



A GROUP OF NEW BUILDINGS

for

BALDPATE, INC.

A private psychiatric sanitarium in Georgetown, Massachusetts.

Submitted as partial fulfillment
of the requirements for the
degree of Master in Architecture.

John W. Peirce
September 15, 1947.

Witch Hill,
Topsfield, Massachusetts.

September 15, 1947.

William W. Wurster, Dean
School of Architecture and Planning,
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Dear Dean Wurster:

Herewith I submit my thesis, "A GROUP OF NEW
BUILDINGS for BALDPATE, INC., a private psychiatric
sanitarium in Georgetown, Mass."

Respectfully yours,

John W. Peirce.

ACKNOWLEDGEMENT.

My thanks are due to Dr. George Schlommer, head physician at Baldpate for permission to inspect the existing plant of Baldpate, Inc. and to use his hospital as the subject for this thesis.

I am also indebted to Mr. George Nelson, superintendent of the Baldpate buildings and grounds, for a long and instructive discussion of the more mundane aspects of the operation of a psychiatric hospital and the practical work side of the occupational therapy program.

Finally, I wish to thank Dr. Benjamin Riggs, formerly of the Baldpate staff, and now attached to the Boston Psychopathic Hospital, for his time freely given me in long discussions of the generalities of psychiatric practice and therapy and the detailed problems of running a psychiatric hospital.

His consistent enthusiasm injected a degree of practical reality into this project without which it could well have become a pale and sterile study.

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Until the last quarter of the nineteenth century, the treatment of mental disease was the most mishandled of all the fields of medicine. On the one hand it was set about with every sort of religious prejudice and superstition, while on the other, the illusive nature of the problem delayed significant advances long after the experimental approach had been accepted and sound clinical methods adopted in virtually every other branch of medicine.

The belief that mental illness was due to the presence of demons and satanic spirits has died hard and can even yet be found in backward parts of the world. Even after most people had outgrown such beliefs, the insane were still treated as beasts or less than beasts bereft of all human feelings and rights. Insanity was agreed to be almost always incurable. Such asylums as there were gave no thought whatever to cure. Custody of the insane, brutal and primitive, was the sole aim, and this was intended not for the protection of the mentally ill but for the protection of society from the irresponsible actions of the insane.

The optimistic rationalism which swept the western world in the late eighteenth and early nineteenth centuries brought a sudden and complete reversal of the belief in the incurability of most insanity. There had been little improvement in methods of diagnosis or treatment. The chances of the patient's recovery were virtually no better than before. The new belief led to many excesses, but unreasoned though its

basis, the change was generally for the better since it stimulated the search for effective therapy.

As mid-century approached, it was generally held that insanity resulted from physical damage to the brain. If this was the case, there should be observable differences between healthy brain tissue and that of the mentally diseased. Years of necroptic work resulted generally in negative results. The foundations of knowledge of the structure of the brain were however laid, on which later investigators could establish their theories and explanations of the functioning of the brain and the nervous system.

Towards the end of the century, lack of progress in the pure somatic attack together with the impetus provided by Freud's new and dramatic approach swung the pendulum to a belief that most insanity resulted not from structural defect but from malfunctioning of a basically healthy brain. The cry was raised to treat not the disease but the patient, not the symptoms of the mental illness alone, but the patient's adjustment or lack of it to his background, his physical and social surroundings.

In more recent years, more complete knowledge has brought about a partial return to the somatic approach. Psychiatric patients are divided into two broad classes, the psychotics and the neurotics. The basis for the classification is easy to state, the practical application difficult in the extreme. The psychotics are those with actual physical impairment of

the nervous system. The impairment may be temporary or permanent. Delirium accompanying a high fever is clearly a case of psychosis, but the impairment of the mind normally lasts only as long as the high temperature. The illogical actions of the psychotic are not the result of outside stimulus, but of faulty responses within his own system. Neurotics, on the other hand, are physically normal people who for one reason or another are unable to adjust properly to the world as they find it. Their illogical reactions are the result of external stimulus wrongly-interpreted. Their treatment is primarily one of reeducation, analysis of their maladjustments, and help in overcoming them. Advanced neurosis may produce psychotic symptoms and psychoses certainly result in maladjustments.

Practical modern psychiatry dates only from the seventies and eighties of the last century. By that time, most states had publicly-supported asylums. The day of the chain and shackle was past, but custody remained the chief aim. An expanding social conscience was forcing the introduction of improvements in patient housing and care, while medical progress could for the first time hold out a more reasonable chance of recovery for the patient. At this early stage of modern psychiatry, help was offered only to the neurotics. The understanding of the workings of the mind was still too elementary and inadequate to permit treatment of physical impairments. The state institutions, swamped with patients, could do little remedial work. A number of smaller private

institutions catering to the mentally-ill dependents of the well-to-do grew up, therefore, to provide both a more humane custody than was possible in public institutions, and an opportunity to use efficiently such therapies as were then available. Treatment was largely by interview, and architecturally the problem was little more than one of housing the patients in congenial surroundings.

The first quarter of the twentieth century brought great improvements in technique and treatment and the general realization that treatment of the patient, not the disease, required that the patient lead a varied and full life of controlled normalcy. Occupational therapy, which in the state institutions had developed primarily as an economical method of floor scrubbing and general maintenance, became in the leading private hospitals a varied and complex technique, an indispensable part of psychiatric treatment requiring special architectural consideration.

At the same period modern hydrotherapy was developed into an essential part of the well-equipped psychiatric hospital. This treatment has in recent years been relegated to a less important place and is generally considered to be of purely temporary value in stimulating or quieting the patient. Continuous-flow baths are still installed in the larger hospitals but appear to be on the way out for the smaller institutions.

In the twenties and to a much greater extent in the thirties, hope was held out for the first time to the psychotic group. A variety of shock treatments were developed, and though their exact effect was imperfectly understood, the

astounding improvement in a large percentage of cases where they were used became a matter of record. Simultaneously the first promising techniques for mental surgery were developed. The typical state institution, swamped as always with too many patients was slow to adopt the latest advances, so the private mental hospital found its field of usefulness greatly broadened. Some of the private institutions confined themselves primarily to the treatment of non-disturbed neurotics, but many began to accept all types of mental patients provided only that diagnosis indicated there was some chance for recovery or marked improvement.

With this broadened scope, the architectural problem of the private hospital became infinitely more complex. There was now a need for the locked ward, where the patient would be under an unobstrusive but none-the-less rigid night and day control, protected from injuring himself or those about him. The disturbed patient is on occasion noisy and his disturbances must be well isolated from the controlled normalcy under which the convalescent and mildly disturbed patient is being led back to a working agreement with the outside world.

The new therapies, fever treatments, electric shock, and insulin shock, all introduce new mechanical and space requirements. Occupational therapy must now be graded to the requirements of a wide range of capabilities, from the disturbed psychotic who may barely have the use of his hands and can never be allowed the use of sharp instruments, and extending upwards to the individual who needs the facilities of a

completely-equipped machine shop to carry out the complex projects necessary to absorb his creative energies and challenge his abilities. The extent of the development of occupational therapy facilities vary widely from hospital to hospital in accordance with the emphasis which this type of therapy receives from the staff. Provisions for mental surgery are naturally confined to the larger hospitals where the large expense of erection and maintenance can be justified by heavy use.

BALDPATE, INC.

Baldpate, Inc. is a private psychiatric hospital organized in 1938 for the treatment of mental diseases. Control of the corporation belongs to Dr. Arthur K. Solomon, professor of psychiatry at the Harvard Medical School. The head of the hospital and its guiding spirit has been Dr. George Schlommer, an eminent psychiatrist who was formerly the head of a 200-bed psychiatric hospital, the largest and best known institution of its kind in pre-hitler Berlin.

Although there are probably more facilities for psychiatric treatment in the Boston area than in any similar area of the country, there is still an unfilled need for additional facilities since patients come to this area from the entire northeast because of Boston's standing as a medical center and of the number and standing of its top-notch consultants.

The Baldpate location comprises upwards of 100 acres including the summit and southern slopes of Baldpate hill which rises to 353 feet in an area where the surrounding lowland averages 100 feet above sea level. The views over the farms and woodland to the south are superb. The location is healthy and isolated. It is cooled by the prevailing southwesterlies in summer and protected by the crest of the hill from the northwest blasts of wintertime. The immediate vicinity is as sparsely settled as any in northeastern Massachusetts.

Baldpate is approximately 30 miles north of Boston and easily accessible over routes 1 and 97, the latter of which passes to the east within a mile of the hill. Route 133

passing a similar distance to the north gives easy access from the cities of the Merrimac valley and southern New Hampshire.

The Baldpate land was first used for farming when it was set off from the common lands of the town. In the eighteenth century an inn was erected. In spite of the long pull which the stage-coaches must have had up the hill, the excellence of the location helped several generations of innkeepers to develop a local fame for their hostelry. Its heyday came in the last quarter of the nineteenth century after its current owner had tripled the size of the original building with an amazing grouping of wings and towers. With the end of the summer hotel boom, the inn's prosperity slipped until people were patronizing it not for what it was but for what it had been. In the middle thirties, it closed its doors and was offered for sale.

Dr. Solomon must have chosen the site for two reasons, first its superb location and second because the buildings could be used for his purposes with the expenditure of a relatively small amount of money for essential remodeling. An excellent new "hospital" for disturbed patients has been built, but the buildings of the old inn involve a series of compromises which make the day-to-day operation difficult and expensive. They offer an old-fashioned hominess which may be a psychological aid. Beyond that, however, the peculiarities of the structure offer nothing but difficulties.

The sanitarium runs at practical, if not theoretic, capacity and every facet of its activities is cramped for

for space.

The inn, as a private institution run for profit, must realize a return on the money invested in it. With building costs as high as they are to-day, it would be difficult to prove the soundness of an investment in such a project as large as would be necessary to permit complete rebuilding. As the years go on, the inn will undoubtedly expand and improve its facilities, but this will be done piece by piece as the money becomes available.

THESIS PROGRAM.

The design of a set of new buildings for Baldpate, Inc. is proposed as the subject for this thesis.

At the outset, it is proposed to make one unlikely assumption and thereafter proceed in a down-to-earth realistic manner.

It will be assumed that a private group, enthusiastic for the work which Dr. Schlommer and his associates have been doing and having faith in their outstanding ability, have raised a fund to erect on the Baldpate site a group of buildings which will provide the best possible physical framework within which to carry on the private practice of modern psychiatry. This fund will be considered large enough to cover the construction of the buildings and no return on the investment is to be expected. Once operating, however, the hospital must be entirely self-supporting. In other words, the building budget will be ample but the plant must be arranged for efficient, economical operation, and low maintenance.

It is hoped that the final scheme will permit erection of the new buildings before razing the old, so that there need be no interruption in the work of the sanitarium.

Since this is a private institution organized for profit, it has been necessary to vary the charges for individual patients in proportion to their ability to pay. The range is from \$60 to \$175 per week. As a result, the accommoda-

tions vary considerably from 4-bed rooms using a bath down the hall to single rooms of ample size with private bath. It seems doubtful that an entirely new building should include quite as wide a variance in standards even if the principle of a sliding scale of charges be maintained. However, the provision of exactly similar rooms for all patients would be wrong. Not only will the institution still be a private one in which those who are better-off can expect better-than-average accommodations if they are willing to pay for them, but from the medical point-of-view some patients require privacy while others do better if they are not left alone. While it is theoretically desirable to assign accommodations solely on the basis of medical need the current expenses of the new Baldpate will be carried entirely by the fees charged. There is no easy solution to this problem, but it is proposed to aim for a realistic balance between medical and financial needs.

The present sanitarium is licensed for 44 patients and usually has 36 to 40 in residence. A study has been made of the existing plant, and it is proposed to determine by conference with the members of the staff the optimum size for this type of private sanitarium.

Preliminary study seems to indicate that the addition of another ten patients would lead to some over-all economies and the possibility of economical inclusion of certain auxiliary services. However, every increase in size is made at some expense in the intimacy of the organization and the

individuality of the care.

PRESENT FACILITIES.

The Old Inn.

Administrative office, reception, doctors' offices.

Dining rooms for patients and staff.

Kitchen and accessory spaces.

Living and recreation rooms.

Accommodations for 28 convalescent or mildly disturbed patients. (There is one nursing station and no strict assignment of rooms according to sex.)

2-room apartment for resident doctor (usually a woman.)

Apartments for housekeeper and assistant housekeeper.

Rest room for off-duty nurses.

Laboratory room.

Sleeping quarters for 5 maids.

Bungalow.

3 patient apartment. This is used for thoroughly convalescent patients or for individuals willing to pay for a maximum of privacy and the services of an individual attendant.

Hospital.

Living room.

Administrative and nursing station.

Kitchenette.

Isolation room.

Hospital - continued.

1 2-bed room, 1 3-bed room, and 2 4-bed rooms (total 13.)

The hospital is a confinement building for actively-disturbed patients. Insulin shock is administered here whether the patient is living in the hospital or the Inn.

Stable.

Occupational therapy room.

Recreation room, an informal gymnasium.

Maintenance.

Converted Henhouse.

Accommodations for the male help - 2 cooks, 2 kitchen men, 3 porters (heavy cleaning.)

Head Doctor's Residence.

Dr. Schlommer's house is located directly opposite the present entrance to the Inn driveway. Its location is good, close-at-hand and yet sufficiently private. Even for an ideal solution this house might well be kept, for it is not a part of the sanitarium plant proper and yet is properly related to it.

Remodeled Residence.

Due to the isolation of Baldpate, housing must be provided for practically all employees. This building is located a mile from the hospital and so is of no use in a proper solution of the Baldpate problem.

THESIS PROGRAM - continued

14.

Hospital - continued.

Remodeled Residence - continued.

Apartments for 2 doctors and their families.

Accommodations for 4 secretaries.

The superintendent of the buildings lives in his own house nearby. His maintenance crew varies with the season and is recruited from local residents.

SITE DEVELOPMENT.

The general location of Baldpate has already been critically discussed in the program for this thesis. Baldpate Hill was found to be entirely satisfactory as the location for a psychiatric sanitarium. The hill, however, is large and it would be a mistake to choose any exact site without first examining the entire area.

I have developed a detailed contour map based on an accurate detailed survey (which unfortunately covers but a limited area) and on the 1942 Coast and Geodetic Survey map which is accurate within the limitations of its 10 foot contours. I have flown over the hill in order to study it and attempt to photograph it from the air. Finally, with a clear picture in mind of what the hill looked like from afar, I spent an afternoon climbing over its sides and forcing my way through the underbrush and second-growth which now covers much of its sides in order to check preliminary conclusions on the actual ground.

A generation ago, the entire hill was either tillage or open pasture with only an occasional woodlot on the steeper slopes to the north and east. Except for the fields close to the old Inn, farming was long since abandoned so that the land is growing up to cedars and gray birch, to pine and scattered hardwoods. Almost the entire hill belonged to the Spoffords, builders of the Inn, but the tract now owned by the sanitarium covers a modest 150 acres. Land in

this area is not valuable, and I believe that any sizable undeveloped parcel on the hill could be purchased for around \$50.00 per acre. If there is a better site on the hill than the present one, cost of the land, should, therefore, be no great deterrent in a broad program for a complete set of new buildings.

The flow of the glacier which moulded this part of Massachusetts was from northwest to southeast and the main axis of Baldpate hill lies on this line. Its sides are steep except on the southeast, the lee side, where the eddies behind the main hill allowed the glacier to drop its material in extended tailings. The hill has three separate eminences all gently-rounded and connected by relatively flat saddles. All three, however, are uniformly exposed to the full force of the winter winds, a fact which alone should rule them out as possible sites.

Studying the hill from the air there appear to be three possible sites at lower altitudes. The highest lies southwest of the crest and just below the 300-foot contour. Here the buildings could nestle into the hillside fully protected from any winds except the fairweather southwesterlies. An interesting grouping could undoubtedly be worked out for this site with the main buildings disposed parallel to the contours, and facing just west of south. This southwest view is good, but neither as interesting nor as broad as the views to the south or southeast, for the land to the west is higher than in the other directions and the relative elevation

therefore less. This site is not owned by the sanitarium. Though the cost of purchasing it would not be large, it would be necessary to construct a service road something over two thousand feet in length, and to bring in electricity and telephone a similar distance. Not only would the initial cost of this work be appreciable, but there would be upkeep as well.

The site of the old Inn has much in its favor. The views are as fine as any obtainable except from the very summit of the hill. It is relatively flat, a shelf on the side of the hill. Taken together with the adjoining site of the existing "hospital" for disturbed patients, it offers adequate space for the requirements of the program. My first studies were made for this site.

The present Inn, however, is much too close to the public road. A small section of the road could be relocated to advantage, improving the grades and eliminating the present dangerous corner at the entrance. Even with this improvement the road would still be too close for an ideal arrangement. Furthermore, the present driveway is also a public right-of-way for access to the fire tower on the high point of the hill and although the number of people who use it is never large, they include hikers and sightseers who are apt to be both curious and noisy.

If the existing site is used for new buildings it will be necessary to raze the existing Inn. To be sure, the inadequacy of the structure for its present use is the chief

reason for this project. If it is necessary to raze the old Inn before erecting the new, however, the entire work of Baldpate will suffer a hiatus, and the organization laboriously built up over the years may well be dissipated while the construction goes on. In addition the loss of income during construction is too serious a matter to be ignored.

Further study made these facts even more apparent and indicated that the third possible site should be studied. This site comprises an open shoulder which extends south of the present "hospital" offering a relatively flat oval area 600 feet long by 400 feet wide. Use of this area allows retention of the present "hospital". The old Inn can function as it now does until such time as the new buildings are ready for occupancy. When the old Inn is vacated it can then be remodeled for use as a nurses' home.

The assistant housekeeper, the maids and the secretaries would also be quartered here. The 2 living rooms would serve admirably as common rooms. The present kitchen and patients' dining room are in an unfortunate 1-story addition which would probably be removed. The male help which is now quartered in a converted henhouse might be housed in one wing.

The present nurses' home is now overcrowded and would become totally inadequate with the contemplated slight increase in patient capacity. The nurses' home in its turn would also undergo minor alterations. It was built

originally as apartments for long-term guests of the Inn and would lend itself to remodeling on an ample scale as a single house for one doctor and his family, or, with less removal of partitions and retention of more of the small rooms, as a two-family house for two doctors.

Use of this site, therefore, allows consideration of my project in the light of a master plan. The first unit to be built would be the "new hospital", a locked ward for semi-disturbed patients, the facility for which the need is most immediate. The second building would be the "new inn" followed by an occupational therapy building. The three new buildings would be located around the edge of the flat oval reached by a drive which makes a logical addition to the present driveway. Eventually the new drive shown on the site plan could be constructed to provide access at an easy eight percent grade instead of the eleven percent plus which now holds on the public road just below the present entrance.

The existing "hospital" would be used with additions which are shown on my plan.

The three-room cottage which is shown might be kept as an additional housing unit. If the present nurses' home is developed as a single family house, this cottage could serve for a doctor who had no children. It is shown on my site plan, but my recommendation would be to sell the building as is for removal from the land.

The head doctor's house would continue in use as at

present.

The ex-henhouse, , now a dormitory for male help and the old barn used in part for occupational therapy, are therefore the only structures for which no use is contemplated.

The new driveways have been laid to take advantage of existing contours and necessitate a minimum amount of cut and fill. All drives and walks would be given a bituminous surface.

There are no large trees on the exact sites of the new buildings. The existing hospital is surrounded by a close growth of hardwoods on three sides. To the south, the growth is more open but the clearing about the hospital is handsomely defined by a row of old hickories. A heavy planting of mixed evergreens, primarily spruce and hemlock is proposed as a sight-and-sound screen between the buildings.

A lawn would be developed between the "new Inn" and the occupational therapy building ^{NOT ONLY} to improve the setting of these buildings, but also to serve as a shaded protected sitting area. There would be sitting areas on the south side of both the "new Inn" and the "new hospital", but other lawns would be limited to those absolutely necessary for preservation of an orderly appearance about the buildings. All planting material would be chosen entirely from native trees and shrubs with strict avoidance of anything exotic.

Town water is already piped to the existing "hospital" and these lines would be extended to the new buildings. Telephone and electricity are carried overhead to the old Inn and thence to the "hospital". Since these lines are in the service area of the developed site they can remain overhead. From the "hospital" they would be continued underground in Parkway-type cable.

There is no public sewer in Georgetown. The existing buildings each have their separate disposal systems which appear to be adequate. The three new buildings might be handled on one system but there seems little advantage in concentrating the sewage prior to dispersing it. Each building will, therefore, have its own septic tank and dispersal trenches.

COMPARISON OF PRESENT AND PROPOSED PATIENT CAPACITY AND
STAFF PERSONNEL.

After my preliminary talks, it seemed to me that Baldpate would be a more efficient organization if its capacity were slightly increased. Apparently my first impressions were correct because I have since learned that they are seriously talking of erecting an additional unit which will both increase their capacity and allow them to segregate their patients into three classes instead of two. My first information was that the Inn operated with four doctors. Later I learned that while it sometimes had four it usually had to make its way on three. The load is apparently too much for three and the gross income insufficient for four.

Patient capacity and staff personnel.

	<u>Present</u>	<u>Proposed</u>
Mild or convalescent patients	31	25
Semi-disturbed patients	-	14
Disturbed patients	9	10
Insulin beds (available as a dormitory for disturbed patients)	<u>4</u>	<u>6</u>
Total patients	44	55
Doctors	3 to 4	4
nurses (including 1 supervisor)	20	24

Patient capacity and Staff personnel - continued

	<u>Present</u>	<u>Proposed</u>
	23 to 24	28
Housekeepers	2	2
Maids	5	6
Cooks	2	2
Kitchen men	2	3
Porters (heavy cleaning)	<u>3</u>	<u>3</u>
Total personnel	37 to 38	44

PLANNING CONSIDERATIONS.

Baldpate is in a sparsely settled area and the immediate public roads are lightly traveled. Nevertheless an atmosphere of privacy and seclusion from all casual passers-by is highly desirable. The buildings for patients should therefore be located well in from the public road. The nurses' home and the doctors' residences should be close to the public road and reached directly from it. While they should be within easy walking distance of the hospital buildings, the connection should appear to be casual and heavy planting should be utilized to emphasize the separation.

Use of the existing buildings as nurses' home and doctors' residences has already been discussed under Site Development. Their entrances are directly off the public road and, with the new driveway, patients need never pass the area. The existing planting and the folds of the hill provide almost the maximum separation possible within a five to eight minute walk.

The hospital buildings proper will be four, a number which derives directly from the medical division of patients and functions. The three classes of patients are - "disturbed", "semi-disturbed" and mild or convalescent. The first two categories require locked wards. From the point of view of meal service and housekeeping, these locked wards would best be treated as pavilions attached to the main

PLANNING CONSIDERATIONS - continued.

building. At times, however, these patients can be extremely noisy. In concentrated metropolitan hospitals adequate acoustic separation must be obtained by expensive heavy construction and high walls enclosing patient yards. One of the most attractive features of Baldpate is the openness of the site. The existing "hospital" for disturbed patients has very smartly provided for restraint of their patients by enclosing the outside yard with a ha-ha referred to as the "bear trap". It consists of a ditch eight feet deep with a stone wall on the outside and overhanging horizontal fencing to prevent possible scaling. The glass wall of the day room looks out over the yard and the ha-ha and it would appear that one could walk at will into the landscape.

The avoidance of prison-like walls has helped tremendously in the handling of disturbed patients, but the problem of acoustic separation can be met only by distance and planting.

My early studies proved that a modified pavilion arrangement was impractical from every point of view, and the final plan shows the buildings separated by a two - three minute walk.

The disturbed unit should be at the dead end of the driveway system so that no one goes there unless they have business there. Next to it should be the semi-disturbed

PLANNING CONSIDERATIONS - continued.

unit with the convalescent unit and administrative functions located closer to the entrance.

Housing for the patients poses two separate problems, one for the mild or convalescent, and the other for the disturbed patients. Those in the convalescent category need supervision and direction but their life is more closely akin to that which would be found in a simple resort hotel than to the life of a conventional hospital.

Psychiatric windows are unnecessary but it is highly desirable to have all rooms on the ground floor and doors to patients' rooms should open out. Entrances will normally be unlocked, but they should be few in number and so located that they will be subject to casual control. An ample living room is necessary and a separate recreation room is desirable where the noise of a pool game or the music of a piano will not disturb other patients. I have located this space on a lower level. It is so arranged that it would normally be open only at specified hours when an attendant could be present.

Charges in the convalescent group are varied by the amount which the patient's family is willing to pay and the class of accommodation offered should also vary. The present basic charges at Baldpate vary from \$65 per week to \$175, and accommodations vary from over-ample private rooms with bath to small dormitories. In a new building, the

PLANNING CONSIDERATIONS - continued.

space economy of wards over double rooms is very little and for ambulatory patients there appear to me to be virtually no operating economies to offset the great loss of privacy for the patients. On the other end of the scale the over-ample room seems unjustified.

A range in the desirability of the accommodations is both necessary and desirable and this is provided by furnishing the following:

- 4 single rooms with private bath
- 1 double room with private bath
- 4 double rooms with private lavatory (basin and toilet)
- 1 single room with basin
- 5 double rooms with basin

The double room with private bath could be assigned to one person who wished the maximum of comfort and was willing to pay accordingly. The single room with basin is intended for the patient whose condition ~~almost~~ requires a private room, but whose budget cannot compass a room with private bath.

It will be noted that there is no assignment of rooms according to sex. The need for separation of the sexes is, apparently, not as necessary in a small hospital as in a large one. Furthermore, the numerical balance between the sexes varies widely from time to time so that elasticity in room assignments is essential.

PLANNING CONSIDERATIONS - continued.

Basic charges for all patients in the two disturbed units are at the same rate, and rooms are assigned purely on the basis of medical need. Some hospitals provide individual cell-like cubicles for such patients but Baldpate prefers double rooms except for the short periods when a patient becomes violent. The "new hospital" for semi-disturbed patients will consist of two isolation rooms and six doubles. All bathroom activities in the disturbed units are attended functions and the bathrooms are normally locked. Nevertheless it is of advantage to have baths and lavatories adjoining each room. Since the doors are normally locked there is no objection to having different sexes in rooms sharing the same facilities and elasticity of assignment is, therefore, unimpaired.

The day room will be similar to that in the existing "hospital" with large areas of herculite glass and access to a yard enclosed by wing walls and a ha-ha.

The existing "hospital" will continue to serve as a locked ward for disturbed patients. In its present arrangement its service facilities are cramped and it has only one isolation room. Insulin treatment is given to some patients in all three categories, but has been given in the disturbed unit, because it is easier to bring the better adjusted patients to the "hospital" than to move the disturbed ones. Insulin treatment was in use at

PLANNING CONSIDERATIONS - continued.

Baldpate when the "hospital" was built, but it would appear that it was not considered as part of the architectural problem, and better provisions should be made than are available at present.

My plans call for two additions to this building, one containing two isolation rooms, and the other enlarging one of the present rooms for use as a six-bed insulin ward. The present isolation room would be divided to provide a three-fixture bathroom, an insulin bar and a linen room primarily for insulin patients.

In insulin therapy, the patients report in the early morning immediately after breakfast. They are put to bed and receive their injections. The injections produce coma which lasts most of the morning. On coming to, they are given medicinal drinks to restore their sugar content. A bath or shower is then in order, because they have perspired profusely while in coma. On dressing they are immediately served a hearty meal in the day room and are then ready for return to their normal quarters.

The "mild" or "convalescent" unit houses patients who are in most respects normal. A locked ward is not needed and their life should be one of controlled normalcy. The use of the psychiatric interview is greatest with this group so that the doctors' interview rooms or offices can properly be attached to it. With the doctors' offices go

PLANNING CONSIDERATIONS - continued.

administrative functions. Virtually all of these patients are ambulatory. They require living and recreation rooms and a patients' dining room.

A staff dining room is also needed and, attached to these, the main kitchen where food ~~where food~~ is also prepared for distribution in heated carts to the disturbed and semi-disturbed units.

It is desirable to have one unmarried doctor on the staff who can be available for emergencies and is therefore best housed in one of the hospital buildings. He is, therefore, provided with an apartment in the main building. The housekeeper is also provided with an apartment. One of the more senior maids is also housed here so that there can always be someone at hand who can be called on for out-of-hours housekeeping problems.

The nurses have a locker-room-lounge, which provides for the occasional nurse who lives outside, and serves all the nurses as a spot to relax when their free time is insufficient to return to the nurses' home.

The remaining functions of Baldpate will be housed in an occupational therapy and maintenance building. This structure is divided into two distinct parts. The first contains the Occupational Therapist's office, a studio and well-equipped craft shop. It would cater to the widest range of abilities. In the south end is a gymnasium or an exercising room. This is large enough for volley ball

PLANNING CONSIDERATIONS - continued.

and high enough to allow for a basketball basket. Though desirable, it would be financially unjustified, if this room were long enough for a badminton court.

The maintenance end of the building contains, garage, tool room, repair shop and the superintendent's office with a boiler room in the basement where steam will be generated for all the new buildings. It is desirable to have maintenance contiguous to occupational therapy, because practical work is frequently the best therapy and the patients often assist very largely in maintenance work, particularly of the grounds.

Given the ample country site which is Baldpate, the layout and general character of the buildings should be open, free and informal, as non-institutional as possible. Since all patients' rooms are best located on the ground floor, a primarily one-story layout seems called for. The choice of flat or pitched roofs is optional, but to my mind the flat roof is never as informal as the pitched, and, in the minds of many people, is still connected with something commercial or institutional; at least it speaks of something non-residential. I have, therefore, chosen a pitched roof because I like the shadow lines of the overhanging eaves, because the attic space allows lightening of the roof members by trussing the rafters, because this space simplifies the insulation and condensation problem, and because it serves

PLANNING CONSIDERATIONS - continued.

as an accessible raceway for pipes, ducts and cables, both in the original work and the later alterations.

STRUCTURAL NOTES.

The program for this thesis hypothesizes an ample building budget but requires that maintenance be paid out of income. The building should, therefore, be sturdily constructed and capable of taking a good deal of wear and tear without major upkeep. A certain degree of fireproofness is essential, but first class construction would be unreasonable in a building where all the patients are located on the ground floor. Second-class construction with load-bearing masonry walls appears to meet the requirements. Exterior wood trim will be kept to a minimum to reduce annual painting.

Main Building: the "New Inn"

Foundations: 12" poured concrete carried to grade.

Exterior walls: 8" brick - 1³/₄ wood furring, metal lath and plaster

Basement partitions: bearing - 8" concrete block - painted;
non-bearing - 4" concrete block, painted.

First and second floor partitions: bearing - 8" cinder concrete block, plastered both sides;
non-bearing - 3" cinder concrete block, plastered both sides;

Floor construction: basement and first floor not over basement- 4¹/₂" concrete slab, reinforced over utility tunnels;

STRUCTURAL NOTES - continued.Floor construction - continued

Living room floor and area over living room - open
web steel joists 2" gypsum plank;

Other first and second floors - wood joists

Finish floors

Living room, staff library select oak, 2 $\frac{1}{4}$ " face

Basement service areas granolithic

All other linoleum

First floor partitions

Bedroom wing cinder
4" ^{cinder} concrete block, plaster-
ed both sides

Administrative wing, bearing 8" cinder concrete block,
plastered both sides

non-bearing 4" cinder concrete block
plastered both sides

Kitchen dining room wing 2 x 4 studs, metal lath and
plaster both sides

Second floor partitions 2 x 4 studs, metal lath and
plaster both sides

Ceiling joists and wood
rafters trussed wood

Ceilings: kitchen, dining

rooms, first floor corridors $\frac{3}{4}$ " metal lath and plaster
± acousti-celotex

elsewhere throughout $\frac{3}{4}$ " or 1 $\frac{1}{2}$ " metal lath and
plaster, sand-finish

STRUCTURAL NOTES - continued.

Roofing: Aluminum interlocking shingles

Gutters: 16 oz. lead-coated copper
~~shingle~~

Insulation: top floor ceilings 4" Rockwool bats with vapor seal

exterior walls 2" blanket in moisture-proof envelope

Window sash: steel - architectural projected. Where the sash open, the lower horizontal lights tilt in, the square lights are outward opening awning type. About 1/2 the sash will be fixed.

Glazing: large lights in living room and entrance

lobby 1/4" plate
all other double thick "A"

Interior doors: wood, solid core, slab, 1 3/4" thick

Exterior doors: wood, 1 3/4" thick

Interior trim: wood to detail

All trim would be kept as narrow and flush as conditions permitted.

Semi-disturbed unit: the "New Hospital"

Construction will be similar to the main building except as noted:

Semi-disturbed unit - continued

Bedroom partitions: 2 withes of 3" cinder concrete block on outside and separated by 3/4" celotex.

Other partitions: 3" cinder concrete block plastered both sides

Floor construction: 4 1/2" concrete slab

Ceilings, patient areas,
except baths 3/4" metal lath and plaster plus acousti-celotex

elsewhere 3/4" metal lath and plaster

Window sash

non-patient areas as in main building
large lights in day room 1/4" herculite in wood frame
opening sash in day room steel, projected, awning type 1/4" herculite, key operated

Bedroom sash

large light is double with 6" space between for venetian blinds, outer glass is 1/4" plate set in wood, inner is 1/4" herculite in steel frame removable for cleaning.

Triple light sash is a steel frame, projected, awning type with gang operator, double thick "A" glass. Stainless steel psychiatric screen is placed 6" inside to protect venetian blind. Screen is hinged and opens only with a key.

STRUCTURAL NOTES - continued

Interior doors as for main building, but
all bedroom doors gasketed at jambs and heads
with drop weatherstrip at sill.

OCCUPATIONAL THERAPY BUILDING.

Construction will be similar to main building except
as noted.

Exterior walls:

Maintenance wing 8" concrete block stuccoed
on exterior

Occupational therapy wing 8" concrete block with 4"
brick on exterior

Partitions 4" cinder concrete block,
painted

Floor construction 4½" concrete slab reinforced
over utility tunnel and
boiler room.

Finish floors

Gymnasium strip maple on wood screeds
over waterproof membrane

Craft shop Granolithic

Elsewhere in Occupational
Therapy wing Linoleum

Maintenance wing Granolithic

Ceilings:

Gymnasium and garage insulating board applied to
underside of rafters.

STRUCTURAL NOTES - continued.OCCUPATIONAL THERAPY BUILDING - continued

Ceilings, continued

Elsewhere

3/4" metal lath and plaster

Garage doors:

aluminum overhead, tilting
in.

Other doors

2 panel fir, 1 3/4" thick

LIGHTING.

Fluorescent strip lighting in coves will be used as the primary light source in all the large rooms in the new Inn and the day room in the new hospital. This will be supplemented by standing lamps and adjustable wall brackets wherever a concentrated light is needed. Each bedroom will have a fluorescent strip in a cove over the window. Bedrooms in the main building will have adjustable bedlamps and one standing lamp. Those in the new hospital will have a non-adjustable light over each bed and at the desk. The doctors' offices, business office and the living quarters on the second floor of the main building will be equipped with semi-indirect ceiling fixtures.

All bathroom lights will be semi-recessed ceiling fixtures. Semi-indirect ceiling fixtures of varying types will be used in the service areas.

A battery-operated emergency lighting system will be provided in the nursing station and first floor corridors of the main building and in the corridor, day room and

LIGHTING - continued.

nursing station of the new hospital.

HEATING.

The old Baldpate buildings each have their separate heating systems and no change in their heating arrangements is contemplated.

The existing hospital has an oil-fired hot water system with convectors. The small size of the additions to this building make it appear likely that the present boiler can handle the few necessary additional radiators. The temperature in the insulin room must be carefully controlled without drafts. A schoolroom-type conditioning unit will be used for this purpose. It is understood that cooling will not be necessary.

Radiant heating is planned for the three new buildings because the complete absence of any controls with which the patients can tamper is added to the other advantages normally claimed for this type of heating. Wrought iron coils will be located in the concrete floor slabs where possible. Where no floor slab is present coils of 1/2" copper will be located in the ceiling.

The buildings would be appropriately zoned, the new hospital in two zones and the main building in three.

The hot water supply will come from two boilers located in the basement of the Occupational Therapy building.

STRUCTURAL NOTES - continued.HEATING - continued

It will be brought at a temperature close to 212° in insulated pipe to the main building, and thence to the new hospital. Each zone will have its own circulator modulating valve and room thermostat. The modulating valve will recirculate sufficient water to establish a maximum temperature not over 180° in the radiant coils.

Domestic hot water will be furnished in the new hospital and the main building by use of storage tanks and indirect heaters connected to the main supply line. In the Occupational Therapy building where the demand is small an instantaneous heater will be used.

Boiler water temperature will be maintained by use of an aquastat. When the radiant coils are in use the zone circulators will provide a sufficient, positive circulation in the entire system. A booster circulator will also be necessary in the main line to maintain an adequate temperature in this line during stand-by periods.

COLOR AND DECORATIVE TREATMENT.

It has long been recognized that the use or absence of color has a great psychological effect and can be of assistance in psychiatric therapy.

Those rooms which are to be used by groups of patients should be gay and cheerful. The doctors' offices should be subdued and calming. About half of the patients' rooms should create the same effect as the group rooms. One quarter should be definitely stimulating and the other quarter, including the isolation rooms and the insulin dormitory, should be distinctly quieting in effect.

Correct choice of intensity and value is more vital than color. Hot colors and strong contrasts are generally stimulating; the greens, grays, and blues generally quieting.

NOTES FOR COLOR SCHEDULE.

EXTERIOR. red brick, aluminum shingles, white wood trim, gray green steel sash.

INTERIOR: wood trim throughout; natural color using a Minwax-type of finish; standard type on floors; quick drying elsewhere.

LIVING ROOM IN MAIN BUILDING: blue-green walls and yellow-tinted ceiling with bright accents of color in upholstery and hangings.

CORRIDORS: (maximum light needed)
ceilings- white; floors - gray; walls- three tones of clear yellow, darkest at the floor.

COLOR AND DECORATIVE TREATMENT - continued.ROOMS FOR DEPRESSED PATIENTS.

CEILINGS: tinted in clear colors of high value and low intensity; color to contrast with walls.

WALLS: each wall to be different in value and intensity, but fairly close to the others in color.

FLOORS: darker variants of the ceiling colors.

ROOMS FOR EXCITED PATIENTS.

All surfaces to be in harmonizing pastel shades.

ENTRANCE LOBBY.

CEILING: pale yellow

FLOOR: slate blue inlaid rubber tile, marbled with touches of white and dull green.

NORTH WALL: natural fieldstone.

OTHER WALLS: coral.

THE EXISTING HOSPITAL FOR DISTURBED PATIENTS

As published in the *Architectural Record*, December 1941.

HEALTH

Photos by Cushing-Gellatly



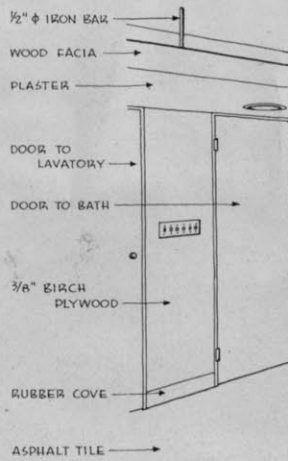
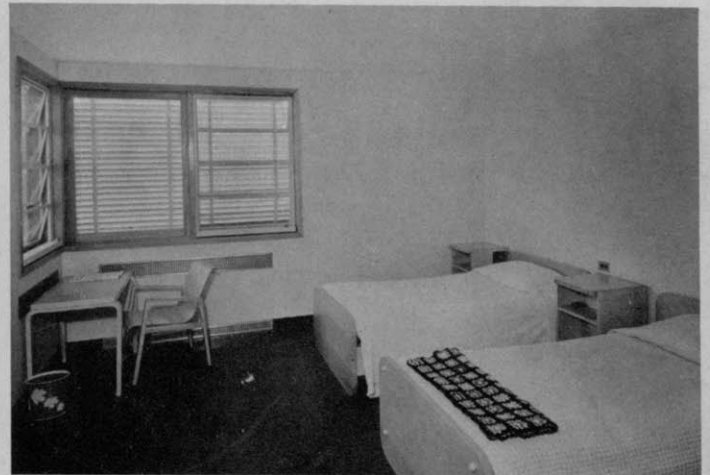
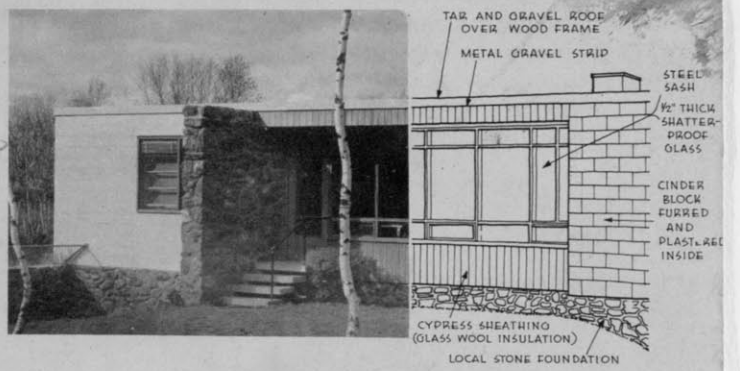
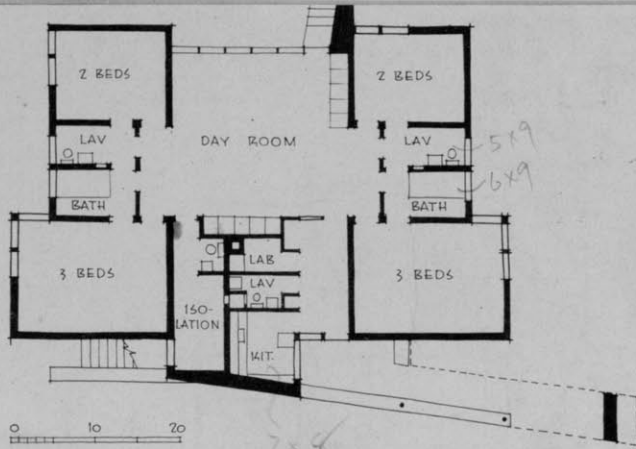
TREATMENT BUILDING

BALDPATE INC., SANITARIUM, GEORGETOWN, MASS. SAMUEL GLASER and L. L. RADO, ARCHITECTS. This forthright little structure is the first of a series of treatment buildings for disturbed patients that will be built on wooded property adjoining the main hospital. As the building is essentially a home, restrictive devices have been visually minimized; the homelike elements emphasized. Compactness and economy are the keynotes of the plan and structure. There are no interior changes in level.

From the attendant's desk in the cheerful main living room, all activities can be readily controlled. The room is finished in birch plywood and has an asphalt tile floor. Patients' clothes wardrobes are built into the wall behind the control desk. Unnecessary projections and mouldings are eliminated. A solid band of windows and a glazed door overlook the walled and fenced terrace and lawn. The use of solid stone masonry piers and projecting walls gives a psychological sense of security, yet obviates the institutional feeling. The sleeping rooms — to be used either privately or as wards — have double doors to the living room and other doors leading to the separated bath and toilet rooms. An isolation room is provided for violent patients, and a kitchen and laboratory complete the plan. A boiler room and storage room occupy the partial basement.

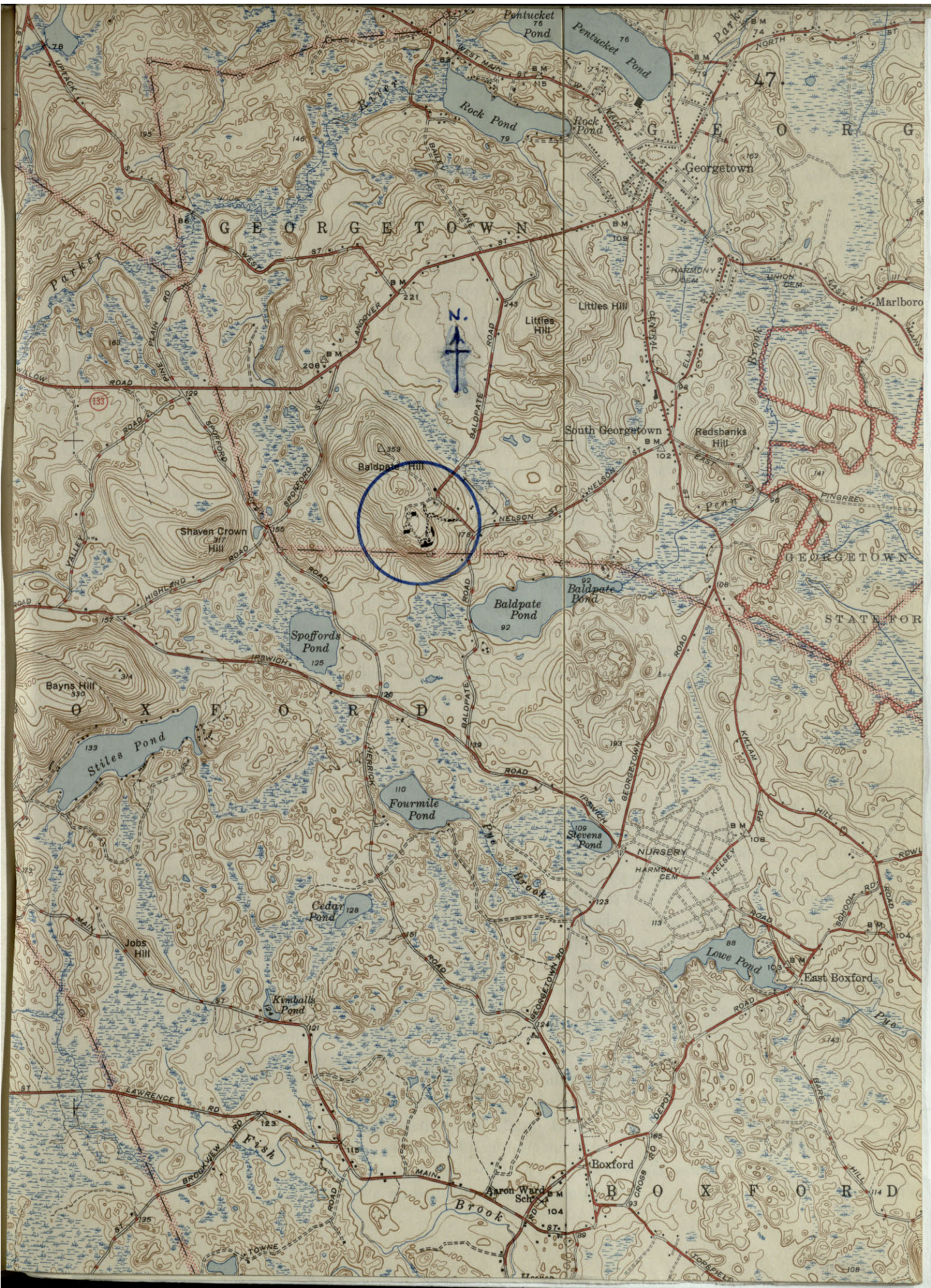
Exterior walls are of cinder concrete block. Interior walls are double walls of three-in. cinder concrete units with one in. between for soundproofing. Floor is of precast concrete bar joists on three-in. concrete slab. The general contractor was August Johnson Associates Inc.







In Boston area and on Cape Cod stop at first Socony Dealer for detailed regional map.



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please refer

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Owen A. Luckenbach

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Edited by Arthur C. Bachmeyer and

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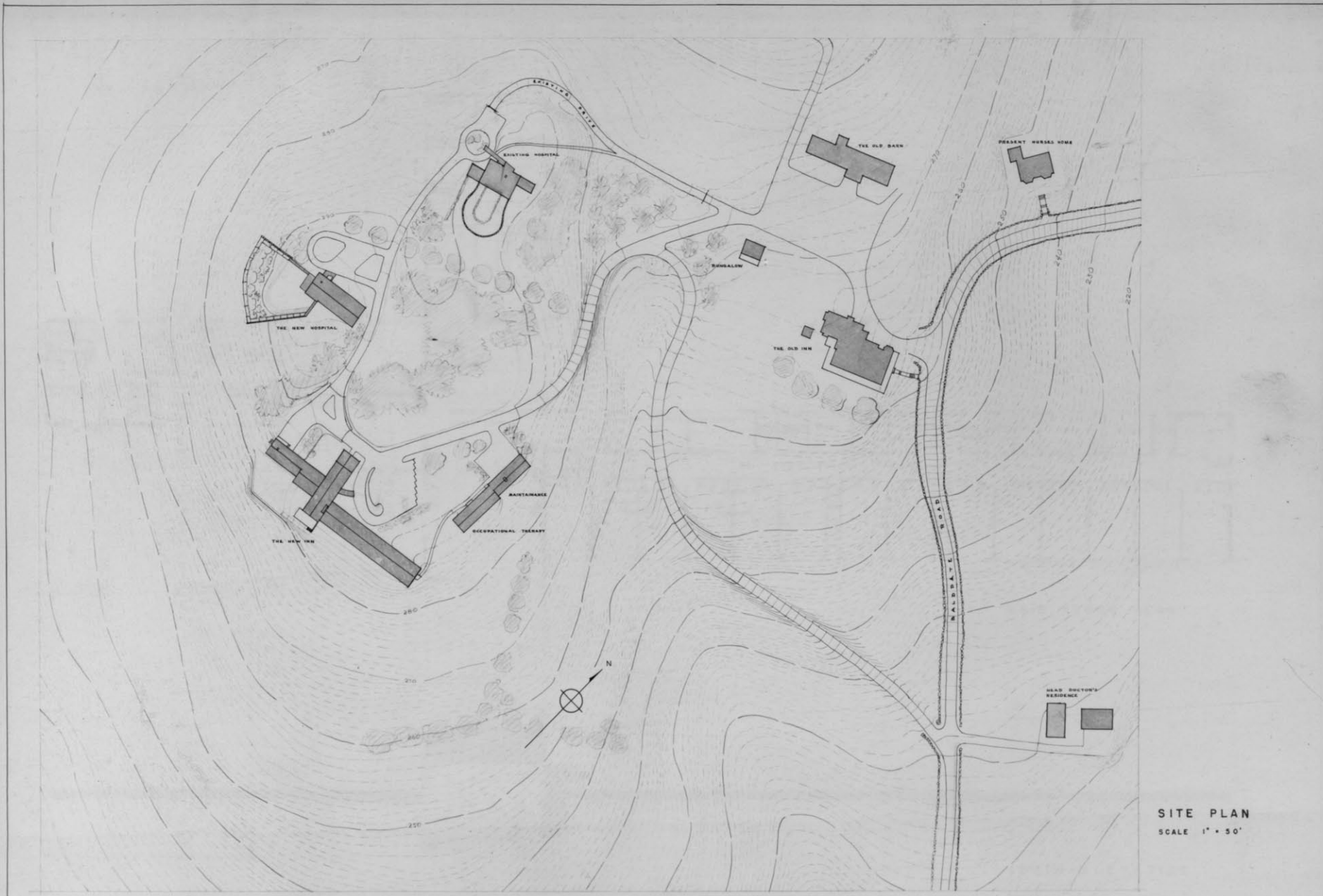
Karl Menninger, M.D.

Modern hospitals May 1945









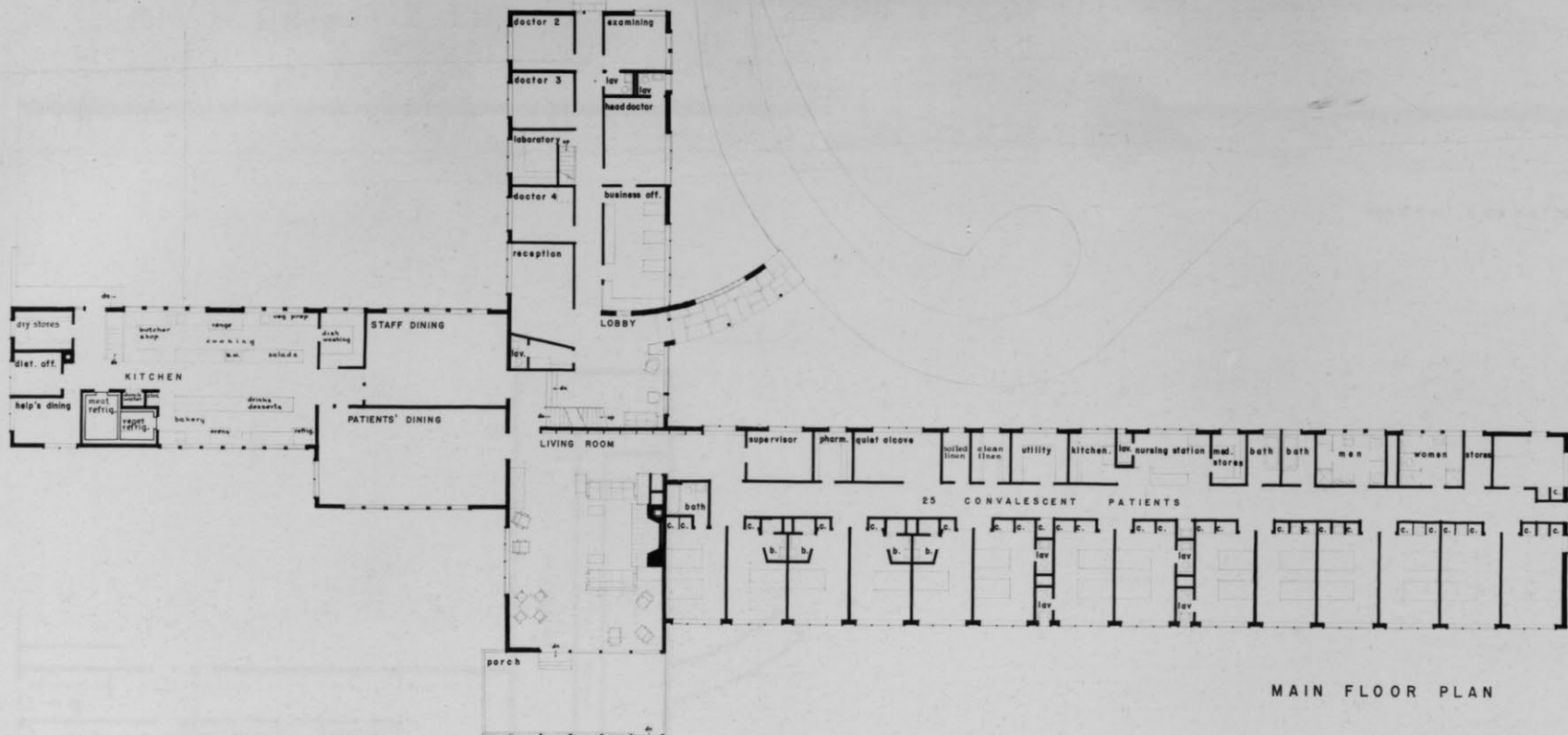
SITE PLAN
SCALE 1" = 50'

A GROUP OF NEW BUILDINGS FOR
BALDPATE INC. , GEORGETOWN , MASSACHUSETTS

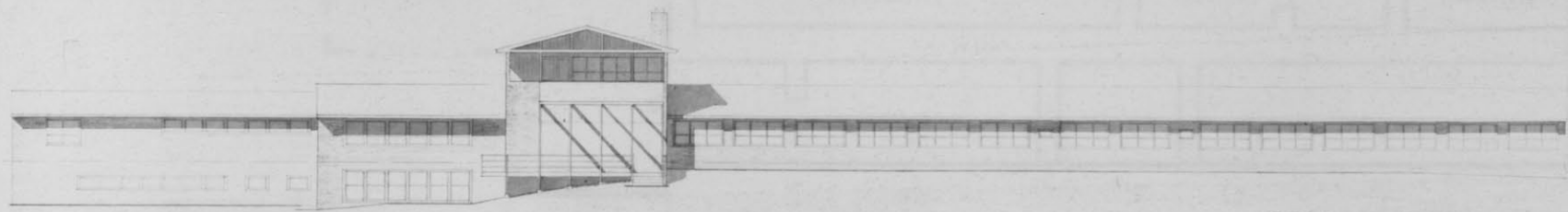
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
MASTER IN ARCHITECTURE THESIS
SEPTEMBER 1947

John W. Prince

3307897

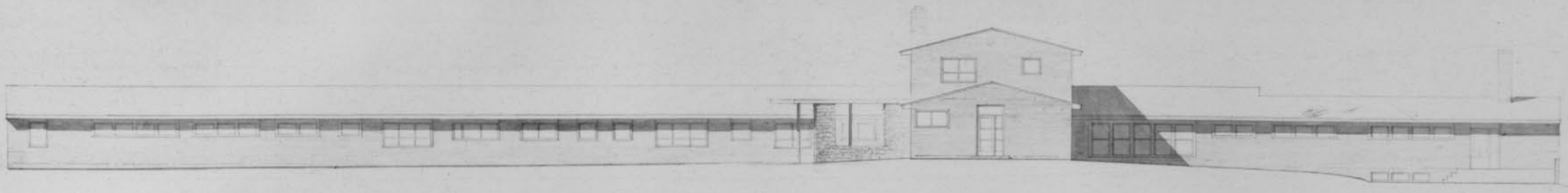


MAIN FLOOR PLAN

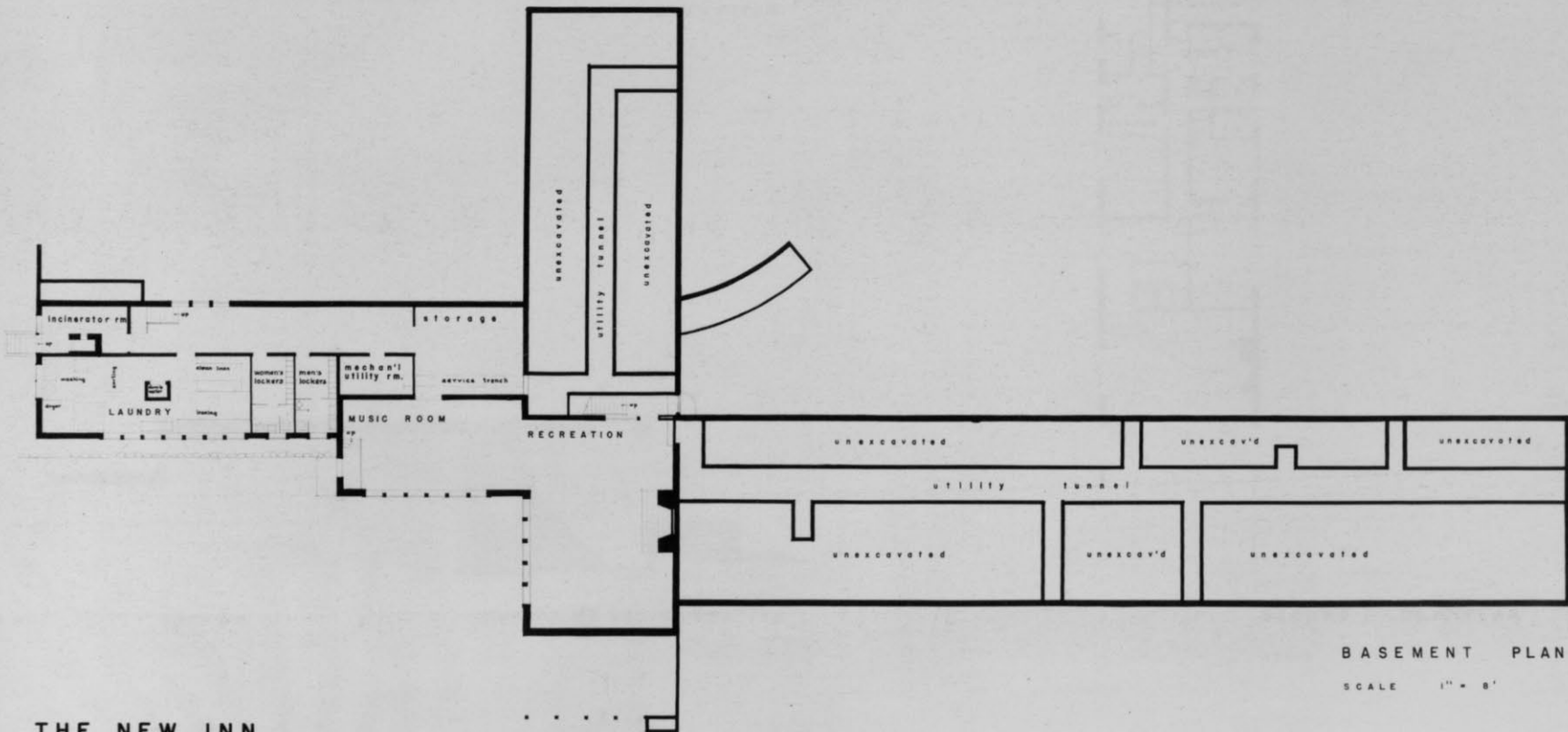


SOUTH ELEVATION
SCALE 1" = 8'

THE NEW INN
BALDPATE INC.



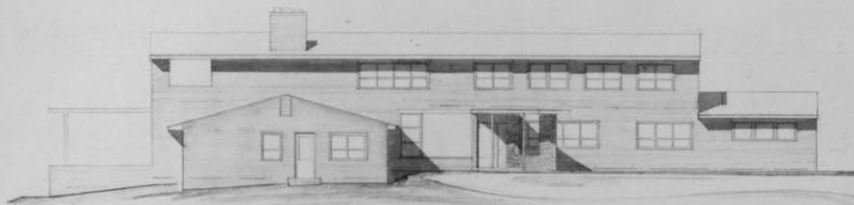
NORTH ELEVATION



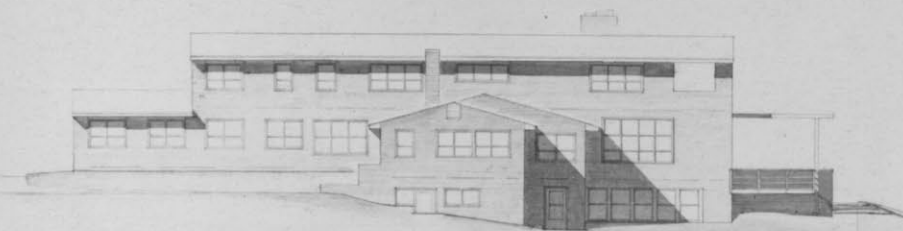
BASEMENT PLAN

SCALE 1" = 8'

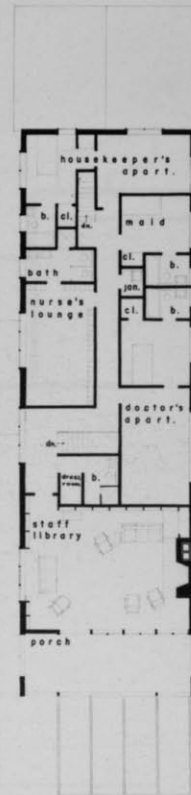
THE NEW INN
BALDPATE INC.



EAST ELEVATION



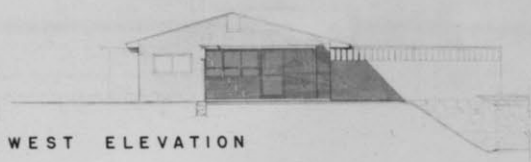
WEST ELEVATION



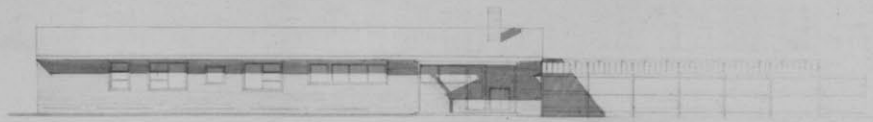
SECOND FLOOR PLAN

SCALE 1" = 8'

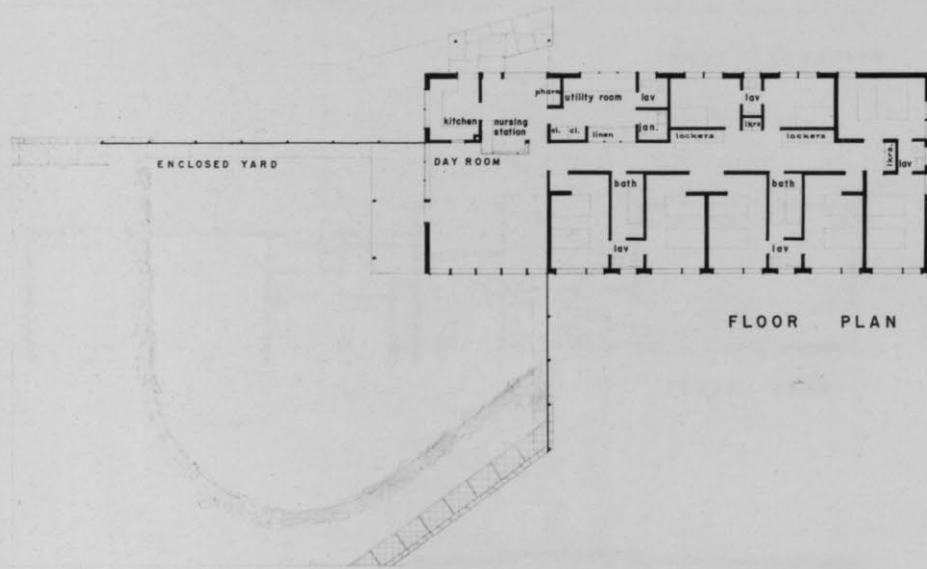
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BALDPATE INC.



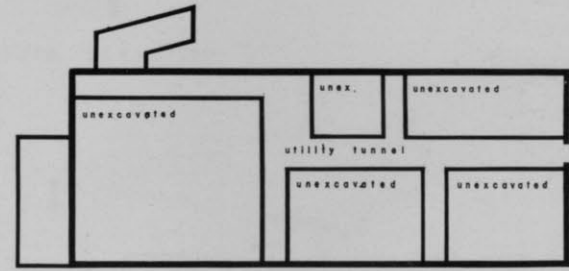
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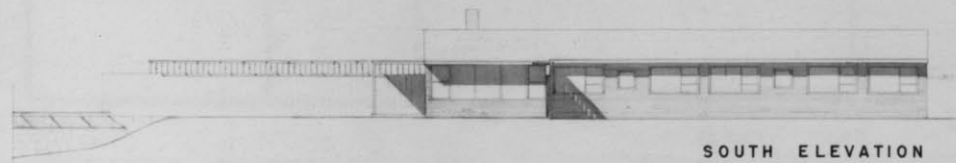
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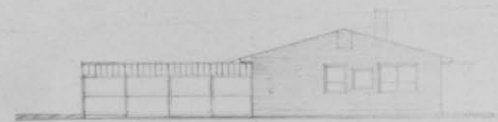
FLOOR PLAN



FOUNDATION PLAN



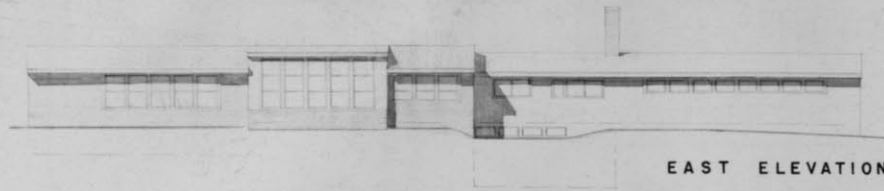
SOUTH ELEVATION



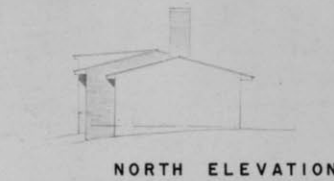
EAST ELEVATION

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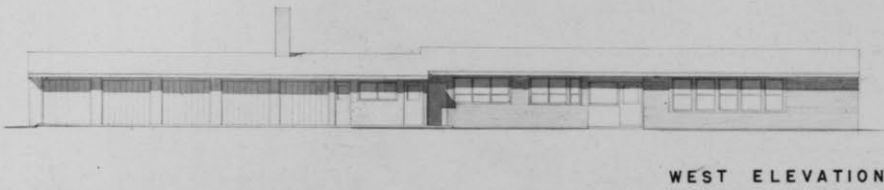
THE NEW HOSPITAL
BALDPATE INC.



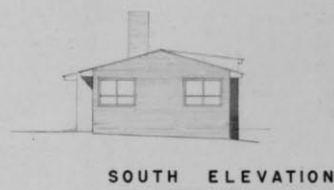
EAST ELEVATION



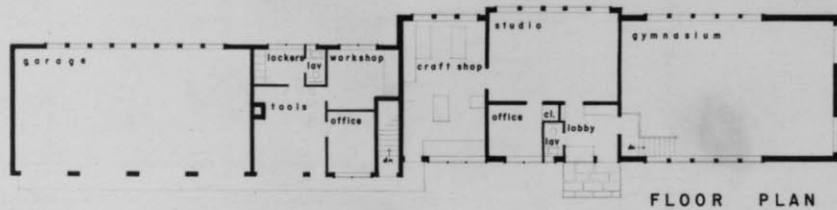
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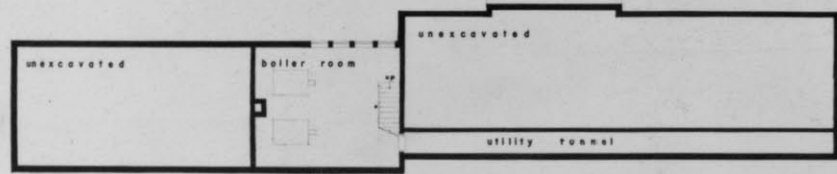
WEST ELEVATION



SOUTH ELEVATION



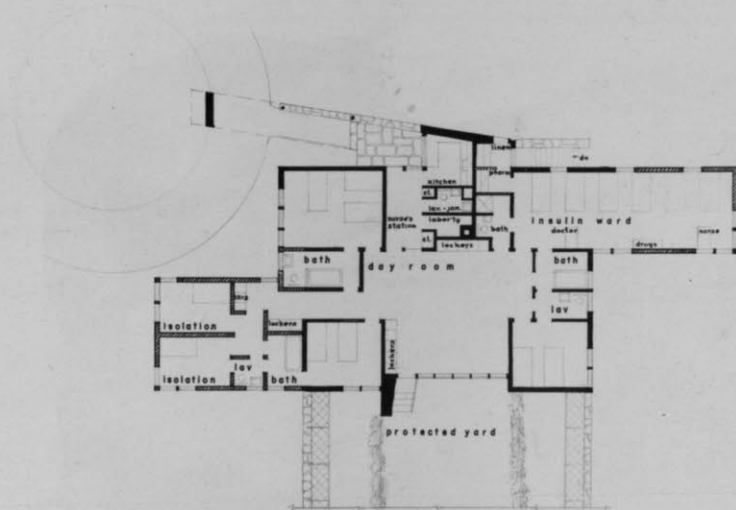
FLOOR PLAN



BASEMENT PLAN

OCCUPATIONAL THERAPY BUILDING

BALDPATE INC.



FLOOR PLAN

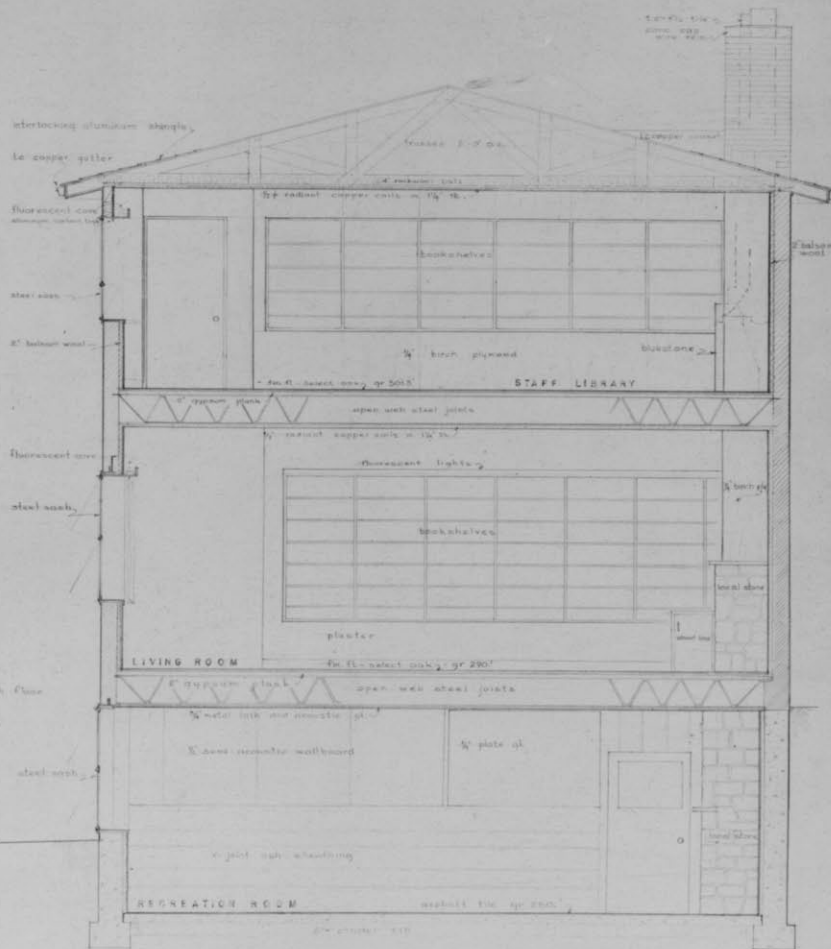
NEW WORK —
EXISTING —

ADDITIONS TO EXISTING HOSPITAL

SCALE 1" = 8'



LONGITUDINAL



TRANSVERSE

SECTIONS

SCALE 1" = 2'

THE NEW INN
BALDPATE INC.