Street north to Cambridge Street. The Proprietors continued the "wall" created by these rope-walks, allowing only one street--Anderson--to connect through from the North Slope to their development. Their layout of the land along Pinckney Street in house lots fostered the division in character between the two slopes. They deliberately encouraged a development of high order in their subdivision.

As an impetus for stimulating the market, five of the people interested financially in this promotion took title as individuals to adjoining lots on Mt. Vernon Street.

Mr. Jonathan Mason's lot was the largest, now covered by the houses numbered 59--67. He erected his mansion in 1802. The house was torn down in 1836, after his death, and the lot subdivided for the present houses there.

Mr. Benjamin Joy owned the next lot west, now under the present houses 69--75, built in 1831 after the lot was sold and subdivided. He abandoned his original intention and built on Chestnut Street instead.

Mrs. James Swan took the lot next west, now numbered 77--83 Mount Vernon Street. She also did not build as at first intended but instead built on Chestnut Street. This was also subdivided in 1832 into the present lots.

Mr. H. G. Otis put up the present house numbered 85 in 1802 as his mansion.

Mr. Charles Bulfinch bought the lot next west, but the failure of his Franklin Street Crescent development financially embarrassed him so that he divided his lot and sold the present houses 87 and 89 before they were completed.

The Proprietors' development was launched at an opportune time--after the value placed on this land by the erection of the State House, and during a time of prosperity just before and after the turn into the 19th Century.

Economic Trends in the Development of Beacon Hill:

The trends, the ups and downs, in the development of the Hill are:

Before 1795--Little actual building, large estates on the east and south fronts, a small development of very low character on the northwest slope.

1795--Erection of the State House and formation of the Mount Vernon Proprietors.

1800--1806--Large mansions built on South Slope. Grading operation on Mt. Vernon and filling-in of Charles Street. Similar speculation and building of lesser nature on North Slope.

1807--Jeffersonian Embargo and cessation of all building.

1809--1812--Building started again to be stopped by War of 1812.

1819--1829--Prosperity, with building continuing. Louisburg Square laid out.

1829--Panic stops building.

1830--Land west of Louisburg Square, along Pinckney, Mt. Vernon, Chestnut, and West Cedar Streets built on. Rise in value of land. Greatest period of development. Large estates, now very valuable, out up:

1835-- Green Estate sold and Pemberton Square laid out.

1836+- Mason Mansion torn down and subdivided.

1837--Panic stops all building.

1840--1860--Replacement of some older houses by more fashionable Brown Stone Houses. Beacon Hill continues as "Court End" of Town.

1870--1880--Movement to the Back Bay. Loss in social distinction. Height of negro influx on North Slope.

1890--1912--Lowest ebb of the Hill. Construction of tenements on the North Slope. Lodgings cover South Slope.

1910--Opening of the Embankment and impetus to improvement in lower section.

1910-on--"Rediscovery of the Hill." Restoration and rehabilitation of the older, well-constructed houses.

Rehabilitation of South Slope:

In the early 1900's, Beacon Hill reached its lowest ebb. Tenements were constructed on the North Slope almost completely annihilating the old houses there and transforming the character of

the neighborhood. From the time of the opening of the Back Bay, nearly 50 years previous, "there began the exodus from Beacon Hill's Streets of the families whose names, through two generations of residence, had become familiar to the District. The Hill's natural advantages held a family here and there, despite the pull of fashion westward to the new parts of town, and the encroachment of boarding houses." Then the change came--the Embankment was created, opening the way to a new residential district west of Charles Street.

Change in Public Taste--Appreciation of Architectural Merit:

After the turn of the Century, there was a swing in public taste to an appreciation of architectural merit, and an interest in "antiques." People rediscovered Beacon Hill, and once again saw the charm and dignified beauty of the old houses; they were attracted by the quiet of the streets, the proximity to business, the theaters, and recreational parks.

Beacon Hill's advantages as a residential neighborhood were appreciated.

The old houses were remodeled mostly into private homes or small apartments.

The remodelers even invaded the North Slope and its rehabilitation was stopped only by the presence of the great number of Hebrew tenements.

THE NORTH SLOPE

The Less Favored Community on the
Northern Slope of Beacon Hill



THE NORTH SLOPE

The less favored Community on the Northern Slope of Beacon Hill.

Background:

This District north of Pinckney Street has always been less desirable from a residential point of view than the South Slope.

This North Slope never enjoyed the patronage of the socially elect. It has been termed the "bob" side of Beacon Hill; the South Slope, the "nabob."

Trends in Division of Character between the two Slopes:

Long before the Mt. Vernon Proprietors began their development of south and west slopes of the Hill, and before the "New" State House was thought of, a considerable section on the northwest side had been laid out in streets and houseslots.

This section was then remote from town, the border of which on Cambridge Street was no farther west than Bowdoin Square. The development was of a cheap nature and populated by a mixed and more or less questionable sort of people.

The development met with little success, being premature and too far from town.

The district acquired a bad reputation, only cleared after many years and a change in street names overcame prejudice against the vicinity.

However, a better class of people began gradually coming in on the North side shortly after the Revolution. Mechanics of all sorts, attracted by the period of good times and the attending building boom in the 1790's began to drift in from the country, and many of these men bought houseslots on which to build homes for themselves, some even built on speculation.

A change came over the upper portion of the North Slope and a village of small, detached and semi-detached houses, many of wood, grew up.

Negro Influx:

After Massachusetts freed its slaves in 1789, families of these freed negroes established themselves in some of the older and cheaper houses of the section, then gradually, street by street, came to possess it in a large degree, causing the entire slope to lose its association with Beacon Hill. By the time of the Civil War this district had become a sanctuary for escaped slaves and a terminus of the "Underground Railroad."

Hebrew Influx:

Toward the end of the 19th Century another change came over the district. The small houses began to disappear before an energetic influx of low-priced tenement houses, erected to take care of the expanding population of Italian and Russian immigrants. This invasion began about 1895 and continued until shortly after 1910. This new population completely changed and destroyed the architectural character of the entire district.

In this transformation to higher buildings with greater lot coverage, many of the courts and the small houses which faced them were obliterated. In fact nearly all these tenements occupy sites of several small frame or brick houses which once predominated in the district. These frame buildings were easier to demolish and their sites were easier to acquire for combination into the larger lot needed for the tenement type of building.

History of the Layout of the Streets:

The first attempt to open this land on the North Slope for building was made in 1725 by Jeremiah Allen, grandson of the Reverend James Allen, who had acquired this as pasture land. (See map of Original Pastures.) Jeremiah Allen laid out 87 houselots, containing generally about 4,000 square feet each. Through the center of this pasture he opened Anderson Street, calling it Center Street, and at intervals of 200 feet on either side

two other streets, called respectively Grove and Garden Streets, names then doubtless significant of the rural beauty of the spot. He also laid out at intervals of 240 feet, two cross streets parallel to Cambridge Street, Phillips and Revere, then known as Southac and May.

In 1729, these last two streets were continued west into the Phillips Pasture by its owner, Nathaniel Byfield, who extended Phillips Street so as to swing around on the westerly side of the pasture on the lines of the present W. Cedar Street. His lots, 59 in number, varied in area. William Taylor, a leading surveyor of the time, laid out both pastures. (Bowditch Abstracts sketch plan, Vol. 5, P. 330.)

The south line of the Allen Pasture extended along the north side of Myrtle Street, so that after 1805, when the ropewalks there were sold and Myrtle Street was continued west from South Russell, there resulted the very narrow blocks between Revere and Myrtle Streets.

Five years after the first subdivision, in 1734, the Thomas Buttolph heirs began the development of their pasture which lay next east of Allen's and extended along Cambridge Street as far as Hancock Street. Mrs. Abigail Belknap and her sister, Mrs. Mary Guttridge, who had inherited the easterly two-thirds of the property, laid out Joy Street in 1734, calling it Belknap's Lane. Their brother, Nicholas Buttolph, owner of the westerly third of the pasture, laid out Irving Street in 1733 along the extreme western edge of his property. It was known as Buttolph St. until 1855. His heirs in 1737 laid out S. Russell Street and that portion of Myrtle along the ropewalks, between Irving and Hancock Streets.

Portion of the North Slope east of Joy Street:

The portion of the North Slope, north of Derne Street, between Joy and Bowdoin Streets, is a unit in itself. The houses here are for the most part the older ones of good quality, there being only a scattered invasion by tenements. This section, the genteel end of the North Slope, has always been occupied by white inhabitants. It is now largely given over to lodging houses; (see Use of Property Map,) and it can well be rehabilitated by individual owners as was done on the South Slope.

Or, perhaps, this section may be used for extending the State House and its grounds as recommended by the City of Boston Housing Survey of November 22, 1932 for the Beacon Hill District; though, personally, this recommendation is not felt to be a good one.

This District's problems are not the same as those of the remainder of the Hill and are not dwelt on in this study, except as rehabilitation west of Joy Street may have bearing in relation to this section of the North Slope east of Joy Street.

CONSIDERATIONS FOR THE HOUSING STUDY ON THE NORTH SLOPE

Existing Conditions



CONSIDERATIONS FOR THE HOUSING STUDY ON THE NORTH SLOPE

Problems affecting the North Slope:

Housing District:

The portion of the North Slope, from Myrtle Street north to Cambridge Street between Joy and West Cedar Streets is a district with high qualifications as a housing unit. It is a segment of the existing residential area of Beacon Hill, isolated from the main current of the City's life, yet close to the commercial heart of the City within walking distance of the downtown offices, banks, stores, and theatres.

This hillside area contains about 20.8 acres, irregularly divided into 14 blocks varying in size from 5,192 square feet to 2.75 acres.

The Existing Streets of the District:

This section of Beacon Hill is bounded on the north by Cambridge Street and on the west by Charles Street, both important traffic arteries zoned for business.

West Cedar Street, roughly parallel to Charles, is a minor street serving as a western access.

Joy Street, crossing the entire Hill from north to south, is the eastern boundary.

Myrtle Street and the houses on its south side form the southern boundary.

The existing streets have created this neighborhood unit and well adapt it to development. There are no through streets, while it is bounded by thoroughfares. The eight streets which enter from the bounding streets all terminate within this area, excepting Anderson which extends to the boundary at Pinckney but without further continuation. The streets are all narrow, ranging from 25 feet to 40 feet from property line to property line; while the north and south ones are over steep grades. (See Appendix A.)

Between West Cedar and Joy Streets, in an 800-foot distance on Cambridge Street, five streets climb the hill at grades averaging from 10% on Grove and Anderson to 12.5% on Irving.

In the opposite direction, Myrtle enters from the east at Joy Street, while Phillips enters from the west at West Cedar Street and Revere comes in also from the west at Charles Street with connection to Embankment Road.

Early Block Development:

These streets are without exception the original streets of the District, changed only in name and in appearance of the flanking buildings from the time of their laying-out in the early half of the 18th Century.

They were at first lined with quite uniform, small brick or frame houses mostly 2 and 3-1/2 stories high. "Some of these were very tidy, suburban looking structures, set back from the street or facing on side yards with small flower-decked dooryards protected behind neat wooden fences." The finest example stood until thirty years ago at the northwest corner of Anderson and Myrtle Streets.

During the time of the Hill's greatest building period, in the 1830's, larger lots were penetrated by narrow courts or alleys, faced with 2-1/2-story houses. The remaining examples of these, such as Rollins, Bellingham, and Sentry Hill places, possess definite, old-world charm and atmosphere. Had the early houses remained the later deterioration of the District would have been easily remedied.

The Tenement:

A change in population between 1895 and 1910, occasioned by the large immigration, and the consequent demand for low-priced

accommodations brought on the building spasm in which the old houses were obliterated.

The tenements, on sites combined for the larger plot necessary, were built, generally, to a complete lot coverage with interior air shafts and to a height of four stories-- and basement with a shop, or to full five stories.

The arrangement of these buildings makes it necessary to pass through all the rooms in going from one end of an apartment to the other. The early ones had no heat except kitchen stoves, were lighted by gas, and had only "sketchy" plumbing.

In a number of cases, particularly 32--34 Grove Street, 80 Revere, 57 and 63 Myrtle Street, the upper floors usurp space over the street by means of large, over-hanging bays, which make possible more space in small, crowded rooms.

Frequently, the tenure of ownership is short, the tendency being to hold for resale rather than investment, with little attempt at upkeep.

With cheap construction on overbuilt sites, overcrowded rooms and neglect, deterioration to slum conditions was inevitable.

The Existing Conditions Map of the North Slope reveals the wholesale transformation to tenement buildings and the only scattered preservation of the older buildings. The greatest percentage of these is in the block at the District's western edge on Revere Street and in the side courts leading from it. Another group of remnants of the section's past glory is at the east, on upper Irving and South Russell Streets. Throughout the rest of the District is only a scattering of survivors, mostly on Myrtle and Revere Streets.

Efforts at Reconditioning:

The wave of rehabilitation by individual owners which swept over Beacon Hill after 1910

trickled over the North Slope. Here only the prevalence of the tenements and their blighting effect checked the flow of renovation. The reconditioning efforts were for the most part confined to the upper fringe of the district and took place in the remaining old houses, many of which were converted into small apartments. So intense was this restoration, that any old house that was at all interesting or well situated, regardless of its immediate surroundings, was reconditioned and brought back to its former, or even better, estate.

There were attempts to improve tenement buildings. Primus Avenue was made a high type development from the worst of slum conditions; among other tenements remodelled into modern small apartments are 82 Phillips, 79, 80-80A West Cedar, 67-69, 90-92 Revere Streets. But confronted in the remaining and larger area with major problems of actual slum conditions, individuals were helpless to go further.

This renovation had for its incentive the infiltration of the trend occurring on the South Slope--the rediscovery of the qualifications of Beacon Hill as a residential neighborhood.

The scattered remnants of former buildings are all that remain in this district to substantiate the definite sentiment that attaches itself to the Hill Region. The tenements have completely annihilated the District's former character.

Deterioration:

The Deterioration and Preservation Map points out the extent of deterioration on Beacon Hill. This is confined mostly to the North Slope with its heart at the intersection of Grove and Phillips Streets.

The blocks north of Phillips Street, on the lower slope nearer Cambridge Street, are more run down than those on the upper slope above Phillips. The lower on the slope, the lower

are the living standards and the greater the deterioration.

Many buildings have become so run down that their replacement is the only remedy possible. In this section the worst deterioration exists beside the best restoration. For example, Primus Avenue and its buildings are adjacent to two that have been condemned. The old houses on Lindall Place next to the Subway have been renovated, while the tenements above on Phillips Street are badly run down and in the worst of deterioration. In very few residential areas is there such violent contrast as is apparent on Beacon Hill. The socially elect exist side by side with the indiscriminate.

Factors in Deterioration:

The factors in deterioration are largely inherent in the site.

1. Orientation: The District is on a steep slope with northern exposure. The layout of the streets gives many of the buildings north exposure; while the shadowed areas due to slope and high buildings on streets far less wide than the buildings are high further increases lack of sunlight. Here, east and west, and a large percentage of northern exposures predominate.
2. Steep Grades: The grades of this area vary on the north and south streets from 10% on Grove to 12% on Irving. In the blocks between Phillips and Revere the rise becomes greater, increasing to 11% on Grove, 14.5% on Garden, and 13.3% on Irving. For tabulation of these grades see Appendix A. The entire section may be said to have, generally, a slope of 10%.

Fire Menace: Parking on these comparatively unused streets is a serious interruption to traffic movement. In winter, the steep grades make this increasingly difficult. The steep grades combined with the density of the buildings is recognized by the Fire Department as a serious safety menace.

3. The Elevated Entrance: The entrance of the Elevated into the hill in the block bounded by Cambridge, Grove, Phillips, and W. Cedar Streets causes a blight on surrounding property. The vibration of the moving cars transmits itself to the buildings surrounding the tunnel entrance. This blight is irremedial but in new housing should not be perpetuated. This consideration leaves the block unsuited for housing purposes, yet for the benefit of other property the subway entrance must be screened.

4. Cheap Construction: The tenements were erected to satisfy demand for low-priced housing produced by the influx of immigrants. They were built for speculation. Their condition after only 30--40 years contrasted with the state of preservation of the older houses after over 100 years very forcefully points out the result of poor construction.

5. High Buildings: The buildings are too great in height for the width of the streets, producing large shadowed areas. Not all the buildings are built to the full 5 stories allowed by the zoning law, but if they were, adequate light and air for buildings would be seriously impaired. This points to the necessary lowering of the height restrictions in the zoning law. Only one building, the Beacon Chambers, in this neighborhood is 10 stories high. It is at the eastern edge where it least hinders any development of the area being studied.

6. Lot Coverage: The map showing the lot coverage graphically reveals the high percentage of lot coverage and lack of open space on individual lots.
The blocks in this section are built over to an average of 73.5% coverage, while individually the block coverage ranges from 57% to 94%.
These are all too high to assure the amenities of life.

7. Lack of Play Space: With buildings covering the greater part of the land, children are forced to play on the streets. Even this is impossible on the north and south ones because of their steep grades. As a result Myrtle, Revere, and Phillips Streets are used by children for play space. The playgrounds within the district are overcrowded and inadequate in size. Bowdoin Playground cannot hold all who wish to use it, and it is paved with concrete. The Peter Faneuil Schoolyard, likewise paved, is only available at school hours and is divided into two insufficiently large areas by the school itself. The Phillips schoolyard is totally inadequate. However, the District is not far from the large recreational areas of the Embankment and the Common, so that the lack of play areas within are not so serious as they otherwise would be.

The Street Layout:

The streets, well adapted in principle to neighborhood planning in their terminations within the District and their lack of through connections, are too many in number. The resulting blocks are too small for large-scale planning necessary in any wholesale rehabilitation.

In any crowded section, the streets form the only source unencroachable upon for assuring light and air; the presence of a large number of streets is the only effective check to further crowding. Of the five north and south streets, excepting the boundary ones, W. Cedar and Joy, at least three are superfluous in replanning.

Factors in Preservation:

This area is unsuited for any use other than residence. The same factors which operated in militating against change in the whole of Beacon Hill apply to this North Slope District.

Topography: Chief factor in preventing wholesale spread of the downtown business area over this district. Business will not go up hill.

Poor Character: The poor-grade nature of business on Cambridge Street before the widening prevented any attraction by high quality business.

The Park Areas: The Embankment and the Common afford nearby recreation areas.

The Zoning Law: Prevents the erection of a wall of high buildings on Embankment Road and Charles Street cutting off the openness of the District.

Sentiment: Attaching itself to the district for its associations and its old buildings.

Openness to the View and Prevailing Breeze:

From the upper slope there is a splendid view to the west down Revere Street to the Charles River and across it to Cambridge, with the Technology buildings as a focal point. Myrtle Street also gives, over the tops of the houses on W. Cedar Street, a view of the setting sun and reflections on the Charles. The vista down Anderson Street, across Cambridge, is terminated by the fine Bulfinch Building of the Massachusetts Hospital.

The prevailing breeze is from the Basin, with other times a breeze coming from the north. In regards to the prevailing winds, the North Slope has always been as well favored as the South Slope.

Schools:

This District is embraced in the Wendell Phillips District of the public School system, which includes only one school outside this housing area--the Winchell School, across Cambridge on Blossom Street. The enrollment is 1252 pupils (1933.) The buildings of the School District, their grade range, and date of construction are:

Wendell Phillips	Boys only	Grades 1--6	1861
Sharp	Girls only	Grades 1--6	1824
Grant(now discontinued)			
	Boys only	Grades 1--6	1852
Peter Faneuil	Boys only	Grades 1--4	1910
(Kindergarten and Special Classes)			
Winchell	Girls only	Grades 1--6	1885
(on Blossom Street)		Add.	1907

In addition, the Bowdoin School, now the Boston Clerical School, built 1848, rebuilt 1896, when it was extended across Revere Street, draws pupils from all over the City. Its location here is no advantage, while its removal would have slight bearing on the school attendance in this District.

The enforced division of boys and girls is an expedient caused by the use of inadequate, old buildings. This system is not followed in the school system at large.

Only one school, the Peter Faneuil, is fireproof or at all a modern building. Excluding this building, the schools are antiquated and lacking in play space. Then too, children should not be forced to cross Cambridge Street.

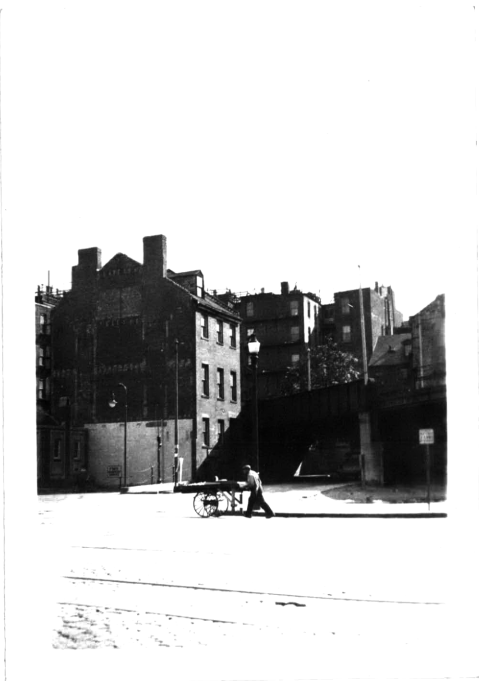
Benefits of Coordination:

By combining these schools into one modern building, maintenance and administration costs would be cut as well as providing better adjustment of pupils to their needs.

The land below the Faneuil School is at present greatly cleared of buildings, the ten houses on Auburn Court having been torn out recently. In addition the City already owns four pieces of property in this area. This indicates one desirability of this land for the new school.

The renovation of the housing district would doubtless produce a change in population of the school district. While this is impossible to determine, the present enrollment is not too large for one modern school.

SOCIAL AND ECONOMIC ASPECTS



Social and Economic Aspects:

Census Tracts:

In 1933 the Boston Council of Social Agencies published study of "Social Statistics by Census Tracts" for the purpose of forming a basis for neighborhood study. From this source, information here is taken. In this study, the City was divided into Health and Welfare areas, such as the North End, West End, Back Bay, etc. Although conditions applying to the whole of the West End, which includes Beacon Hill and the section north of Cambridge Street, cannot be directly applied to the North Slope, they may be considered as significant.

The North Slope coincides nearly with the Federal Census Tract--K--1, including all north of Myrtle and Revere Streets to Cambridge between Joy and Embankment Road. Census Tract--K--2 includes all south of Myrtle Street to Beacon Street between Joy and Embankment Road. Therefore information contained in census tract statistics can be directly applied to the North and South Slopes.

Population Density:

Census of 1930 gives the population of census tract K--1 as 4,258. With adjustment to include the portion of the two blocks on the south Side of Myrtle Street being considered in this housing study, the population is 4,725.

There are approximately 227 people to the acre; on the basis of 4 to the family, the average for the West End, there are 55 families to the acre.

In the Boston Council's study the figure is higher, -- 300--499 people to the acre, for they have discounted uninhabitable land. At any rate, this West End District is the third densest in population in Boston.

Aliens:

In this District, the percentage of foreign born is the third highest in the City. By the census tracts, those aliens born in Russia were found to be especially concentrated in this housing District. While the Federal Census at no place makes any classification by religious faith, this Russian group is important because it is undoubtedly composed of those of the Jewish faith. The percentage of aliens in this District is high--40% to 49%.

Decrease in Population:

There is a decrease of 30% in the population of the West End for the ten-year period, 1920--1930, while the population of Boston increased 4.1%.

Tabulation of Social Statistics:

The following is a tabulation of the position held by the West End among the 14 Welfare Districts of Boston. These can be safely regarded as pertaining to the North Slope, so similar are its conditions to the larger area. These social and health factors show the correlation which exists between them:

3rd highest in Number of foreign born heads of families
3rd highest in Number of aliens
2nd lowest in Number of homes owned
6th highest in monthly median rentals--South Slope is one of the highest.
2nd highest in density of population
2nd lowest in infant mortality
7th highest in new cases of tuberculosis (1931)
9th highest in deaths from tuberculosis (1931)
5th highest in deaths from diptheria cases
3rd highest in juvenile delinquency (1930)
1st highest in juvenile delinquency (1931)
3rd highest in Juvenile delinquency (17--20yrs), (1931)
4th highest in public relief cases.

The number of aliens is high and the number of cases of delinquency is also high--the relation of lack of interior play space may have direct bearing on the latter.

Rentals:

The Federal Census in the information it contains about home ownership, rents paid, etc. offers valuable clues to the economic levels of different neighborhoods. Median rentals for a given tract may be considered as rough but significant guages of the economic status of families in the District.

In Tract K-1, rentals are between \$30 and \$40 per month. Taking three rooms as a basis, the room average is \$10 to \$12. It is known that, in reconditioned properties in this North Slope Section, the rentals have been in excess of \$20 per room per month.

The census figures for Tract K-2, the South Slope, show its median rentals are \$54.60--one of the three highest for census tracts in the City.

Valuations:

The Land Valuation Map shows the average price of land per square foot for each block on the Hill. On the North Slope, even, the values are high. The cheapest land price, in the block damaged by the subway entrance, is \$2.82. The average price over the 14 blocks is \$4.56. (See Appendix B). These land values place this area far out of any possible consideration as the location of a "slum clearance" or low-cost housing project.

Group to be Housed Here:

This area is exceptional as an opportunity for rehabilitation to house the middle-economic group.

The survey of the City's housing possibilities conducted during the winter of '33--'34, determined areas which more feasibly could provide proper housing for the lower wage groups: It is the middle economic group, the white-collar class, which has been left out of housing studies generally. Housing projects have been undertaken for the lower wage group, but turnout in scale of rentals, only possible for the higher wage group. It would be better to design housing for this latter group in the beginning. This economic group as a whole may permit rentals of \$20 a unit for the average within their range.

Middle Economic Group:

The proof that this District offers an exceptional field for living accommodations for the middle-economic group lies in their steady infiltration into rather desolate surroundings of its present condition.

Their further advance into the District is stopped by the presence of the large numbers of aliens, and the rundown conditions. They are here disproving the old belief that a metamorphosis of population groups is not possible by reason of mere renovation of a once blighted district, that the old prejudice is too great to overcome.

This North Slope's location is particularly strategic for these people, which, combined with the appeal of its background coupled with Beacon Hill, creates a strong market demand. With the provision of really favorable living conditions that demand would be difficult to supply.

Patronage Group:

The Patronage Group, largely composed of young professional people, office workers, teachers, students, artists, craftsmen are within walking distance of their working places and other interests.

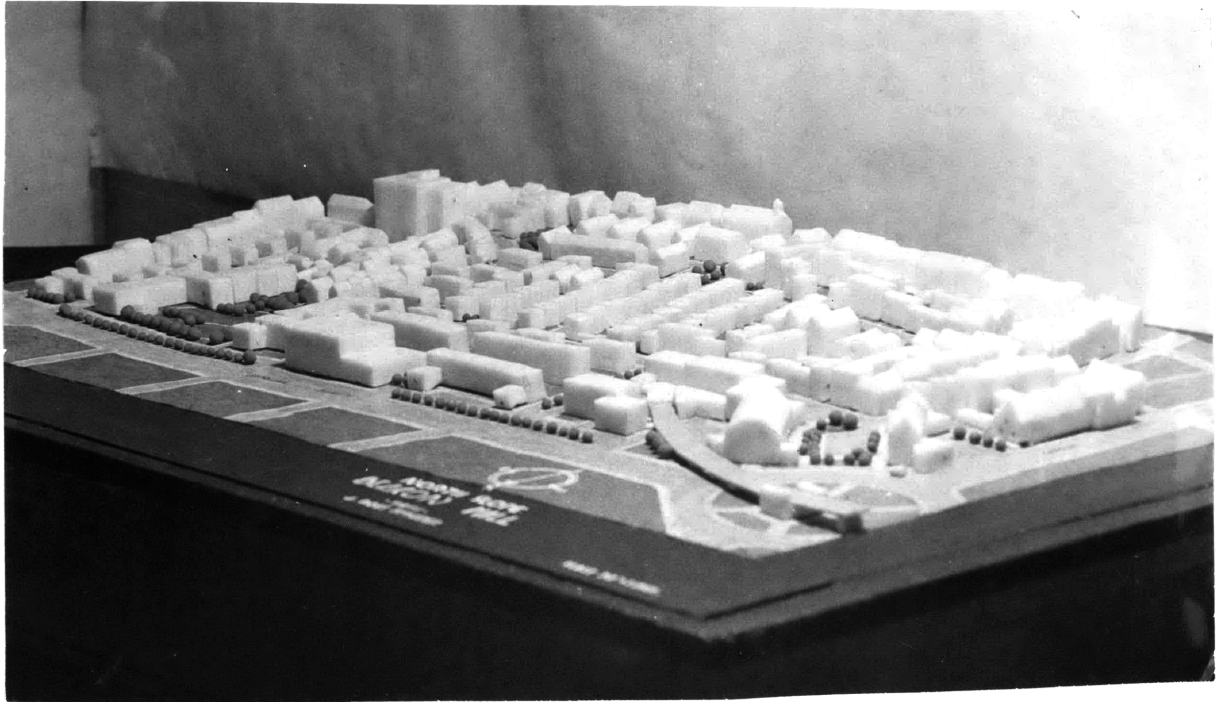
The Charles Street Station on the subway further increases the range of patronage. With seclusion, tradition, views, prevailing winds, transportation, convenience, combined with good housing and ample sunlight, this District would be unequalled as a neighborhood.

It is just these qualifications and latent possibilities that are a spur to rehabilitation and a guarantee of value for the effort. The successful treatment of the disorders within will re-create it as a stabilized neighborhood.

No less important is the provision of the essentials of good living to a social group to whose welfare this District is so suited.

THE REHABILITATION OF THE NORTH SLOPE

The Proposed Replanning



THE REHABILITATION OF THE NORTH SLOPE

A Thesis in Site Planning:

Recreation of a blighted district cannot be accomplished by merely replacing the old buildings with new structures.

A more extensive cure is needed, the street pattern being the first point of attack.

Then, to meet the heavy costs in demolition and new construction, another class of tenants with higher incomes must be brought in. No plan for gradually bringing in such tenants, family by family, will work.

However, on this North Slope, this infiltration has taken place in renovated buildings, but now individuals, faced with deterioration and actual slum conditions, are powerless to go further.

The difficulty is only overcome by a bold, resounding attack. This can feasibly be done by a rehabilitated neighborhood, - replanned with fewer streets, interior play spaces, ample areas of green between dwellings, openness to the sunlight and the views, lower buildings, less lot coverage, first-class construction with modern mechanical equipment, in fact, a complete lessening of the intensity of use, so that it offers the amenities and such all around desirability that the former unpleasantness is forgotten.

It is the thesis of this study that, given the favorable conditions that exist, a solution to the problems of renovation of the North Slope is technically feasible.

Consideration for Replanning:

The North Slope offers a particularly fruitful opportunity for adequate rehabilitation. The district is a comparatively small area, complete in itself, geographically isolated, advantageously located in relation to the central city, bounded on the one hand by widened and improved traffic arteries, and on the other by an established district which guarantees security to improvements.

Advantages in the Area:

There exist these definite assets:

1. Location - near the heart of downtown Boston, within walking distance of places of employment, banks, stores, and theatres.
2. Prevailing winds - sweep over from Charles River Basin.
3. Vistas - the grade offers views of the Basin.
 - Opportunity to develop the vistas up the streets from Cambridge Street and view at end of Anderson Street.
4. Tradition - created by character of the old houses and spirit of charm attached to the name "Beacon Hill."
5. Utilities - public services already installed.
6. Transportation - adjacent to rapid transit.
7. Secluded courts and backways - in high demand for their privacy. People prefer quiet to sunlight in this area.
8. High demand for renovated small apartments - One, two, and three room units in greatest demand.

Disadvantages in the Area:

There also exist difficulties:

1. Steep grades.
2. North exposure - increasing problem in orientation.
3. Major dimension looks out to Cambridge Street rather than the River.
4. Insufficient sunlight - caused by buildings too high for the width of the streets and high percentage of land coverage.
5. Smoke, dirt, noise - difficulty of ash and garbage removal in winter, inadequate play spaces.
6. Difficulty in circulation - caused by double parking on narrow streets.
7. Fire hazard - caused by second class brick and frame construction.
8. Scattered, poor quality local business places.
9. Wrong type of tenancy.
10. Interruptions to traffic on Cambridge Street - induced by the number of entering streets from the Hill.
11. Entrance of Subway under the Hill.

REPLANNING :

The Street Pattern

The street pattern is the key to considerations for rehabilitation.

The first decision is whether the existing streets have in themselves any merit or whether a completely new pattern of curving streets following the contours should be considered.

The latter is discounted, as being impracticable in a built-up area. This requires discarding existing utilities, demolishing all existing structures, the preserved and the deteriorated, providing expensive grading and paving, and completely divorcing the neighborhood from the South Slope.

Given a site with the same topography in a suburban area, a pattern of winding streets following the contours would have been possible.

The existing streets (described in preceding section - see Page 25) have considerable merit in themselves, terminating as they do within the area and discouraging their use by through traffic. However, there is at present an excess number and the blocks are too small for comprehensive replanning.

Consequently, portions of the existing street pattern have been utilized, closing those which need not serve as access to the replanned blocks, and keeping those which have the lesser grades.

The Old Houses:

For the most part, the old houses remain as being desirable both in themselves and for their benefit to the neighborhood to which they are undeniable assets.

Map of Remaining Originals

The spot map showing the old buildings which remain reveals the great extent to which the former character has

been lost. Yet there are two groups of preservation; one, between South Russell and Irving Streets, and the other between Phillips and Revere Streets at West Cedar Street. The scattered remnants increase the difficulties in replanning, for they stand in the way of comprehensive treatment.

The groups which form a unit in themselves, such as the two mentioned, the Rollins Place and Smith Court groups and the "wall" along Pinckney and West Cedar Streets, are incorporated in the replanning.

THE ACCESS STREETS: (For tabulation of street grades, see Appendix A)

From the South

Joy Street

Explanation for revised boundary.

In the early stages of the thesis, Joy Street was taken as the eastern boundary of the replanning studies. However, upon further consideration and close examination on the site, the character of the buildings on the eastern side and the traffic conditions determined that both sides of Joy Street must be included.

The rear of the houses on the west side of Hancock Street now become the eastern boundary. Consequently, revised statistics, differing for this reason from those listed on the "Population Spot Map and the "Existing Conditions" Map are given in Appendix "C".

Joy is the first street east of Charles that crosses the Hill from north to south. There is traffic which uses this cross access, therefore, the eastern side of the street, from Myrtle to Cambridge Streets, has been widened ten feet, to three car width.

The street is now capable of permitting two-way traffic north of Myrtle Street. South of Myrtle, the direction of traffic remains the same - one way south.

(To change the direction of flow on any of the one-way streets in Boston requires the complete reversing of all, with Washington Street as the backbone.)

Cars are encouraged to enter the Myrtle Street entrance from the Cambridge end of Joy Street, avoiding the necessity for a left turn.

Widening is only possible on the eastern side where the buildings are being torn down for rehabilitation. The western side has prohibitive grading considerations, due to the ten foot embankment at the school yard and the high value, eight-story Beacon Chambers.

Anderson Street:

Anderson Street is taken as the key to replanning. It is the center of the development. The street has for its northern vista termination the Bulfinch building of the Massachusetts General Hospital, and for its southern, at the top of the hill, the facades of the Pinckney Street houses.

Anderson enters the district from Pinckney Street and is the entrance from the South Slope. The northern portion between Cambridge and Phillips Streets is closed to traffic and is developed as a pedestrian entrance with stairs and planted terraces keeping the vista open.

Between Myrtle and Revere Streets, the new buildings are set back so that an open square, planted and terraced, can be introduced into the development to provide an attractive feature at this entrance point and to give a focus to the

architectural composition of the rearrangement.

In addition, this square is warranted; for, by providing one-way movement north and south in its short distance, (60') the drop in grade between Myrtle and Revere Streets is less troublesome.

Access from the East:

Myrtle Street, between Joy and South Russell, is the existing access and is retained as such. Though narrow, two-way traffic can be permitted if parking is eliminated. Therefore, an off-street parking bay is provided on its south side incorporated with the new business and apartment building.

Myrtle is connected to Revere Street across the former site of the Bowdoin School to ease the grade between these two streets, to leave the remainder of Myrtle Street as a private cul-de-sac, and to increase the effective open space provided by the present Bowdoin Play ground.

South Russell, Irving, Garden, and Grove Streets no longer extend across Revere to Myrtle Street. They cut the area into small, unusable block sizes. By eliminating these streets east and west of Anderson, two blocks result which are adequate for re-planning.

Access from the West:

Revere Street

Revere Street is the present access to this North Slope district. It connects through to Embankment Road and the recreational development on the river. It is adjacent to the deep blocks above Phillips Street; east of Grove it is nearly level and a natural service street. The grade from West Cedar to the present Grove Street is 9%, but is continued be-

cause it serves to discourage through traffic from entering this residential area.

Throughout, the replanning is intended to discourage unnecessary through traffic, so that the district's own traffic can enter and depart easily.

West Cedar Street

West Cedar, between Pinckney and Phillips, is undisturbed. The houses facing it are worthy of preservation and form the western boundary of the project. It is not desirable for West Cedar to enter the traffic circle. Its angle of intersection is obtuse and further complicates traffic's movement around the circle.

To relocate it westward to meet an easy curve into and out of the circle would lessen the distance for vehicles to interweave between Charles Street and their division at Cambridge Street; thus, hindering the circle's functioning rather than easing it. To move the street's intersection eastward complicates the entrance of Cambridge Street into the circle.

Consequently, the street is closed entirely between Phillips and Cambridge Streets. Cars moving on West Cedar either leave at Revere or continue into Phillips, passing the new shopping center, and leave by Grove Street.

Access from the North:

This North Slope area should be largely self-contained. It is, therefore, important that the neighborhood unity be safeguarded. So small an area does not require or admit of many communications to the surrounding traffic arteries.

Once the character of the neighborhood is established, the danger of unfavorable change is lessened by blocking access to the north. It should be bulwarked in that direction as Pinckney Street has bulwarked the single house district on the South Slope from the spread of the present conditions on the North Slope.

Grove Street

Two access points from the north, near either border, will serve instead of the present six.

Grove Street, because of its lesser grade and location far enough away from the Cambridge Street mouth of the traffic circle, becomes the west-north access.

Grove has been widened on its west side to permit separation of the traffic directions by a center planted strip. This not only gives a more attractive entrance feature, but also further screens the housing to the east from the subway and the shopping center.

Irving Street

In order to secure a larger block for replanning, Irving Street is taken as the east-north access. It is curved into Phillips Street, the lower east and west service street. Above Phillips, the street becomes a cul-de-sac, serving the existing old houses. It is terminated purposely to indicate its closing by a building constructed to take advantage of the grade opportunity for incorporating a garage in the basement level.

The Planted Strip

In the replanning, the street line of Cambridge Street is set back to allow for a parallel service street. These are separated by a planted strip which forces the cars to enter and leave at a point where

weaving into the opposite directional flow may take place. The possible interruptions to traffic on Cambridge Street are lessened to Grove Street, the Garage, and Joy Street, thus increasing the efficiency of Cambridge Street.

This strip provides service access to the business places. East of the Garage the strip is swelled at each end to allow the car turning left to stand while waiting to make the turn. The swell also allows a lane for parked cars along the service-road. However, its main purpose is to protect the rehabilitated North Slope from the district north of Cambridge Street.

(It is assumed that when the West End is rehabilitated a similar strip will be provided on the north side to complete the effectiveness of such strips.)

The planted strip had to be broken in front of the Cambridge Street Garage, a modern, fireproof, high-value building, which could not feasibly be removed. A main point of entrance and exit occurs here, giving the garage full advantage in its location for servicing cars.

The Interior Streets:

South Russell

This street at the north end is closed and turned into Irving at the point where the old houses are not preserved. The former street area becomes part of the school lot. The southern end is turned into Revere to transform the street into a loop serving the residents only.

Garden Street is entirely eliminated, its right of way becoming a pedestrian walk, planted and terraced. The closing of Grove, Garden, and Irving between Phillips and Revere Streets, results in two "super-blocks", capable of comprehensive replanning.

Orientations:

The ultimate problem of providing sunlight in all living quarters becomes more acute on this site with its northern exposure. The emphasis is placed on east and west exposure, with the major demension of the houses north and south to give the desired exposure. The buildings are also spaced at distances greater than their height to avoid shadowed walls.

Those buildings which must have north and south exposure are planned to have the main living rooms on the south.

Block Treatment:

At the base of the hill, deterioration is the greatest, land values are lowest. In the new block between Cambridge and Phillips the lowest cost apartments are located. The block plans run east and west required by the necessity for maximum south light in this location at the base of the hill.

The block is deep enough to allow three rows of units. Along Cambridge Street the buildings on either side of the garage are provided with stores on the first floor with apartments above. These are entered, not from Cambridge Street, but from the garden on the higher south side.

The southern most row is broken to allow a wider angle of sunlight to reach the inner row. Between the buildings, the space is planted and utilized as garden and play space.

Blocks between Phillips and Revere:

In these blocks, next higher up the hill, are the higher cost apartments. The two blocks, east and west of Anderson Street, are planned with two and three room apartment units, three stories high. These

units step down the hill at half story intervals. The existing street lines account for their slightly diagonal arrangement. These buildings, entered from Anderson Street, are set back from the present street line ten feet to give more space between them. The other rooms are entered by terraced walks leading between Phillips and Revere Streets. In the rear of each unit are terraced gardens. These buildings have flat roofs intended to be used as roof gardens.

In the portion of this block between the closed Garden and Irving Streets the pattern is changed. The units run east and west in order to allow more buildings with the same amount of open space and to preserve a house at the corner of Phillips and Irving Streets.

At the west end of the other block, the new construction is incorporated with the renovated Primus Avenue development.

(The street facade of these two buildings would have to be remodeled.) The present garden is extended to form an ample court. The rooms face this. There is a 15' retaining wall, left by excavations long ago, between this lower development and the old houses above entered from Revere Street through Goodwin, Sentry Hill, Bellingham, and Goodwin Places. A row of garages, screened from the court by planting, is placed against the wall. The roofs of these garages are treated as a garden terrace.

Block between Revere and Pinckney:

In these two blocks, on top of the hill, are the highest cost apartments and the single family houses adjacent to the single family district to the south.

West of the square, the buildings are designed to take advantage of the swing in the

topography which gives a view over the Basin. The buildings step down the hill with flat roofs to be utilized as roof gardens. Access to the unit is a driveway over the existing extension of Grove to Myrtle Street. Differences in level allow a basement garage entered, after some excavation, over the location of the present Myrtle Street. The roof becomes a terrace. The eastern section of the unit, on the highest elevation, is six stories high and the only elevator apartment. A small play yard is provided in the center of this development between the upper and lower entrance drives.

The lower end of Myrtle is a cul-de-sac with a garage compound provided. The connection between the two levels is by a flight of steps.

East of the Square, Myrtle remains a cul-de-sac. Here six and eight room, single family houses are planned. On the north side of Myrtle, the houses retain southern exposure. The full story drop between Myrtle and Revere allows basement garages. The houses on Pinckney Street are untouched; the "wall" continued. The several buildings in need of renovation are considered as being done by their individual owners.

The Block between Joy and South Russell:

Here, on Smith Court, new construction is fitted around the old buildings felt worthy of saving. This results in a seemingly disorderly arrangement of buildings, but advantageous use of the available space is made. The old stable-restaurant is removed and, in its stead, a three story apartment with units of three and four rooms is built. The entrances are not from Joy Street, but from the western or garden side. A driveway and garage are also incorporated.

On the north side of the new diagonal connection between Myrtle and Revere Streets, the buildings are stepped back, giving each four

exposures. These are planned as one-room apartments.

The Block Around the Cambridge Subway:

To all the difficulties presented to block arrangement, is added the area around the entrance of the subway into the tunnel under the Hill. The block is left unsuited for housing, yet the structure must be screened by buildings to eliminate its blight spreading to the surrounding blocks. The closing of West Cedar permitted a larger area for more adequate planning. This area becomes the shopping center for the North Slope. It is also adjacent to the existing business center on Charles Street and in the direct line of pedestrian travel to the Charles Street station and underpass.

The Buildings:

The Housing Units

In order to create the proposed frame for the housing, only the pattern can be indicated. The details of floor plans and facades constitute a later stage in the development for solution by the architect. In particular they evolve a study of the existing foundations, an evaluation of new building materials, methods of construction, and the characteristic economics of large-scale building.

For this reason, the actual floor plans and apartment arrangements are indicated only in the block form, except a typical unit of the Anderson Street groups shown on the final drawing.

However, the housing is intended to fulfil the variety of needs presented by the site. It is necessary to provide for single family houses, one, two, and three room apartments. The buildings are all intended for

combinations of one and two story spaces, which may contain one, two, three, and, in special cases, four, and five room suites. All the latest technical improvements in housing which advantageously extend the usefulness of the multi-family dwelling - first-class construction, oil burning heating units, mechanical refrigeration and incineration, and the latest methods of servicing, operating, and control - are incorporated.

Direct street frontage is eliminated.

The "row" type of house is used. Provided with improved plan and broader frontages (30'), cross ventilation and sun light on at least one side are assured. The rooms are larger, yet conveniently compact, affording to each tenant the maximum of privacy and living independence. In addition, special work rooms, storage, and laundry rooms are included in the basements.

Architectural Treatment

The tradition and character of Beacon Hill indicate in the new construction a return, in spirit at least, to the inherited precedent. Brick is intended for the facades which have wall surfaces unbroken and free from detail, large and regularly spaced windows.

Treatment would vary with group units.

Studied use of the precedent should restore the neighborhood to its modest, but harmonious relation to the Hill district, at the same time, recognizing the technical and mechanical advances in design.

The Public Buildings:

The School

The present schools have been described in the previous section of the report(Existing

Conditions). One building, only, will serve this neighborhood.

The Faneuil School, a fireproof building, is taken as the one to remain. To have combined the sites of the Phillips and Grant Schools would have given a more central location in the development, but it is necessary to care for children in the section east of Joy Street. Therefore, the Faneuil School location is more suitable. In addition, there are three pieces of city owned property between the school and Cambridge Street, as well as 10,024 square feet of already cleared property. So that, with the closing of the lower end of South Russell Street and combining the sites of badly deteriorated tenements, a school property of 89,000 square feet gross area, with 52,325 square feet of play yard is easily obtainable.

The present school district is considered to be reorganized, eliminating the need for the children's crossing Cambridge Street.

The new building is an "L" shaped extension to the present structure. This wing takes this form so that the maximum sized open space can be obtained. (The present school cuts its yard into two, small, unusable spaces.) The three story extension provides for fifteen class rooms, special rooms, and a kindergarten, with east and west exposure. The kindergarten is the semi-circular wing on the west side. It opens on a terrace which leads to the special play yard provided with a lily-pond, sand boxes, swings, and the other playground equipment for small children. The remainder of the school yard is planted around the edges and paved with a bitulithic composition as recommended for such playgrounds by Mr. Gilmore Clark, designer of the new playgrounds in New York City. The yard does not open to Cambridge Street so that, with a fence and a row of planting, the children are adequately safeguarded from the fast traffic.

The Sharp School

This building, at the corner of Anderson and Pinckney Streets, becomes no longer used as a school, but is reconditioned for the G. A. R. Hall and offices for the management of the development.

The present G. A. R. Hall at Joy Street and Smith Court is badly run down and becomes part of the site for the new apartment unit.

The Police Court and Radio Patrol Station:

The site of the Police Court #3 is taken for the school extension. The new location is the triangular lot at Grove and Cambridge Streets, adjacent to the subway structure. This is logical, because of the jail across Cambridge Street and the inappropriateness of the location for business.

Radio Patrol Station #3, likewise incorporated in the school lot, is included in this new building. The garage opens directly on to Cambridge Street. On the upper two floors of the building are dormitories, class rooms, and rooms for records and equipment. Behind the Police Court, entered from Grove Street, is a garage compound for use of the tenants in the housing east of Grove Street.

The Shopping Center:

The Market

With the closing of West Cedar Street, the block adjacent to the Subway entrance becomes well suited to the requirements for the neighborhood's shopping center. The location is close to the existing local business on Charles Street and is in line with direct movement of people to the Charles Station and pedestrian underpass. A large retail food market so arranged to provide for the various chain stores is placed here.

The necessary, heavy servicing takes place in the rear. Lindall Place becomes the access from Cambridge Street. There is ample space here for turning and parking while unloading. The space under the elevated structure is used for all day parking. In this way no heavy trucks enter the housing area, and the trucks do not interfere with the shoppers' cars. These are parked in the space between the Market and the new buildings fronting on Charles Street. It has entrances from either side with an open connection between the two parking places. This building is set back from Charles Street to allow a parking bay for Charles Street.

These parking spaces are planted and landscaped to eliminate any question of unsightliness. The value of this provision for the shops removes any objection to using valuable land for parking.

In addition to the Market, shops are provided on the north side of Phillips Street, serviced in the rear from Lindall Place. The new building line permits two parking bays, one for angular, the other for parallel parking.

Cambridge Street Business

On the Cambridge service street are two new buildings providing shops on the first floor. These are for the specialty nature - tailors, cleaners, laundry agencies, and drug stores. These are easily reached from the upper slope by the pedestrian walks on the line of the former streets. They also allow the present zoning to be applied, except for lowering the height restrictions from 80' to 55'.

Between Joy and Hancock on Cambridge Street, is another business building with apartments on the upper two floors. This is planned for a restaurant with an open air dining

terrace. A parking space for eight cars, entered from Joy Street, adjoins the restaurant.

To care for the needs of the upper slope, there is the new business and apartment building on Myrtle Street with a parking bay for eight cars in front.

Diagonally across Joy Street, is another, for local shopping. The apartments on the two upper floors are entered from Hancock or Joy Streets. Service here is through the basement, deliveries through the existing alley way. The difference in grade also allows for a garage in the basement.

A "head-in" parking bay is provided on Myrtle Street by setting the building back 30' from the present curb line. The street is then clear for traffic movement.

At present, there are 3,670 lineal feet of business frontage, of which 2,500' is actually occupied. The replanning allows 2,350 lineal feet.

The Beacon Chambers:

This eight story building is not feasibly removable. It is incorporated in the development, renovated into a hotel for guests of residents in the area. It is to have expanded club-room and recreational facilities.

The model reveals the condition which could result on the North Slope under the height provisions of the existing zoning law.

The Cambridge Street Garage:

This high-value building is also incorporated in the development. A large garage is essential because of the impossibility of providing enough garages in each housing

unit. This location is central and permits easy access and, while not ideal, is not objectionable. Its rear or south wall is screened by heavy planting.

The five-story factory building adjacent to it is objectionable. The plan calls for its removal and the site added to the garage.

The Wylnor Synagogue:

This building on Phillips Street is removed. Its members will have moved out of the area to the lower rental housing which they require.

The Congregation Libanity Synagogue:

This organization occupies the historic church on Smith Court. This building, in the rehabilitated plan, is taken over by the Beacon Hill Association and serves as their museum and headquarters.

The Open Spaces and Playgrounds:

No large recreational area for adults is provided in the plan. This is not the serious defect that it would be in any other site plan. The Esplanade, the Public Gardens, and the Common admit of this deficiency.

The school yard is the major children's play space. The present public open space is .7 acres; the replanning permits 2.1 acres, or the required 10% of the entire area, in public open space.

Private gardens, dooryard gardens, and space between buildings is increased, providing for ample air and sunlight. The building coverage is now reduced to 31.1%.

The slightly enlarged Bowdoin Playground is improved with planting and a one story building planned to provide an office for the playground supervisor, toilets, and a room in which craft work - weaving, wood carving, model boats and airplanes - can be taught.

The landscape treatment, composed of easily maintained ground cover vines and hedges and low-mass shrubbery, is designed to isolate the garden spaces, terraces, and intervening common spaces.

The Parking Bays:

These have already been mentioned. However, located where buildings are to be torn down, they provide off-the-street-parking, thus clearing the streets for easy movement of cars and eliminating the otherwise necessary expensive street widening.

Zoning:

Zoning has its limitations. It is laid down upon the already built-up district and has the effect of freezing into permanence the defects in height, coverage, and usage which exist. (See Zoning Map.) In the rehabilitation, the plan becomes the zoning restriction. It is assumed that the plan is correct in its land use, and in heights and coverage; the restrictions are then made that no new building can exceed the 31.1% lot coverage and four stories in height.

Social and Economic Aspects:

In order to eliminate wordy descriptions, the subject matter under this heading is given in appendix form at the end of the report.

Methods of Accomplishment:

To undertake a large scale neighborhood project, there must be unified control. It is likely that no complete assembly of properties for the undertaking is possible without the power of Eminent Domain.

On the other hand, private owners may be willing to turn over their property at low cost after considering the advantages derived from the improvements.

Equity Trust:

An Equity Trust, composed of the property owners as stockholders, is formed to assemble the property, evaluating the individuals' interests according to the income record of the property, its cost and replacement value, the past record of taxation, and the relation to the value of the district as a whole.

This requires less new capital and allows the Trust to utilize the invested capital for improvements. The Trust formulates and administers the stages in the development. It maintains control and secures the advantages due to administration for a common purpose. It may delegate to subsidiaries the construction of units (the development under supervision by the Trust).

This Trust could reconstruct the area according to the plan in stages rather than in one upheaval. For example, the Joy Street units might be re-built as the first step; the schools reorganized as the next; the blocks between Revere and Myrtle Streets rehabilitated as the third; and so on until the project is complete.

Conclusion:

No deteriorated district can be reclaimed piecemeal. The curative process begins with replanning.

Based on sociological study of the existing conditions, due consideration to the area's special purposes and site limitations, the planner achieves a recomposition of its elements.

The North Slope, a residential area, has the qualifications that are a spur to rehabilitation and that guarantee validity to such efforts. The successful treatment of the disorders within the district will recreate it as a stabilized neighborhood, differing only in kind and not in character from the South Slope.

No less important is the provision for the essentials of good living to a social group whose welfare is important to the city.

APPENDIX A

Grades of Area on the North Slope

<u>Street</u>	<u>Difference in Elevations</u>	<u>Rise</u>	<u>Distance</u>	<u>% of Grade</u>
W. Cedar	Cambridge to Phillips 17.6' - 23.2'	5.6'	225'	2 %
	Phillips to Revere 23.2' - 36.4'	13.2'	270'	5 %
Grove	Cambridge to Phillips 16.5' - 42.6'	26.1'	250'	10.5%
	Phillips to Revere 42.6' - 73.5'	30.9'	280'	11 %
	Revere to Myrtle 73.5' - 76.4'	2.9'	100'	<u>2.9%</u>
	Average grade to Revere Street			10 %
Anderson	Cambridge to Phillips 17.0' - 40.7'	23.7'	250'	9.2%
	Phillips to Revere 40.7' - 76.8'	36.1'	280'	10.7%
	Revere to Myrtle 76.8' - 82.5'	5.7'	100'	<u>5.7%</u>
	Average grade			10.2%
Garden	Cambridge to Phillips 17.5' - 36.3'	28.8'	250'	11.4%
	Phillips to Revere 36.3' - 73.0'	36.7'	280'	14.5%
	Revere to Myrtle 73.0' - 86.8'	13.8'	100'	<u>13.8%</u>
	Average grade			10.8%

APPENDIX A (Continued)

Grades of Area on the North Slope

<u>Street</u>	<u>Difference in Elevations</u>	<u>Rise</u>	<u>Distance</u>	<u>% of Grade</u>
Irving	Cambridge to Phillips 18.6' - 33.9'	25.3'	250'	10 %
	Phillips to Revere 33.9' - 71.3'	37.4'	280'	13.3%
	Revere to Myrtle 71.3' - 84'	12.7'	100'	<u>12.7%</u>
	Average grade			12.1%
S. Russell	Cambridge to Myrtle 19.5' - 80.4'	60.9'	640'	9.5%
Joy	Cambridge to Myrtle 23.0' - 76.9'	53.9'	640'	8.4%
	Myrtle to Mt. Vernon 76.9' - 106.3'	29.4'	400'	7 %
Hancock	Cambridge to Myrtle 35.5' - 75'	39.5'	640'	6 %
Phillips	W. Cedar to Grove 23.6' - 43.8'	20'	340'	5.9%
Revere	Charles to W. Cedar 20.8' - 36.4'	5.6'	130'	5 %
	W. Cedar to Grove 38.4' - 74.0'	35.6'	380'	9 %

APPENDIX B

Land Valuations

<u>Block No.</u>	<u>Av. Val. Land per Block</u>	<u>Av. Val. Bldg. per Block</u>	<u>Total Block Area--1 Squ. Ft.</u>	<u>Total Value Land per Block</u>	<u>Total Value Bldgs. per Block</u>	<u>No. of Properties</u>	<u>Aver. Val. Land per Property</u>	<u>Aver. Val. Bldg. per Property</u>
312	\$3.50	\$5.22	119,787	\$430,000	\$625,900	53	\$8,110	\$11,800
313	3.61	6.75	42,164	175,300	286,000	39	4,490	7,330
314	4.37	4.27	27,283	131,500	116,600	18	7,300	6,500
315	3.90	5.47	42,044	212,100	230,100	19	11,160	12,100
316	4.73	4.55	39,981	191,200	182,200	31	6,100	5,880
317	°2.82	4.90	49,745	192,200	244,700	42	4,580	5,820
318)	4.65	4.66	33,312	154,700	166,200	23	6,720	7,230
318A)	7.10	4.69	29,388	211,300	131,800	21	10,060	6,280
320	4.59	5.53	17,835	335,300	441,800	65	5,160	6,790
321	3.32	6.84	38,407	152,400	263,100	33	4,600	7,970
322	3.64	6.04	46,999	162,700	283,900	35	4,650	8,110
323	4.00	6.77	23,439	94,900	158,800	21	4,520	7,560
324	6.25	9.36	5,192	33,400	48,600	4	8,350	12,150
326	6.76	4.57	92,933	693,100	425,500	68	10,190	6,250
327	6.20	8.85	12,198	75,500	108,000	10	7,550	10,800
328	5.28	9.00	13,501	71,400	122,800	14	5,100	8,770
329	6.00	10.00	16,158	98,200	161,600	20	4,910	8,080
330	'7.48	5.30	79,612	643,300	421,400	50	12,860	8,430

° Lowest in column
' Highest figure in column

APPENDIX C

Statistics . . Existing Conditions

As Originally Figured

Including east side of Joy Street
As later determined upon

.6 A - 27,900 sq.ft. in st. area
.8 A - 39,400 sq.ft. in housing

Total Gross Area

20.8 A or 908,714 sq.ft.

22.2 - 970,000 sq.ft.

Net housing area	11.4 A - 502,724 sq.ft.	12.2 A or 542,124 sq.ft.
St. & court area	6.28 A - 273,550 sq.ft.	6.88 A or 301,450 sq.ft.
Non-housing area	3.12 A - 135,740 sq.ft.	3.12 A or 135,740 sq.ft.
	<u>20.8 A</u>	<u>22.2 A</u>

Of this7 A or 30,000 sq.ft. actual play and school yard space
56,800 sq.ft. gross school property
7,000 sq.ft. gross school property

Land Coverage - 73.5% (streets included)

Population - 4,725 - no. people in area

4,258 - Census

227 - People to gross acre

57 - Families to gross acre

411 - People to net acre

110 - Families to net acre

235 - People to gross acre

59 - Families to gross acre

416 - People to net acre

104 - Families to net acre

Building Heights - 4 stories - average

Streets - 30' - 40' wide - average

Grades - 10% average

Orientation - North

Valuations

\$5.10 - average assessed value of land per sq. ft.

\$2.82 - lowest assessed value of land per sq. ft.

\$7.48 - highest assessed value of land per sq. ft.

\$6.63 - average assessed value of buildings per sq. ft.

Rentals

\$30. - \$40. - median monthly rent.

APPENDIX D

Statistics - the Rehabilitated Area

- note - figures include the land in the section
added east of Joy Street

Area - 21.6 A or 948,100 sq. ft.

12.58 A - 554,490 sq.ft. in net housing area
 - 175,650 " " " undisturbed buildings
 - 378,840 " " " new construction
5.72 A - 249,100 " " devoted to sts and parking bays
3.3 A - 144,500 " " " " use other than housing

 - 2.1 A - 91,000 sq.ft. = play space
 - 52,325 " " = school yard
 - 9,850 " " = gross police court area

21.6 A

Land coverage:

31.1% - in new construction

52.3% - coverage for the area (undisturbed buildings included)

Population:

2,463 - people provided for in new construction

1,000 - " " " " old "

3,463 - total no. provided for

160 - people to gross acre
40 - families to " "
275 - people to net "
69 - families to " "

Building Heights - 3 stories (average)

Financial Considerations

The problem of assembling land for district rehabilitation becomes that of discounting unreal values.

In this area the present land values are prohibitive, based as they are on the allowable height and coverage of the existing zoning law, which permits buildings 65' high and 80% coverage (except the zone 100' south of Cambridge Street allowing buildings 80' high and no coverage restrictions).

The desirable standard (as passed on by the Boston Housing Association) is 3½ story buildings, covering only 40% of the lot.

If the area were rebuilt for the best sociological height and coverage, this would discount the present land values to the extent of their being one half their present figure.

The following becomes, therefore, the financial set-up for this study:

Building height	- 40'	
Coverage	- 31.1% (32%)	
Land cost(housing only)	- \$1,932,000	- 378,840 sq.ft. @ \$5.10
(Land Value taken as present average value	- \$5.10	- Building value discounted)
Construction cost	- \$21,857,950	- 8,165,575 cu.ft. @ 35¢
Bldg. cost per room	- \$ 1,160	
Land " " "	- 780	
Total " " "	\$ 1,940	- making land cost 40% of the total cost, which gives a room rental of \$16.20
<u>Using the desired standard</u>		
Land cost per room	- \$ 390	- making land cost 25% of the total, giving a room rental of \$13.

The lowest cost apartments	are desirable to rent for	\$10	per room
			per mo
The higher " " " " " " "		\$14	" "
The highest " " " " " " "		\$18	" "

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James H. Stark, Published by James H. Stark
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M. A. De Wolfe Howe, The MacMillan Company
- 1908--"Consolidated Statutes of City of Boston"
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