



Photograph by Gustav Anderson

FURNITURE STORE IN NEW YORK CITY . . . J. LEWIS SINCLAIR, ARCHITECT

Exhibit 1

July 1935 Architectural Record Article featuring Abraham's

THE RETAIL STORE

Compiled by FREDERIC ARDEN PAWLEY

STORE planning involves two distinct phases: (1) the general consideration of merchandising principles and (2) the detailed study of structural and service requirements. Merchandise requirements are variable, and types of customers are legion, but a discussion of some fundamental considerations may help to clarify the architectural problem and to emphasize those planning features which are most important in merchandising. Much detailed data obviously must be revised for each new store design problem. This article therefore presents first an outline of merchandising principles and then a listing of specific data in reference form. These data have been compiled from many authoritative sources and represent progressive practice. A brief bibliography is appended for additional reference.

LOCATION

The trading area, volume and type of traffic, parking facilities, day or night business, competition with or advantageous proximity to similar stores, transportation facilities and location of transit stops, rentals, banking facilities, trend of population and trade development of neighborhood are all necessary considerations.

"The measurement of a retail market resolves itself into a scientific study of a community. . . . Just as the manufacturer and banker have realized the importance of research in their management problems and have proved the advantage of knowledge over guesswork in business, so may the retail merchant benefit by a study of his problems in the light of facts scientifically gathered. Since the purpose of any retail business is to sell merchandise, thereby making sufficient profit to compensate for the energy and capital expended, it seems only logical that the merchant should desire to obtain all the information possible relative to his market."

Retail Store Problems. U. S. Department of Commerce.

Corners are estimated to be 30 per cent more valuable than inside lots. They draw traffic from two streets and offer better natural light and more window area, but crowding minimizes this advantage.

"A corner store has the choice of an entrance from each street or one at the corner. The corner entrance makes it necessary for customers approaching from one direction to walk the full length of the building before entering the store. Two entrance ways tend to influence customers to go through the store. An entrance on the corner in addition to the other two street entrances might have a tendency to divert traffic, so that many customers would come in through the nearest street door and go out at the corner, and this diversion might materially cut down returns from an otherwise effective display space within the store."

Retail Store Problems.

The upper side of a street which is not level is the more desirable. Shade is valuable in summer and better for displays, but winter sales volume may be higher and rents cheaper on the sunny side of the street.

"One side of a street is usually more popular than the other. There may be several reasons for this. If the street is not level, the upper side is usually more traveled than the lower. This may be accounted for by the fact that the upper side of the street is cleaner, or that 'the human tendency is to get on the upper side of things.' Then, again, there is the question of the shady or sunny side of the street. In the summer the preference for the shady side becomes quite marked, and this is especially true for women, who do much of their shopping the hottest part of the day. Sunlight is always an important factor to be considered in locating a retail store. Shoppers naturally seek the protection of the shady side of the street in the summer, and the sunlight affects the displays that the store makes in its windows. Satisfactory displays are more difficult to make in sunny windows than in those in which the light is controlled or shaded. . . . It is possible, however, that for certain reasons the sunny side of a street may be preferred. An analysis of sales may show that the largest business is done in the winter months, during which time the traffic may prefer the sunny side. The rent is usually cheaper on the sunny side. Another factor in determining the preferable side of the street is the convenience to the street-car stops. When a car stops people usually go to the nearest curb, rather than cross the street."

Retail Store Problems.

Exclusive specialty shops need not be in a high-rent shopping area but should be easily accessible.

"Some stores go well in groups. One reason for this grouping is the convenience of the customer, as it affords opportunity for the purchasing of a number of different kinds of articles in one vicinity. Another advantage of locating competing stores close together is the possibility of drawing trade from customers who had planned to go directly to a competitor. The stores thus established are not always competing stores. Very frequently they arrange themselves into complementary groups cooperating with each other in the attraction of custom and in the making of sales. Stores dealing in men's goods are often found on one side of the street, while stores dealing in women's goods are found on the other.

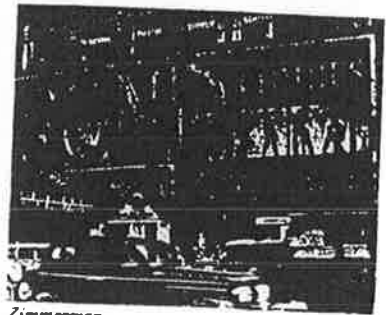
"The logical site is that one which offers the best opportunity to sell goods where people naturally come to trade, either because of convenience or because of habit. If the best site is not obtainable or carries an exorbitantly high rental, and therefore an inferior site is chosen, success depends largely upon the recognition of the economic disadvantages resulting from the location and the cost of special attractions necessary to overcome them."

Retail Store Problems.



Architectural Review

A shop in London designed by Wells Coates, architect. The front is in oak and glass.

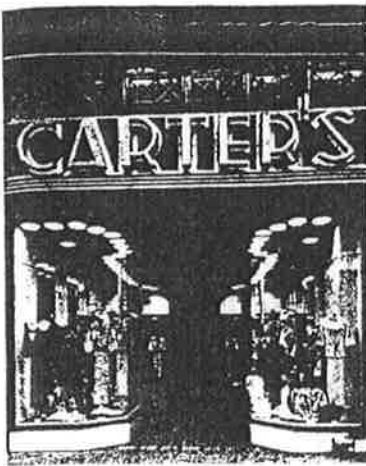


Zimmerman

A 2-story shop front in Times Square, New York City.



A restaurant front in New York City designed by Ross-Frankel, Inc.



Hedrich-Blessing

A dress shop in the Palmer House, Chicago, designed by Sobel and Drielsma, architects.



Hedrich-Blessing

An apparel shop in Detroit by Sobel and Drielsma, architects. Façade of Carrara glass held in place by aluminum supports.



Klotz

A Paris shop front designed by B. J. Klotz. Façade of oak.

ATTRACTION

The first problem of the merchant is to attract the attention of potential customers and to give them favorable impressions. Uncluttered surfaces, legible signs, good color selections, intelligent window display and lighting are all undeniable attractions for the exterior. Comfort within, based on easy circulation, clarity of plan, accessibility of merchandise; quick service resulting from proper location of stock; effective illumination, good acoustics, and air conditioning—all of these will make customers return.

CIRCULATION

This might be called routing; it is the familiar problem of making the customer see as many varieties of merchandise as possible so as to induce additional sales. In large stores an appearance of activity is desirable; in smaller stores and shops crowding must be avoided.

Aisles and vertical circulation can be planned in such a way as to influence sub-consciously the customer's path. The shopper instinctively chooses the wider of two or more aisles or the one to the right. Departments with greater drawing power should be placed so that customers must pass other displays. Service departments, such as the cash desk and wrapping center (if used), should be so located.

Arcades or passages to transportation lines or to other places provide effective spaces for advertising or impulse displays. Self-service or quick service is indicated for such locations.

Special attractions, such as telephone booths, and in large stores, beauty parlors, children's barber shops or playrooms, lunch rooms, are sometimes planned to attract shoppers past impulse displays. These services are often not directly profitable. Location on a main floor balcony or mezzanine is preferred. Even a small book store may work on this basis and have exhibition space for temporary art shows as an attraction.

"The question of locating the soda fountain and cigar counter is something to be decided by a close study of the individual store. Fountain goods in the majority of cases are of a semi-convenience type. Frequently the fountain can well go to the front of the stores on busy corners and in the rear in stores in small towns and neighborhood locations. The cigar counter almost universally is placed in the front of the store.

"Some proprietors believe that the fountain brings into the store people who would not come otherwise. In such cases, if possible, the fountain should be placed back in the store in order to get as much merchandise as possible before the fountain customers. On the other hand, this often is impractical as this type of customer might not enter if the fountain were removed from the front door.

"A good plan is to check the value of the fountain in profits in comparison to space occupied. Some stores report that the fountain makes a substantial part of the entire store profit; others learn that the space required by the equipment and tables for customers is out of proportion to earnings but justified as a leader to other sales.

"Services, such as telephone and postal station, are placed in the rear of the modern store. The center of the room in a well arranged store is low and the customer has no trouble in finding what is wanted. The man who wants to use a telephone, in passing attractive tables of merchandise, is often reminded of and buys items he needs."

Small Store Arrangement. Domestic Distribution Department, Chamber of Commerce of the U. S.

CLASSIFICATION

Departmentizing helps clarify the store plan, gives good stock control by showing which lines of merchandise are most profitable, facilitates more frequent inventories, tends to develop expert sales help who keep stock in better condition, and to some extent may indicate efficient personnel.

Within each department wares may be divided into three classes—convenience, impulse and demand goods. An entire department may belong to one of these classes or may include all three. As far as possible department or class location should be governed by the characteristic of these classifications.

Convenience goods are usually low-cost items which will be bought hurriedly at the nearest store. Profit is small but good-will is worth cultivation for frequent return. Locate for quick service but not nearest entrance.

Impulse goods are often luxuries sold with high margin of profit. Locate wherever they will best catch the customers' attention or where there is any waiting: near entrance, at service center, at elevator. Displays is most important factor.

Demand goods are staples of a substantial nature which customers come most often to buy. They are items for which a customer will go to a particular store with decision already made for their purchase. Easy accessibility of stock to sales staff is more important than display.



Hammerman

Shopping goods, a fourth classification often made, differ from demand items in their need for accessibility to customer and display so that comparison can be made with competing wares.

All classifications should be made evident. Prominent display of typical items help more than signs unless goods are of great variety and similar in size as in a drug store.

Related departments should be grouped together not only to suggest additional purchases but to make it easier for sales-persons to assist in adjoining departments.

Bargain departments should be isolated since bargain hunters are not good prospective purchasers of other goods. Extensive display of bargains near regular departments tends to lower the character of the store.

The self-service checkout plan used mainly in the grocery line with open display of goods or automatic dispensing machines and change-makers may reduce pay roll, shorten customers' waits and handle a larger volume of sales in peak hours. Provide check-out racks near entrance, table or counter space for customers and checking out with wrapping materials at exit. One-way circulation.

DISPLAY

Display facilities should be subordinate to the merchandise. A mechanized display may attract brief attention but usually is not sufficiently subordinated; interest is attracted by the workings of the device, not by the wares.

Similarly, color should be used to focus attention on merchandise. This can be done by using colors of considerable variety, with neutral backgrounds which harmonize with any and all of them; or, when goods have one predominant hue, the use of a complimentary scheme will add intensity to the display.

Stores or departments with wares which will not be injured by handling now use open display. Advantages are many: (1) Encouragement of self-service which results in greater volume of sales per clerk. (2) Useful floor space is increased through elimination of counter and bulky show cases. (3) Lower part of display is made useful for selling-display. (4) No danger of hidden accumulation of unselling stock. Quick check on wares that do not sell.

Open display tables with tops divided into adjustable compartments are used in many departments, helping to control circulation. Open wall shelving and display cases with several levels are recommended. Theft is reported to be negligible, especially when high fixtures obscuring view of tables and racks have been properly located.

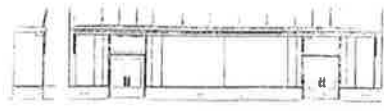
Merchants are coming to realize the primary importance of flexibility to meet competition by improvements. Much floor equipment is now made easily movable. Show bulkheads, tables, racks, counters, refrigerators or refrigerated cases, even wall shelving are now put on wheels in the modern grocery store. Shelving is adjustable and easily movable. Fruit and vegetable racks are removable and have provision for spraying and/or refrigeration.

Interior show windows built in wall or used between rooms are an effective means of display for wares requiring protection or special lighting.

Locate the cash register so that clerk can do nothing else while making change.

SELLING AREAS

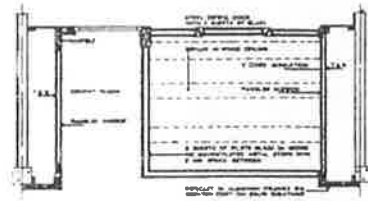
Receiving department for unpacking, checking and marking goods. Reserve stock room is often a cause of overbuying.



General store façade.



ELEVATION



PLAN

Design for a flower shop in Los Angeles by J. R. Davidson.

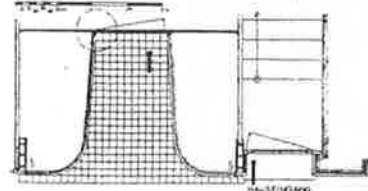
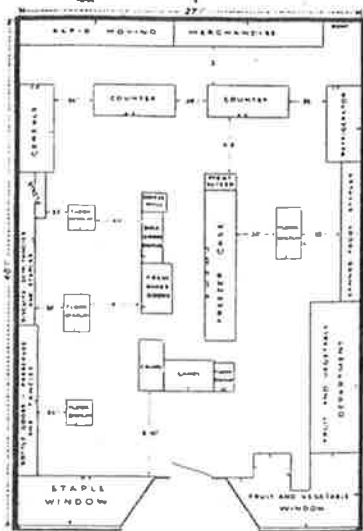


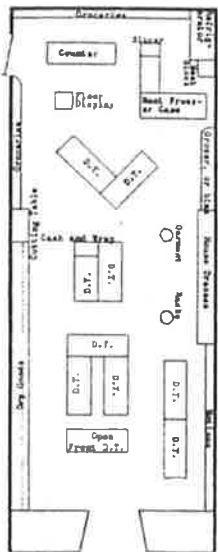
Illustration from LADENBAU

Design for a beauty shop by Joseph Ringel, architect.

1936



From BETTER GROCERY STORES



Plan prepared by Wholesale Dry Goods Institute

Measurements
Store - 24' x 45'
Display Tables - 32' x 7'



Plan prepared by Wholesale Dry Goods Institute

Measurements
Store - 24' x 82'
Display Tables - 32' x 7'
Shelving - 18"
Dressing Room - 7' x 5'

Seasonal demand makes use of separate warehouse space preferable to using more expensive area in store.

"The small store can handle its delivery orders, as a rule, from the wrapping counter, the orders going out fast enough to prevent cluttering of aisles and delays to either type of customer. When the sales volume reaches a point at which confusion occurs in the retail selling space, it is advisable to provide a separate delivery room. Often as few as 50 orders daily justify an order, assembly and delivery room.

"No selling is done in the order room. It is solely for delivery orders. Experience shows that this plan minimizes mistakes in filling orders, does away with confusion in the sales room and makes for better service all around. Aisles are free of outgoing delivery boxes.

"The order room can be added easily to the floor arrangement of the smaller type store, by removing the rear wall on one side and substituting for it a low 40-inch stock shelf. This throws one-half the back room into an order room. Customers can see into the order room but will not enter. The activity of assembling orders gives a busy aspect to the store without interfering with counter customers' service. Rear doors are used by delivery clerks."

Small Store Arrangement. U. S. Chamber of Commerce.

Delivery department for sorting, checking, loading. In larger stores conveyor systems speed up this process with moving belts or spiral gravity chutes. Loading platform for trucks. Garage usually is separate or eliminated in favor of cooperative delivery service.

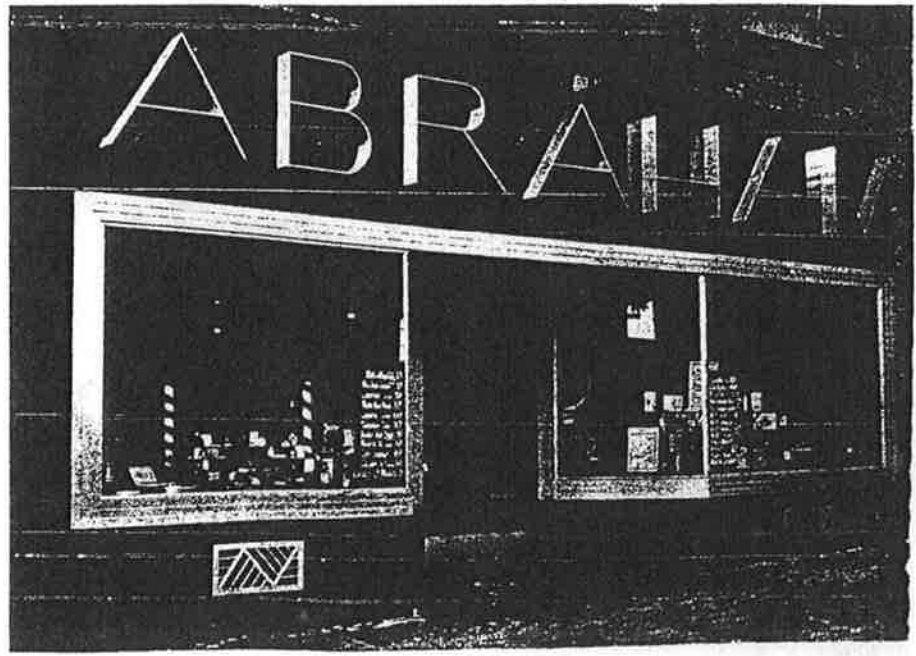
Offices, credit department, 'phone order department and such accessory services as fitting rooms, alteration rooms and millinery workrooms must be provided, all near respective selling departments. Services such as lockers, rest rooms and lavatories for clerks become large elements in department stores. Even in smaller shops conveniences such as water coolers, telephones, lavatories and rest alcoves are offered customers.

MAINTENANCE

Materials should be resistant to wear and easy to clean. Walls should have sanitary cove bases and equipment bases should stand up under wet-mopping or scrubbing. Easy and economical maintenance is assured by keeping surfaces and decoration simple.

Provision should be made for easy collection of trash (chute and bin) and incineration or possible salvage by shredding and baling.

DRUG STORE IN BURLINGTON, VERMONT . . . LOUIS S. NEWTON, ARCHITECT



SHOP FRONT

The merchant is interested in distinctiveness, adequate display area and an effective entrance. A good sign or trade symbol against a simple background of material interesting in texture or color is frequently used. Another method is to provide a view of the store interior, thus making the window display doubly effective. In warmer climates it is possible to open the front entirely if the benefits of air conditioning are not sought or necessary.

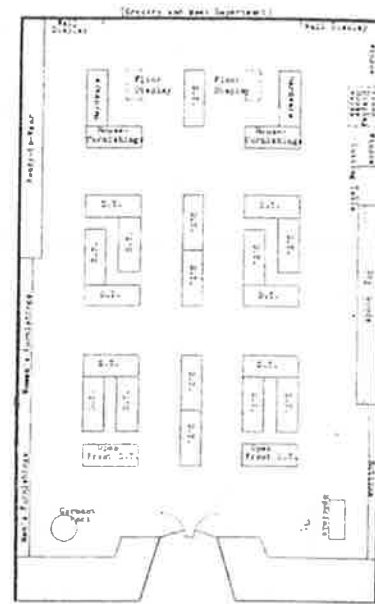
SIGNS

Maximum legibility for day and night illumination. Graduated in size and located for visibility from across street, from passing cars, and by pedestrians. Lettering in dark silhouette against lighted background recommended. Projections on building-line and types of illumination are governed by local code and usually require permits.

Gaseous tubes for color: Alternating current with small local transformers or inverters for direct current—as near sign as possible to shorten heavy copper conductors. Neon (red) uses 6 watts per foot of lettering tube; blue or green each 8 watts; white or yellow, 20 watts. A new type of tubing permits several parallel channels in small section which makes new combinations practical. Photo-electric and/or time control for signs.

ENTRANCE

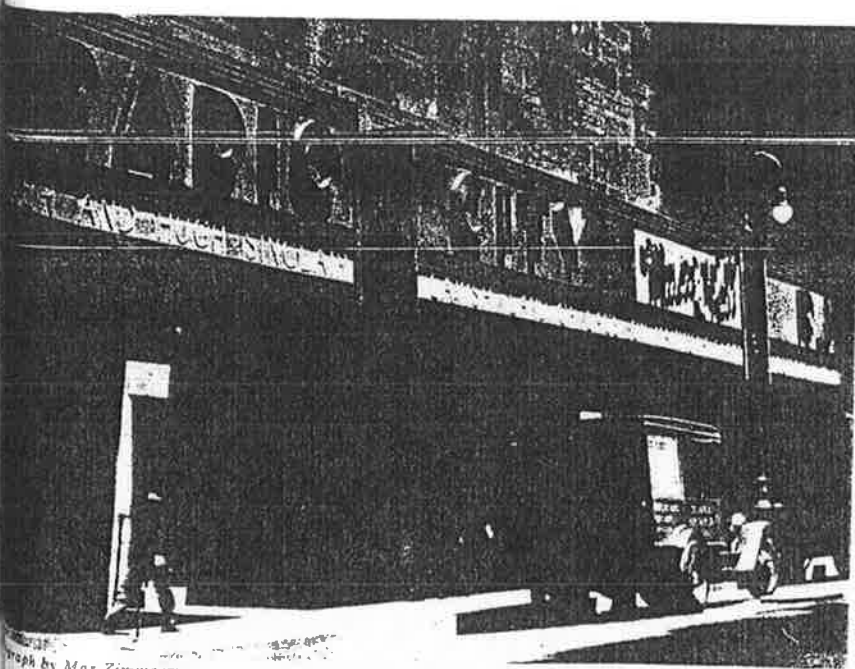
Island windows and irregularly shaped entrances intended to draw window shoppers to store are often wasteful of space and doubtful in effectiveness. Provide automatic door-opening device with photo-electric control. Doors operate on a ray of light, falling on a photo-electric cell, is interrupted. The door opens long enough for a person to pass through, then closes automatically.



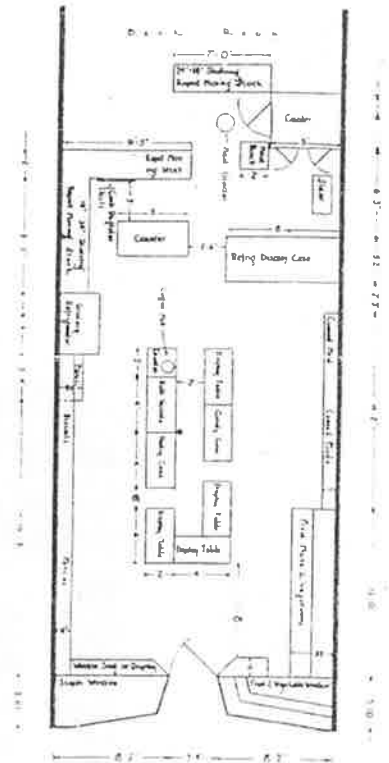
Dimensions
Main Display 45' x 13'
Tables 12' x 6'

Plan prepared by
Wholesale Dry
Goods Institute

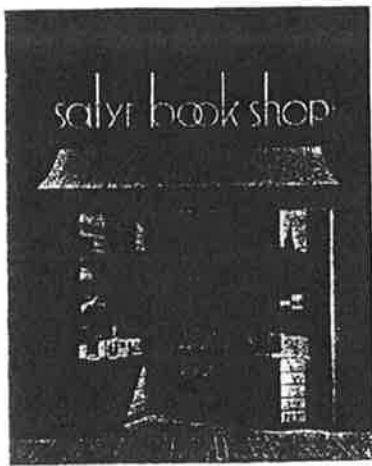
WATER FRONT DISPLAYS ROCKEFELLER CENTER, NEW YORK CITY



Photograph by Max Zimmerman

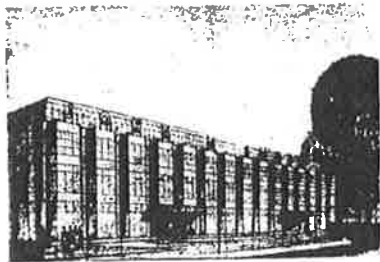


Louisville Grocery Survey Model Grocery Store, arranged by Carl Dipman, editor of The Progressive Grocer.



Morgan

A book shop in Los Angeles designed by J. R. Davidson.



Hedrich-Blessing

A furniture store façade designed by Howard T. Fisher, architect.

WINDOWS

Window areas represent 12 to 40 per cent of total rent and are estimated to earn one-third of profit on all sales.

One-front windows are easiest to dress and light. Island windows are difficult to treat: elevator dressing is expensive, and display and lighting for observation on many sides create problems.

More floor area in window is gained and knee and toe room provided for window shopper if window and its frame can project from shop front.

Depth of window should be twice its width for satisfactory angular view on approach. For general purposes no window need be more than 8 feet high.

A two-level or second-floor display may be advisable for streets traveled by double-deck buses.

Stores selling wares with considerable size range will do well to have at least two separate window types. **Examples:** Women's wear: (1) gowns displayed on standing figures; (2) gloves and hosiery at hand height. Hardware: (1) stoves, lawn mowers, in larger window with low floor; (2) tools at hand height.

Consider access for window dresser, merchandise, cleaning and relamping.

Consider time-switch for window lights.

REFLECTIONS

Superlighting (high intensity of illumination in daytime) seems the only solution but is expensive. Sloping windows do not solve problem satisfactorily.

Awnings will cut off most reflections from upper stories of buildings on other side of street but do not take care of bright street scene.

Consider all window floor and background materials to avoid distracting reflections of lighting equipment and window shoppers.

Use matte tile, travertine or similar non-polished materials.

Mirrors may be used on walls to increase apparent size of small displays but care is necessary to avoid distractions. Window dressing may also be made more difficult.

TYPICAL DIMENSIONS FOR SHOW WINDOWS

Type	Depth (feet)	Height above sidewalk (inches)	Type of background	Remarks
Department store:	7-10	12-30	Closed	Interior wall valuable.
Automobile store:	10	Nearly level with sidewalk	Open into store	Disappearing window.
Furniture store:	10	Nearly level with sidewalk	Period	
Jewelry store:	1 2/3-3	42-48	Low or closed	Miniature stage.
Books or stationery:	2-3 1/2	30	Low	
Florist shop:	3-5	12	Open or glass	Terraced tile with drainage and insulation.
Drug store:	2-2 1/2	36	Open	Show interior.
Hardware or paints:	2 1/2-3 6	30 12	Closed	Two types.
Shoe store:	3-5	12-16 48	Closed or open	Exclusive shops may feature individual models in small windows.
Hat store:	2 1/2-4	30-48	Closed or open	
Women's wear:	3-5	12 30	Screens, Venetian blinds or open	Two types.
Haberdashery or Tailor:	3-5	30 18	Closed	Two types.
Grocery store:	3-6	20-28	Low	Terraced tile with drainage and insulation.
Bakery or confectionery:	2-3	30	Closed, Glass	Insulation. Two levels.

INTERIOR PLAN AND EQUIPMENT

Standards	Width	Length	Height
Ceilings:			
Basement			12-14 feet clear
Main floor			12-14 feet clear
Main floor with mezzanine			18-20 feet clear
Shop with mezzanine			15 feet clear
Minimum aisle	4 feet		
General show cases and counters	22-24 inches	4, 6, 8, 10, 12 feet	34-40 inches
Grocery wrapping counter	3 feet	4 or 6 feet	34-36 inches
Display Tables:			
Grocery	3 feet	4 or 6 feet	28-30 inches
Dry Goods	30-32 inches	7 feet	34 inches
Hardware	31-34 inches	5 feet 4 inches and 7 feet	32-35 inches
Drug	24-32 inches	Up to 7 feet	32-34 inches

Shelving:	Depth	Clear Height Between Shelves	Other Features
Grocery:			
General	12-18 inches	10-18 inches	Not over 6 feet high including 6-inch base. Shelves preferably adjustable.
Staples	18-24 inches	Lower shelf 20 inches Others 14 inches	
Hardware wall case with ledge and cabinet			
Cabinet	30-36 inches 20 inches		8 feet long 32 inches to ledge 7 feet 6 inches high
Books	8-9 and 12 inches	10 and 14 inches	8 books/foot
Shoes	14 inches	9 inches (double row)	Boxes 6 inches wide
Millinery	14 inches	18 inches	Deep drawer under shelf
Dry Goods:			
Piece goods	26-28 inches	Shelves under ledge	30-34 inches to ledge
Men's and women's furnishings	10-18 inches		
Shelves under ledge, add	12-14 inches		

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PROGRAM

"MODERNIZE MAIN STREET" COMPETITION

Sponsored by LIBBEY - OWENS - FORD GLASS COMPANY

Conducted by THE ARCHITECTURAL RECORD

KENNETH K. STOWELL, A.I.A., Professional Adviser

\$11,000 IN CASH PRIZES

(52 PRIZES IN ALL)

		<i>Total</i>
FIRST PRIZE, for each Problem	\$1,000	\$4,000
SECOND PRIZE, for each Problem	750	3,000
THIRD PRIZE, for each Problem	500	2,000
HONORABLE MENTIONS (40)	50	2,000
		<hr/>
		\$11,000

Exhibit 2

Modernize Main Street Competition

THE "Main Street" in every city, town, village or community usually has at least these four stores: the food store, the drug store, the apparel shop and the automotive sales-and-service station. These stores are chosen as the subjects of this competition and constitute the four problems from which the competitor may choose. Each store is to be modernized for modern merchandising methods which demand a store that attracts the public, displays goods to the best advantage, and provides space, convenience and light so that purchasing is a pleasure.

GENERAL REQUIREMENTS

THE store front with its plate glass show windows establishes the character of the store in the eyes of the passer-by. It must serve to make the passer *buy*, inviting him or her to stop and shop.

The interior must fulfill the promise of the front, serving as a background, and placing the merchandise in the foreground of the customers' consciousness. It must be convenient in arrangement for expeditious service, comfortable, easily controlled, adequate in all its appointments and consistent with the quality of the merchandise.

Space, equipment and facilities must be provided for all merchandising activities normally engaged in by the stores, such as receiving, marking, storing, preserving or protecting, displaying, selling, measuring, wrapping, delivering, accounting and recording, and the special operations or servicing that are implied by the type of goods to be sold. Locker, dressing and toilet facilities for employees must be provided, but may be in the basement if a stair is provided.

It is assumed that the stores are to serve an average American community, rather than the luxury class. While a photograph of the present store front or site is given for each type of store, it is shown merely to present uniform conditions for the competitors, as the problems are hypothetical only and are not intended to obtain designs for modernizing a particular existing store. The dimensions given are also hypothetical and for purposes of the competition only. The competitor may choose any appropriate names for the stores to use on signs or shop fronts. No show window shall extend beyond the lot lines. No sign shall extend more than 18" beyond the building line. The main signs will be legible from a point perpendicular to the store front. Skylights may be introduced in any part of the roof, if desired.

Any competitor may submit as many designs as he wishes as solutions of any or all problems, and each design is eligible for a prize, irrespective of other drawings submitted by the same competitor.

Complete freedom is given the competitors in regard to style, design, and the materials and methods of construction.

COMPETITORS

Any architect, engineer, draftsman, or designer in continental United States is eligible to compete, except as noted below. Designers may associate or form groups to cooperate in the production of competition drawings. Each group is considered a single competitor.

No employee of the Libbey-Owens-Ford Glass Company, or of any other glass manufacturer, or of The Architectural Record, or the advertising agencies of the above, is eligible to compete.

ENTRY BLANKS

The entry blank signifies merely the intention to compete. The blank should be sent promptly to Kenneth K. Stowell, A.I.A., *Professional Adviser*, care of The Architectural Record, 119 West 40th Street, New York, N. Y. The required outline specification sheet, title-pasters and name-pasters can be sent only to those who indicate their intention to compete.

DATES

Competition opens, programs issued—June 15, 1935.

Competition closes, 5 P. M., August 12, 1935.

Judgment by the Jury, beginning August 26, 1935, until completed. Announcement of awards will be made at the close of the Judgment.

JURY OF AWARD

The Jury consists of seven members; five architects and two experts in retail merchandising. The names of the jurors will be announced on August 12, 1935. The Judgment of the Jury shall be final.

BASIS OF AWARD

Prizes will be awarded for the designs which, in the Judgment of the Jury, offer the best solutions to Problems as set forth in this program. The Report of the Jury will be made public as soon as practical after the Judgment.

ANONYMITY OF DRAWINGS

The only mark of identification shall be the name of the competitor lettered in the lower righthand corner of the sheet in the space provided on the title-paster.

The opaque name-paster shall be firmly affixed on the edges only, as indicated, to cover the competitor's name. This paster will not be removed until the final judgment is completed and the awards are made.

The full name and complete address of the competitor shall be lettered in the space provided; lettering shall be at least $\frac{3}{16}$ " in height. If the design is submitted by associates, the full names of all such associates must be given.

DELIVERY OF DRAWINGS

Drawings shall be addressed to Kenneth K. Stowell, A.I.A., *Professional Adviser*, care of The Architectural Record, 119 West 40th Street, New York, N. Y. All drawings not delivered personally, or by messenger, shall be sent by mail, or by express (i.e., delivered to the post office or express office), not later than 5 P.M., August 12, 1935. All drawings delivered personally, or by messenger, shall be so delivered not later than 5 P.M., Eastern Daylight Saving Time, August 12, 1935.

Drawings must be securely wrapped and protected against bending or breaking. All designs are submitted at the competitor's risk. Reasonable care will be used in handling all drawings. Drawings which do not receive prize awards, or which are not reserved for publication or exhibition, will be returned to the competitors within a reasonable time, insured for \$50.

AGREEMENT

The competitor (either an individual or group) in submitting the design, agrees that the drawing and design automatically become the property of the Libbey-Owens-Ford Glass Company in the event that the design is awarded a prize or an honorable mention, and further agrees that the Libbey-Owens-Ford Glass Company has the right to exhibit, or to publish, or to authorize the publication of any or all designs submitted in this competition.

PUBLICATIONS AND EXHIBITIONS

No drawing shall be exhibited or made public until after the award of the Jury.

The name of the competitor and his address will be published in connection with any reproduction of his design authorized by the Libbey-Owens-Ford Glass Company, and the competitor's name and address will also appear on his design when and if said design is exhibited.

The Prize-Winning Designs will be published in The Architectural Record and other publications.

COMMUNICATIONS

It is believed that the purpose, requirements and awards of the Competition are clearly stated and, therefore, in fairness to all competitors no questions regarding the Competition can be answered. Inquiries for additional copies of the program, outline specification sheets, title-pasters or name-pasters, shall be addressed to Kenneth K. Stowell, A.I.A., *Professional Adviser*, care of The Architectural Record, 119 West 40th Street, New York, N. Y.

THE PROBLEMS

PROBLEM "A"

The DRUG STORE

PROBLEM "B"

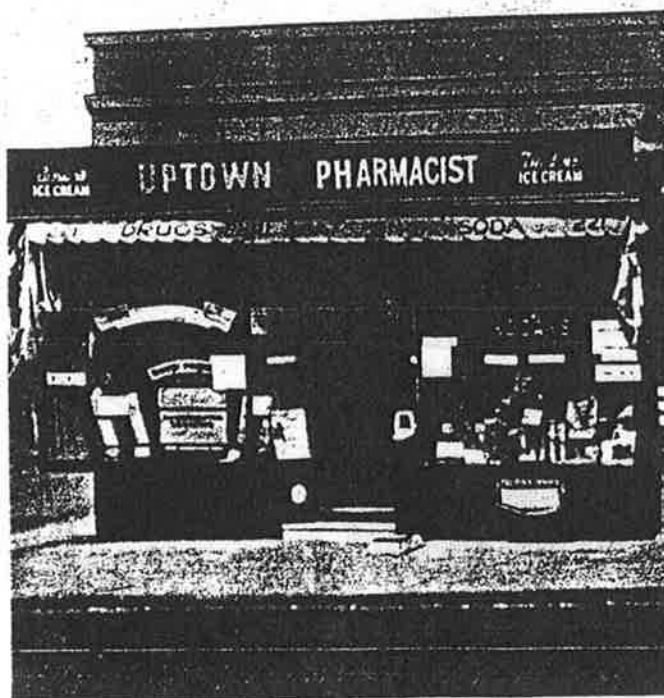
The APPAREL SHOP

PROBLEM "C"

The FOOD STORE

PROBLEM "D"

The AUTOMOTIVE SALES-
and-SERVICE STATION



PROBLEM "A"

The DRUG STORE

The modernized corner drug store is to provide for the selling of many types of small merchandise, as well as medicine and prescriptions. Among other things the following "departments" must be provided for: soda fountain and lunch counter, cigars, candy, toilet articles and cosmetic proprietary medicines and home remedies, sick room supplies and rubber goods, packaged drugs, and prescriptions.

The kitchen for the lunch counter must be considered to be in the basement. Proper stairs, conveyors or dumb-waiter and flues are shown on the plan.

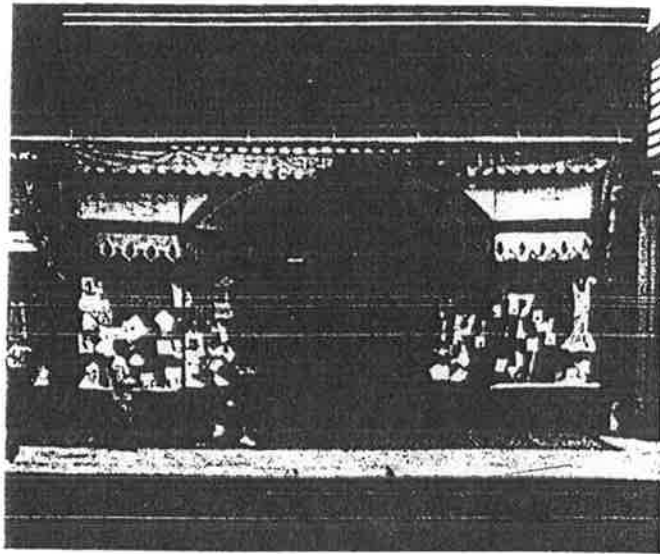
Dimensions. The building is on a level corner lot 25'-0" x 75'-0", the short side of the north side of Main Street; the long side faces west on the side street. The east party wall extends 6" into store lot. The present clear height, floor to ceiling, 12'-0"

PROBLEM "B"

The APPAREL SHOP

THE modernized apparel shop is to be devoted to the merchandising of women's wear, suits, dresses, hats, ensembles, gowns, lingerie and underthings, corsets, hose and accessories. The sale of shoes in this store is not contemplated. Among other things customer dressing rooms will be necessary.

Dimensions. The building covers a level inside lot (not a corner lot), 25'-0" x 75'-0" on the north side of Main Street. There is a service alley at the rear. The clear width between party walls is 24'-0". Party walls are 12" thick. The present clear height, floor to ceiling, is 12'-0".



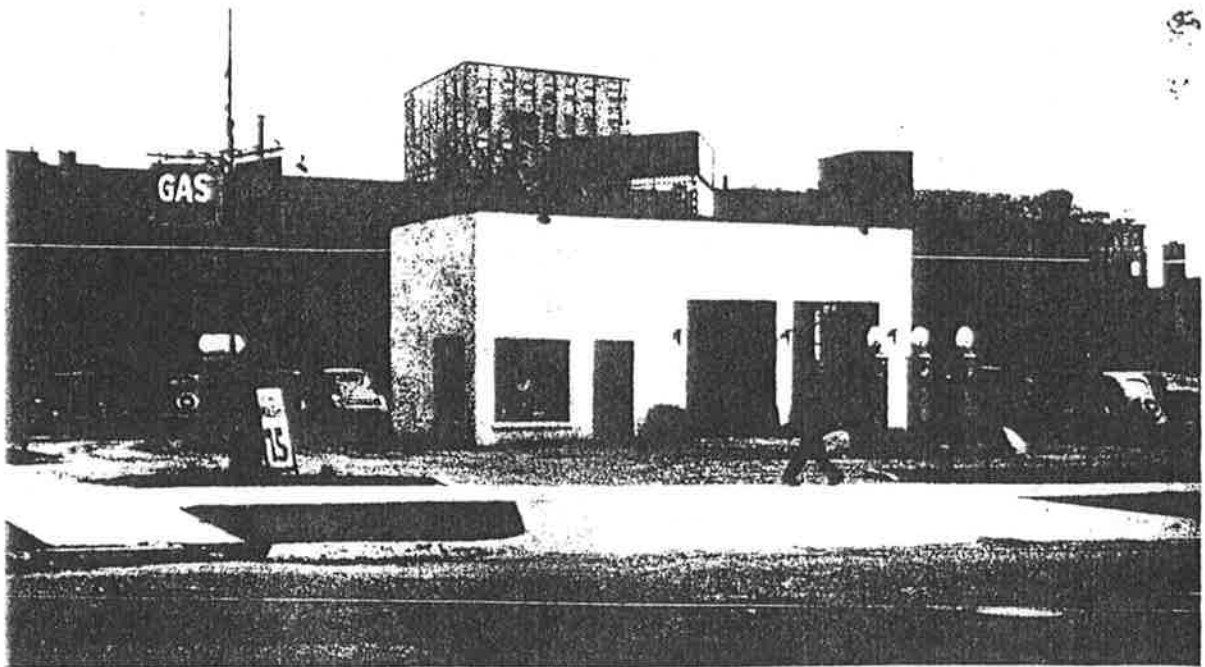
PROBLEM "C"

The FOOD STORE

This store is to provide for the merchandising of groceries, packaged and canned foods, fresh fruits and vegetables, meats, fish and frozen foods.

Dimensions. The building covers a level inside lot (not a corner lot), 25'-0" x 75'-0" on the north side of Main Street. There is a service alley at the rear. The clear width between the party walls is 24'-0". The present clear height, floor to ceiling, is 12'-0".





PROBLEM "D"

The AUTOMOTIVE SALES-and-SERVICE STATION

THE gas station, presumably, is to be modernized by an automobile dealer as a "feeder" for his main showroom, as well as to produce a profit through the sale of gasoline, oil, tires, accessories and parts. Servicing, such as greasing, washing and minor repairs on all makes of cars, will return a profit in addition to creating good-will which may lead to a car sale.

The plan shall provide a showroom for two low-priced passenger automobiles; space for the display and sale of tires, parts and accessories; cash and record space; "rest-room" toilets; one car-washing space; two greasing pits, hoists or lifts; work bench and tool racks for minor repairs, with inclosure for repairing one car at a time; gasoline pumps and oil dispensers shall be located within the building lines (no pumps or other structure are permitted at the curb of street). As customers drive in the travel of cars must be considered carefully to prevent traffic congestion and to provide maximum availability of the pumps.

The basement is not to be shown on the drawings. It is assumed that employees' lockers, the heating plant, air compressors, etc., and extra storage space may be provided for in the basement, providing a stairway is shown on the plan.

It is assumed that the present structure may be moved, enlarged, altered, or torn down so that the most efficient design for the lot can be realized. Gasoline pumps, also, may be added, changed or relocated.

Dimensions. The level lot is on the Northeast corner of intersection of Main Street and a through traffic artery. The wide Main Street runs East and West. The rectangular lot measures 100' on Main Street, 75' on the intersecting street. Both are two-way traffic streets. From building line (lot line) to curbs of streets is 12'.



REQUIRED DRAWINGS

ALL drawings shall be undiluted black ink only, except the elevation which shall be in color. Drawings shall be on white stiff cardboard or illustration board, or heavily mounted opaque white paper, measuring 22 inches by 30 inches. A single line border shall be drawn to leave a margin $\frac{3}{4}$ -inch wide around the entire sheet. The sheet shall be vertical, with the title at the bottom of the sheet within the border line. No hand-lettering of the title is necessary since a paster-title, to be attached to the drawing as directed, will be sent to each competitor who sends in an entry blank. *No lettering or numerals on any part of the sheet shall be less than $\frac{1}{8}$ " in height.*

The following drawings are required on each sheet submitted as the solution of each Problem, i.e., Problem A, Problem B, Problem C, or Problem D.

1. PLAN

The plan of the main floor shall be shown.

The plan shall show store fixtures, show cases, furniture or store equipment. Uses of spaces shall be clearly indicated on the plan.

The plan shall be lettered so as to be easily read when the whole sheet is reduced to $7\frac{1}{2}$ inches by 10 inches for reproduction in publications.

For Problems A, B, C and D, the scale of the plan shall be $\frac{1}{8}"=1'-0"$.

2. ELEVATION

Elevation of the store front and show windows shall be shown.

The elevation shall show the true colors, in flat washes or tempera, or, it is permissible to show colors and materials by the use of flat colored-papers, cellophane, metalized-papers and the like, providing they are so affixed to the drawing as to be permanent. No media shall be used which will flake or chip off, or smear, or smudge, or tear, or become loose, in handling. Conventional shadows may be cast to show relationships of planes or forms. No perspective, or false perspective, shall be shown; no indication of adjacent buildings shall appear; no figures, trees or other entourage shall appear on the drawing except one human figure, $5'-10"$ in height, shall be shown at scale.

For Problems A, B and C, the scale of the elevation shall be $\frac{1}{2}"=1'-0"$.

For Problem D, the scale of the elevations shall be $\frac{3}{16}"=1'-0"$. Two elevations are required, one of each street front; both elevations shall be in color, and shall conform to conditions as stated above.

3. SECTION

One longitudinal section shall be shown. The section shall show store fixtures and furniture, decorative glass or mirrors, lighting, skylights (if any), thickness of roof construction, but shall indicate nothing below the main floor level. One human figure, $5'-10"$ in height, shall be shown at scale.

For Problems A, B and C, the scale of the section shall be $\frac{1}{4}"=1'-0"$.

For Problem D, a section is required to be taken through the showroom. The scale of this section shall be $\frac{3}{16}"=1'-0"$.

4. STRUCTURAL DETAIL

The structural detail is required on each drawing submitted.

The structural detail shall show in section the construction of the show window, i.e., the bulkhead or base, the ceiling (including show window lighting), the sign and the awning box (if any). The structural detail shall be drawn in clear black undiluted India ink lines, without color or washes, scale $3"=1'-0"$.

This detail shall show the glass, the necessary blocking, and shall indicate the sash, jambs, head, transom bars, sills, awning bars, or bases, *in profiles only* (without showing details of patented or copyrighted constructions).

5. OUTLINE SPECIFICATIONS

The outline specifications shall list the materials and equipment to be used in the modernization. The list shall be typed, or neatly lettered, on the blank provided, and shall be firmly mounted on the back of the drawing in the center.

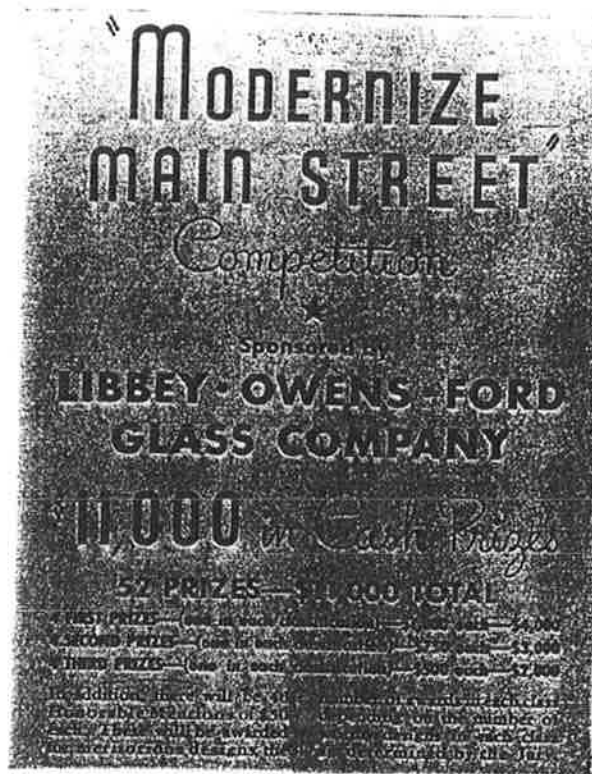
The outline specification is mandatory, but will not be a factor in the judgment of the solutions. It is intended to aid in the publishing of descriptions of the winning drawings.

OUTLINE SPECIFICATION SHEET

This Outline Specification Sheet must be filled out and firmly pasted on the back of the drawing in the center. State materials, sizes, types, qualities.

- A. Glass for**
 - 1. Show window
 - 2. Transoms
 - 3. Door
 - 4. Show window lighting troughs or fixtures
 - 5. Show window floor.....
 - 6. Show window ceiling.....
 - 7. Show window mirror.....
 - 8. Show case tops.....
 - 9. Show case fronts
 - 10. Show case shelving
 - 11. Show case mirrors
 - 12. Interior mirrors
 - 13. Interior decorative glass
 - 14. Interior lighting fixtures
 - 15. Interior lighting troughs
 - 16. Skylights (exterior).....
 - 17. Skylights (interior or ceiling).....
 - 18. Screens or cages
 - 19. Partitions
 - 20. Rear windows
 - 21. Other uses
- B. Store front frame**
- C. Facing of bulkhead**
- 1. Trim
- D. Facing of exterior wall, walls or columns**
- 1. Trim or ornament.....
- E. Facing of sign background**.....
- F. Sign lettering and illumination**
- G.**
 - 1. Show window floor.....
 - 2. Show window walls.....
 - 3. Show window ceiling.....
- H. Sales Interior**
- 1. Walls
 - 2. Ceiling
 - 3. Flooring
 - 4. Show cases
 - 5. Furniture
 - 6. Main lighting fixtures.....
 - 7. Trim
- I. Type of heating, ventilating or air conditioning systems contemplated.**.....
- J. Other equipment**.....

LEST YOU FORGET



(Competition closes 5 P. M. August 12, 1935)

● On June 15, the Program for the "Modernize Main Street" Competition was distributed to architects throughout the country. This Competition, sponsored by the Libbey-Owens-Ford Glass Company and conducted by the Architectural Record, with Kenneth K. Stowell, A. I. A., as Professional Advisor, is in reality four simultaneous competitions, each calling for the modernization of a particular type of shop or store—(1) A Food Store; (2) A Drug Store; (3) An

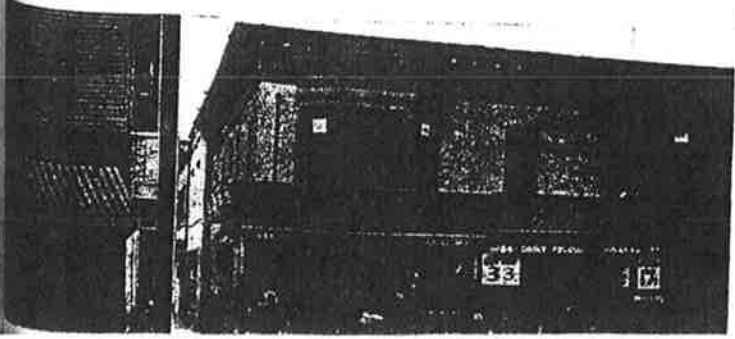
Apparel Shop; (4) An Automotive Sales and Service Station. A photograph of each shop to be modernized, together with all necessary data, is published in the Program. A complete

copy of the Program appears in this issue of The Architectural Record in the preceding pages. If you have not already sent in your entry, the blank below will bring you the title-paster and other necessary data and information. The competition closes August 12; the Jury meets August 26, 1935.

USE THIS ENTRY BLANK

KENNETH K. STOWELL, A. I. A., Professional Advisor,
 "Modernize Main Street" Competition
 The Architectural Record, 119 West 40th Street, New York, N. Y.
 Gentlemen: I desire to enter the "Modernize Main Street" Competition sponsored by the Libbey-Owens-Ford Glass Company. Please send me the title-paster and all necessary data and information.

Name _____
 Profession or occupation _____
 Street _____



FEDERAL HOUSING ADMINISTRATION

Washington

Stewart McDonald
Acting Administrator

June 1, 1935

Mr. John D. Biggers, President,
Libbey-Owens-Ford Glass Company,
Toledo, Ohio.

Dear Mr. Biggers:

Your new "Modernize Main Street" Architectural Competition is a most constructive and timely development in the growing interest in modernization and reviving construction.

Your plan will stimulate the interest of many architects and builders and will encourage the specific action of business property owners throughout the country.

Widespread examples have already come to our attention of increased income resulting from modernization of business properties. The broadening of the National Housing Act to permit insured modernization loans on business property up to \$50,000 greatly increases the scope of the cooperation of the Federal Housing Administration.

Under the National Housing Act approved lenders, by complying with the regulations, may be insured up to 20% of the total loans made for improving business property and may be insured also against mortgage loans.

You may be assured of our fullest cooperation and our appreciation of the contribution you are making.

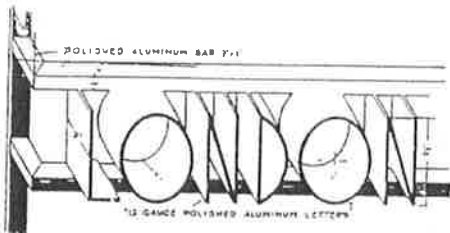
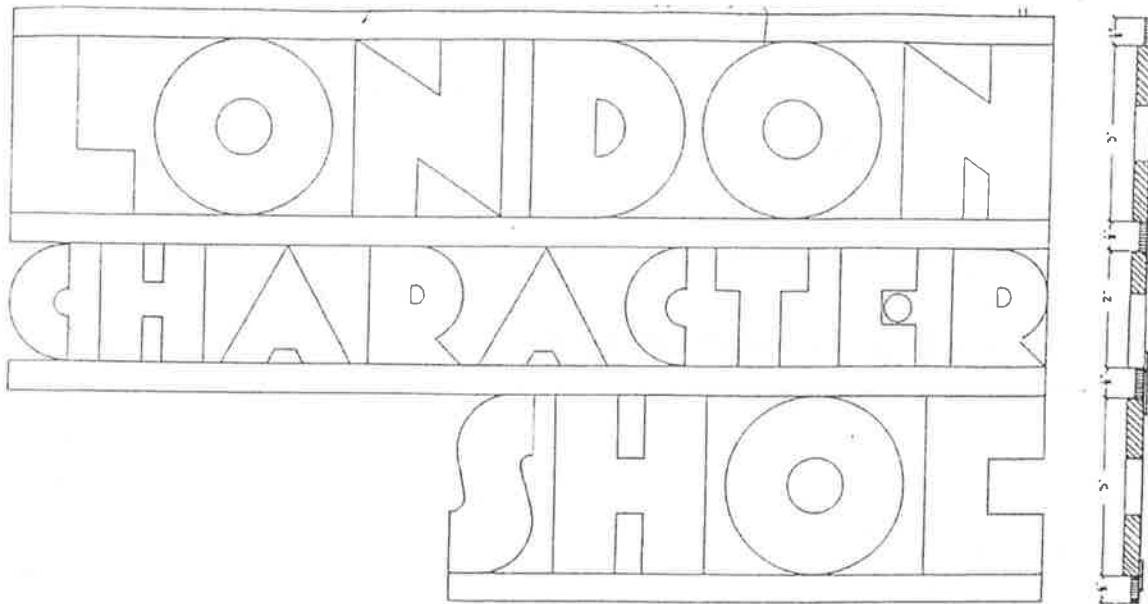
With every wish for the success of your program, I am

Sincerely,

(Signed) STEWART McDONALD

Exhibit 3

Letter from Federal Housing Administration



LONDON CHARACTER SHOE

ALFA-DOMEIO

HONORE PAYAN

Exhibit 4

Kodak sign logo from Architectural Record

LETTERING (BELOW) BY WALTER DORWIN TEAGUE

Photograph by John Wallace Gillies, Inc.

